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

Annual Report for Soil and Groundwater Remediation

March 2000

Prepared For

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1. INTRODUCTION

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

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

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

- December 1996 - Philip injected approximately 500 gallons of urea nitrate in water into the passive vent system and installed magnesium peroxide socks in monitoring wells M-3 and M-4 to supply oxygen to enhance natural biodegradation of hydrocarbons in groundwater.
- January 1997 - Philip installed a belt skimmer in R-2 to remove phase separated hydrocarbons.
- February 1997 - Philip installed a belt skimmer in R-1 to remove phase separated hydrocarbons.
- November 1997 - Philip installed two temporary monitoring wells inside the excavated area north of R-1 to determine if phase separated hydrocarbons could be recovered during high groundwater season.
- June 1997 - Belt skimmer phase separated hydrocarbon recovery system shut down due to seasonal reduction of product thickness related to local irrigation.
- January 1998 - Philip restarts belt skimmer in R-1 and R-2.
- April 1998 - Belt skimmer phase separated hydrocarbon recovery system shut down due to seasonal reduction of product thickness related to local irrigation.
- July 1998 - Philip injected approximately 500 gallons of urea nitrate in water into the passive vent system and installed magnesium peroxide socks in monitoring wells M-3, M-4, R-3 and R-4 to supply oxygen to enhance natural biodegradation of hydrocarbons in groundwater.
- November 1998 - EPFS conducts investigation of possible hydrocarbon seep of groundwater into the surface water of an arroyo to the south of the property. No hydrocarbons are found during this investigation.
- June 1999 – EPFS submits soil and groundwater remediation workplan to the OCD for sparging in the area north of Citizens Ditch.
- June 1999 – Landowner encountered discolored soils while plowing. EPFS and OCD sample area of concern.
- August 1999 – One sparge well, one soil vapor extraction point and five monitoring points are installed and a soil vapor extraction and aquifer pilot test were performed north of Citizens ditch.
- August 1999 – EPFS submits soil sample results and work plan for additional soil and groundwater investigations as requested by OCD.
- September 1999 – OCD approves soil and groundwater investigation work plan with modifications.
- October 1999 – EPFS submits Pilot Test Report and workplan for soil and groundwater remediation using sparge techniques to the OCD.

- November 1999 – Landowner requests test trench across field. Test trench reveals small area of residual contamination on west side of garden area.
- December 1999 – Meeting with landowner reveals possible second pit location on north side of Citizens Ditch. Four test trenches excavated in possible pit area. No evidence of pit or impacted soils found.
- January 2000 – EPFS submits soil investigation results and amended work plan for soil and groundwater investigation.
- January 2000 – EPFS begins air sparging remediation of the aquifer.
- January 2000 – EPFS installs two additional down gradient monitor wells as requested by Mr. Jaquez and the OCD.
- February 2000 – EPFS samples the existing six-inch irrigation well as requested by Mr. Jaquez and the OCD.
- February 2000 – EPFS samples sediment in the ditch as requested by Mr. Jaquez.

2. 1999 ACTIVITIES

In 1999, activities included the following:

- Groundwater sampling of the following monitor wells was conducted during the second quarter of 1999: R-3; R-4; R-5; M-1; M-2; M-3; M-4; and, M-5.
- Quarterly groundwater samples were collected during all quarters of 1999 from monitor wells M-3 and M-4.
- A groundwater sparge pilot test was conducted on the groundwater aquifer north of Citizens Ditch.
- Based upon the result of the groundwater sparge pilot test, a remediation workplan was developed and submitted to the OCD.
- Extensive soil investigations were conducted north and south of Citizens Ditch. The soil investigations were conducted to satisfy concerns expressed by Mr. John Jaquez.

2.1 Quarterly Sampling

Groundwater samples are not collected from wells when LNAPL are present, which is the case for monitor wells R-1 and R-2. Groundwater samples were collected from eight monitor wells, R-3 through R-5 and M-1 through M-5, and analyzed for BTEX, polynuclear aromatic hydrocarbons (PAH), and nitrate during the second quarter of 1999. Monitor wells M-3 and M-4 are also sampled quarterly for BTEX and nitrates.

Nitrate sampling has been performed on the monitor wells to help determine the effect of nutrients injected into the passive venting system on the south side of Citizens Ditch. There was no nutrient injection performed in 1999. Generally, nitrate levels increase for one to two quarters after nutrient injection in monitor wells M-3 and M-4.

Graphic displays for the thickness of phase separated hydrocarbons vs. time for R-1 and R-2 is presented in Appendix A. Graphic displays of phase separated hydrocarbon elevations and groundwater elevations vs. time are presented in Appendix B. No phase separated hydrocarbons have been recovered from R-1 or R-2 in 1999.

2.2 Groundwater Sparge Pilot Test

In June 1999, Philip Services Corporation prepared a work plan for soil and groundwater remediation at the Jaquez Com. C#1 and Jaquez Com. E#1 Meter Sites. The objective of the work plan was to determine the feasibility of using bio-venting, volatilization, and soil venting technologies to reduce the levels of hydrocarbons in soil and groundwater below regulatory standards. Per the approved June 1999 work plan, Philip installed one sparge well, one soil vapor extraction point, and three monitoring points north of Citizens Ditch to gather enough information for the final system design (Figure 4). In August 1999, a soil vapor extraction and aquifer sparge test was performed north of Citizens Ditch.

The results of the August 1999 air vapor extraction and aquifer sparge test indicated that the site is a good candidate for the proposed treatment model. Based upon these results, a remediation work plan was developed and submitted to the NMOCD. As a result of the August 1999 test, the final system design was proposed and two additional sparge wells, two permanent monitor wells, three shallow soil borings, and five shallow well points were installed. The system operates twelve hours per day.

2.3 Soil Investigations

On June 25, 1999, Mr. John Jaquez, the landowner, expressed concerns that he encountered "blackened smelly soil" when plowing the area south of Citizens Ditch (cornfield area). An investigation was initiated on June 30, 1999, by EPFS lab personnel and the OCD. Soil samples were collected using the hand auger method. In addition to

the collection of soil samples, groundwater samples were also collected from two hand auger holes. The results of this soil investigation are included in Appendix D and summarized in Table 3 with the locations of the soil samples shown on Figure 2.

EPFS submitted a letter on August 13, 1999, to the OCD with the results of the June 30, 1999, investigation and included a proposed work plan for further investigation of potential hydrocarbon impacts of soil and groundwater at this location. On September 22, 1999, OCD approved the work plan with modifications.

Due to continued concerns from the landowner, Philip Services performed additional exploratory excavations for EPFS on November 24, 1999, and collected additional soil samples thought to be impacted by hydrocarbons. The excavations included a trench 100 feet long by three feet wide by three and one-half to six feet below ground surface. Soil samples were collected from the trench just above the water table.

The results of the soil samples from these exploratory excavations are included in Appendix D and summarized in Table 4 with the locations shown in Figure 3. On December 17, 1999, EPFS, OCD, and Philip Services personnel met with the landowner to discuss the results of the November 24, 1999, investigation and to address additional concerns raised by the landowner. As a result of this meeting, the scope of work for the August 13, 1999, Work Plan was significantly changed.

Additional excavations were conducted on December 22, 1999, and included extending the trench excavated on November 24, 1999, in the "Garden Area" towards the west by 26 feet. Four soil samples were collected from this trench extension. In addition to the trench extension, four additional trenches were excavated to the north of Citizens Ditch in the meter house area. The trenches in the meter house area are TP-01 which measures 21 feet long by 3 feet wide by 10 feet deep, TP-02 which measures 24 feet long by 3 feet wide by 10 feet deep, TP-03 which measures 53 feet long by 3 feet wide by 9.5 feet deep, and TP-04 which measures 42 feet long by 3 feet wide by 10 feet deep. Six soil samples were collected from these trench excavations in the meter house area and laboratory results are included in Appendix D. The laboratory results are summarized in Table 5 and the locations of the additional trench excavations are presented in Figure 3. The trenches were backfilled with the excavated material on December 27, 1999.

3. SUMMARY TABLES

All product thickness, phase separated hydrocarbon recovery information, and groundwater elevations are presented in Table 1 and a summary of all BTEX, PAH, and nitrate analysis are included in Table 2.

The June 30, 1999, summary of the soil investigation is included as Table 3. The November 24, 1999, summary of the soil investigation is included as Table 4. The December 22, 1999, summary of the soil investigation is included as Table 5.

The laboratory reports and associated quality assurance/quality control data for the groundwater investigations are included in Appendix C and the laboratory reports and associated quality assurance/quality control data for the soil investigations are included in Appendix D.

4. SITE MAP

A site map showing the groundwater gradient is presented as Figure 1. A site map showing the locations of the June 30, 1999, soil investigation is presented as Figure 2. A site map showing the locations of the November 24, 1999, and December 22, 1999, soil investigation is presented as Figure 3. A site map showing the additional vapor extraction point, groundwater sparge point, and monitoring points is presented as Figure 4.

5. GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

The August 12, 1999, geologic logs and well completion diagrams are presented in Appendix E.

6. DISPOSITION OF GENERATED WASTES

The November 24, 1999, and the December 22, 1999, trench excavations were backfilled with the excavated material. There were no wastes generated at this site in 1999.

7. ISOCONCENTRATION MAPS

The May 25, 1999, total BTEX isoconcentration map is presented as Figure 5.

8. CONCLUSIONS

Garden Area South of Citizen's Ditch

BTEX concentrations remain below NMWQCC groundwater standards in monitor wells M-1, M-2, M-3 and M-5. Monitor well M-4 shows fluctuating benzene levels that remain above NMWQCC groundwater standards, although the levels often decrease significantly when the water table is high. The source of the phase separated hydrocarbons in R-1 and/or R-2 probably contribute dissolved phase hydrocarbons to M-4. Toluene, ethyl-benzene and total xylenes concentrations remain below NMWQCC groundwater standards in M-4. Since the installation of the oxygenate socks and the injection of nutrients into the passive venting system, monitoring well M-3 has been below NMWQCC standards for BTEX in groundwater the last six quarters sampled.

Soil hand auger samples and water samples collected from the June 30, 1999, investigation of the cornfield area show minor evidence of hydrocarbon contamination. However, groundwater in the vicinity of SB-10 had levels of BTEX in excess of regulatory standards. SB-10 is directly downgradient of M-4. Soil samples collected in the trench excavations during the November 24, 1999, investigation were below regulatory standards; however, the area at the west end of this trench excavation revealed a small area of residual contamination. The December 22, 1999, trench extension toward the west ("Garden Area") found no evidence of impacted soils. Based on visual observations and soil samples collected during the trench excavations, the contaminated soil appears to terminate at the west end of the November 24, 1999, trench.

Meter Site Location North of Citizen's Ditch

Phase separated hydrocarbons continue to accumulate in R-1 and R-2 in trace amounts during periods of low groundwater. As in previous years, product accumulation decreases rapidly with the beginning of the irrigation season and increased flow in Citizens Ditch. Approximately 264.03 gallons of phase separated hydrocarbons have been removed from recovery well R-1 since the belt skimming system has been in place. The belt skimming system did not operate in 1999 due to the trace amounts observed in the first and second quarters. Dissolved phase hydrocarbons are decreasing in R-3.

The results of the August 1999 air vapor extraction and aquifer sparge test indicated that the site is a good candidate for the proposed treatment model. As a result of the August 1999 test, the final system design was proposed and two additional sparge wells, two permanent monitor wells, three shallow soil borings, and five shallow well points were installed. Results of the in-situ respiration test indicate that the light non-aqueous phase liquids (LNAPL) can be volatilized into a gas phase and biodegraded. The test also indicated that, although bioremediation is naturally occurring at the site, the proposed technology will enhance the speed of the remediation process.

Laboratory analysis of soil samples collected during the December 22, 1999, trench excavations north of Citizens Ditch indicated BTEX and TPH levels were below analytical detection limits.

9. RECOMMENDATIONS

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

- Continue removing phase separated hydrocarbons from R-1 and R-2 whenever present.
- Recovery wells R-1 and R-2 will not be sampled if phase separated hydrocarbons are present.
- Sample monitoring wells R-1, R-2, R-3, R-4, R-5, and R-6 monthly for BTEX to evaluate effectiveness of sparge technology for at least one quarter.
- Sample monitoring wells M-1, M-2, M-3, M-4, M-5, and M-6 monthly for one quarter for BTEX to evaluate effectiveness of sparge technology then quarterly thereafter.
- Continue sampling monitoring wells M-3 and M-4 quarterly for BTEX and nitrates.
- Continue sparging the aquifer until groundwater samples are below New Mexico Groundwater Standards for BTEX constituents.
- Collect monthly groundwater elevation data at each well.
- Collect weekly oxygen and volatile organic compound (VOC) readings of soil gases and record subsurface pressures.

TABLE 1

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-1	02/07/97	19.97	17.55	2.42	0.00	99.07	77.24	79.66	Prior to Skimmer Installation
R-1	02/19/97	20.16	17.68	2.48	0.00	99.07	77.05	79.53	Prior to Skimmer Installation
R-1	02/26/97	20.17	17.64	2.53	0.00	99.07	77.04	79.57	Prior to Skimmer Installation
R-1	03/05/97	20.18	17.83	2.35	0.00	99.07	77.03	79.38	Prior to Skimmer Installation
R-1	03/12/97	20.28	17.81	2.47	0.00	99.07	76.93	79.40	Prior to Skimmer Installation
R-1	03/17/97	20.61	18.22	2.39	0.00	99.07	76.60	78.99	Prior to Skimmer Installation
R-1	04/03/97	20.85	18.43	2.42	0.00	99.07	76.36	78.78	Prior to Skimmer Installation
R-1	04/04/97	20.81	18.43	2.38	0.00	99.07	76.40	78.78	Start up of skimmer
R-1	04/09/97	20.40	18.23	2.17	13.01	99.07	76.81	78.98	Increased timer to 24 hrs. 4/10/97
R-1	04/16/97	20.49	18.81	1.68	38.99	99.07	76.72	78.40	Will leave skimmer set to run 24 hours per day
R-1	04/23/97	20.25	18.70	1.55	62.90	99.07	76.96	78.51	Running 24 hours per day
R-1	05/01/97	17.56	17.53	0.03	86.81	99.07	79.65	79.68	Set Skimmer to run 12 hours per day
R-1	05/07/97	16.26	16.15	0.11	90.74	99.07	80.95	81.06	Still running 12 hours per day
R-1	05/13/97	16.14	16.13	0.01	93.80	99.07	81.07	81.08	Skimmer running before measurements taken
R-1	05/21/97	16.48	16.41	0.07	96.29	99.07	80.73	80.80	Running 12 hours per day
R-1	05/28/97	16.68	16.63	0.05	99.54	99.07	80.53	80.58	Running 12 hours per day
R-1	06/04/97	16.55	16.55	0.00	99.54	99.07	80.66	80.66	Shut system down
R-1	06/11/97	16.44	16.24	0.00	N/A	99.07	80.77	80.97	Restart system
R-1	06/18/97	16.57	16.57	0.00	99.92	99.07	80.64	80.64	Shut system down
R-1	06/27/97	16.38	16.35	0.03	N/A	99.07	80.83	80.86	Leave system shut down
R-1	07/02/97	16.25	16.22	0.03	N/A	99.07	80.96	80.99	Leave system shut down
R-1	07/09/97	15.69	15.66	0.03	N/A	99.07	81.52	81.55	Leave system shut down for the season
R-1	10/30/97	17.49	17.39	0.10	N/A	99.07	79.72	79.82	Temporary well installation
R-1	11/04/97	17.64	17.56	0.08	N/A	99.07	79.57	79.65	Temporary well installation
R-1	11/14/97	16.33	16.23	0.10	N/A	99.07	80.88	80.98	Temporary well installation
R-1	11/21/97	16.63	16.55	0.08	N/A	99.07	80.58	80.66	Temporary well installation
R-1	11/25/97	16.92	16.86	0.06	N/A	99.07	80.29	80.35	Temporary well installation
R-1	12/16/97	17.81	17.71	0.10	N/A	99.07	79.40	79.50	
R-1	01/14/98	19.79	17.71	2.08	N/A	99.07	77.42	79.50	Skimmer startup, running 24 hrs/day
R-1	01/21/98	19.73	17.97	1.76	105.47	99.07	77.48	79.24	Running 24 hrs
R-1	01/28/98	18.59	18.40	0.19	116.18	99.07	78.62	78.81	Adjust to run 12 hrs / Day
R-1	02/05/98	19.51	18.58	0.93	126.86	99.07	77.70	78.63	Adjust to run 24 hrs/ Day
R-1	02/11/98	19.15	18.73	0.42	148.48	99.07	78.06	78.48	Adjust to run 12 hrs/ Day, Ditch empty
R-1	02/19/98	19.98	18.82	1.16	164.35	99.07	77.23	78.39	Adjust to run 24 hrs/ Day, Ditch empty
R-1	02/25/98	19.25	19.19	0.06	185.77	99.07	77.96	78.02	Adjust to run 12 hrs/ Day, Ditch empty
R-1	03/04/98	19.99	19.24	0.75	198.98	99.07	77.22	77.97	Adjust to run 24 hrs/ Day, Ditch empty

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-1	03/11/98	19.52	19.32	0.20	207.97	99.07	77.69	77.89	Adjust to run 12 hrs/ Day, Ditch empty
R-1	03/18/98	19.94	19.54	0.40	224.24	99.07	77.27	77.67	Adjust to run 24 hrs/ Day, Ditch empty
R-1	03/25/98	19.08	19.03	0.05	248.16	99.07	78.13	78.18	Adjust to run 12 hrs/ day, Ditch empty
R-1	04/02/98	17.31	17.31	0.00	258.30	99.07	79.90	79.90	Shut skimmer down, Ditch running again
R-1	04/08/98	16.77	16.61	0.16	258.30	99.07	80.44	80.60	Adjust to run 4 hrs/ Day, Ditch running full
R-1	04/15/98	16.42	16.42	0.00	264.03	99.07	80.79	80.79	Shut skimmer down, Ditch running full
R-1	04/23/98	16.02	15.87	0.15	264.03	99.07	81.19	81.34	Adjust to run 4 hrs/ Day, Ditch running full
R-1	04/29/98	16.04	16.04	0.00	264.03	99.07	81.17	81.17	Shut system down, ditch running full
R-1	05/08/98	15.42	15.32	0.10	264.03	99.07	81.79	81.89	Leave system shut down, Ditch still running
R-1	05/14/98	14.62	14.60	0.02	264.03	99.07	82.59	82.61	Leave system shut down, Ditch still running
R-1	05/20/98	14.82	14.76	0.06	264.03	99.07	82.39	82.45	Leave system shut down, Ditch still running
R-1	05/27/98	15.24	15.16	0.08	264.03	99.07	81.97	82.05	Leave system shut down, Ditch still running
R-1	06/29/98	14.92	14.84	0.08	264.03	99.07	82.29	82.37	Leave system shut down, Ditch still running
R-1	10/08/98	14.96	14.89	0.07	264.03	99.07	82.25	82.32	Leave system shut down, Ditch still running
R-1	11/11/98	15.00	15.00	0.00	264.03	99.07	82.21	82.21	Leave system shut down, Ditch still running
R-1	11/24/98	15.67	15.49	0.18	264.03	99.07	81.54	81.72	Leave system shut down, Ditch still running
R-1	12/01/98	15.78	15.58	0.20	264.03	99.07	81.43	81.63	Leave system shut down, Ditch still running
R-1	12/14/98	16.08	16.01	0.07	264.03	99.07	81.13	81.20	Leave system shut down, Ditch still running
R-1	12/20/98	16.61	16.45	0.16	264.03	99.07	80.60	80.76	Leave system shut down, Ditch still running
R-1	01/05/99	16.54	16.38	0.16	264.03	99.07	80.67	80.83	Leave system shut down, Ditch still running
R-1	01/11/99	16.52	16.42	0.10	264.03	99.07	80.69	80.79	Leave system shut down, Ditch still running
R-1	02/24/99	16.75	16.66	0.09	264.03	99.07	80.46	80.55	Took water level & product level
R-1	03/31/99	16.63	16.59	0.04	264.03	99.07	80.58	80.62	Water running in ditch
R-1	04/09/99	16.34	16.24	0.10	264.03	99.07	80.87	80.97	Canal flowing
R-1	04/16/99	15.47	15.33	0.14	264.03	99.07	81.74	81.88	Water running in ditch
R-2	02/07/97	18.66	16.52	2.14	0.00	98.05	77.49	79.63	
R-2	02/14/97	18.76	16.65	2.11	0.00	98.05	77.39	79.50	Start skimmer, running 12 hours/day
R-2	02/15/97	17.28	17.22	0.06	3.06	98.05	78.87	78.93	
R-2	02/18/97	17.33	17.14	0.19	4.78	98.05	78.82	79.01	Adjust to run 10 hours/day
R-2	02/26/97	17.31	17.20	0.11	7.46	98.05	78.84	78.95	
R-2	03/05/97	17.39	17.33	0.06	7.46	98.05	78.76	78.82	
R-2	03/12/97	17.35	17.34	0.01	9.95	98.05	78.80	78.81	
R-2	03/17/97	16.84	16.83	0.01	10.14	98.05	79.31	79.32	
R-2	04/03/97	18.00	18.00	0.00	10.71	98.05	78.15	78.15	No measurable product, shut down to recover

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-2	04/09/97	17.67	17.67	0.00	0.00	98.05	78.48	78.48	Will leave shut down until product returns
R-2	04/16/97	18.12	18.12	0.00	0.00	98.05	78.03	78.03	No measurable product
R-2	04/23/97	18.01	18.01	0.00	0.00	98.05	78.14	78.14	No measurable product
R-2	05/01/97	16.75	16.28	0.47	0.00	98.05	79.40	79.87	Reactivate Skimmer to run 10 hours/day
R-2	05/07/97	14.89	14.89	0.00	11.48	98.05	81.26	81.26	No measurable product. Shut system down
R-2	05/13/97	14.94	14.93	0.01	0.00	98.05	81.21	81.22	Will leave skimmer shut down
R-2	05/21/97	15.28	15.24	0.04	0.00	98.05	80.87	80.91	Reactivate skimmer to run 10 hours per day
R-2	05/28/97	15.48	15.48	0.00	39.57 (water)	98.05	80.67	80.67	No measurable product. Shut system down
R-2	06/04/97	15.37	15.37	0.00	N/A	98.05	80.78	80.78	Shut system down
R-2	06/11/97	15.12	15.11	0.01	N/A	98.05	81.03	81.04	Leave system shut down
R-2	06/18/97	15.41	15.37	0.04	N/A	98.05	80.74	80.78	Leave system shut down
R-2	06/27/97	15.18	15.18	0.00	N/A	98.05	80.97	80.97	Leave system shut down
R-2	07/02/97	15.08	15.06	0.02	N/A	98.05	81.07	81.09	Leave system shut down
R-2	07/09/97	14.45	14.45	0.00	N/A	98.05	81.70	81.70	Leave system shut down for the season
R-2	10/30/97	16.47	16.25	0.22	N/A	98.05	79.68	79.90	Temporary well installation
R-2	11/04/97	16.64	16.43	0.21	N/A	98.05	79.51	79.72	Temporary well installation
R-2	11/14/97	15.14	15.06	0.08	N/A	98.05	81.01	81.09	Temporary well installation
R-2	11/21/97	15.58	15.39	0.19	N/A	98.05	80.57	80.76	Temporary well installation
R-2	11/25/97	15.90	15.69	0.21	N/A	98.05	80.25	80.46	Temporary well installation
R-2	12/16/97	16.89	16.54	0.35	N/A	98.05	79.26	79.61	
R-2	01/14/98	18.58	16.67	1.91	N/A	98.05	77.57	79.48	Skimmer startup, running 12 hrs/day
R-2	01/21/98	17.30	17.30	0.00	14.92	98.05	78.85	78.85	No measurable product, shut down to recover
R-2	01/28/98	17.48	17.30	0.18	0.00	98.05	78.67	78.85	Leave system shut down
R-2	02/05/98	17.83	17.71	0.12	0.00	98.05	78.32	78.44	Leave system shut down
R-2	02/11/98	17.86	17.74	0.12	0.00	98.05	78.29	78.41	Leave system shut down, Ditch empty
R-2	02/19/98	18.13	18.02	0.11	0.00	98.05	78.02	78.13	Leave system shut down, Ditch empty
R-2	02/25/98	19.25	19.19	0.06	0.00	98.05	76.90	76.96	Leave system shut down, Ditch empty
R-2	03/04/98	18.48	18.31	0.17	0.00	98.05	77.67	77.84	Leave system shut down, Ditch empty
R-2	03/11/98	18.40	18.26	0.14	0.00	98.05	77.75	77.89	Leave system shut down, Ditch empty
R-2	03/18/98	18.07	17.99	0.08	0.00	98.05	78.08	78.16	Leave system shut down, Ditch empty
R-2	03/25/98	18.02	17.94	0.08	0.00	98.05	78.13	78.21	Leave system shut down, Ditch empty
R-2	04/02/98	16.28	15.92	0.36	0.00	98.05	79.87	80.23	Leave system shut down, Ditch running
R-2	04/08/98	15.64	15.30	0.34	0.00	98.05	80.51	80.85	Turn system on, running 4 hrs/ day,Ditch full
R-2	04/15/98	15.30	15.30	0.00	15.39	98.05	80.85	80.85	Shut system down, Ditch running full
R-2	04/23/98	14.70	14.70	0.00	15.39	98.05	81.45	81.45	Leave system shut down, Ditch running

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-2	04/29/98	14.83	14.83	0.00	15.39	98.05	81.32	81.32	Leave system shut down, Ditch running
R-2	05/08/98	14.13	14.13	0.00	15.39	98.05	82.02	82.02	Leave system shut down, Ditch running
R-2	05/14/98	13.40	13.40	0.00	15.39	98.05	82.75	N/A	Leave system shut down, Ditch running
R-2	05/20/98	13.58	13.58	0.00	15.39	98.05	82.57	N/A	Leave system shut down, Ditch running
R-2	05/27/98	14.00	14.00	0.00	15.39	98.05	82.15	N/A	Leave system shut down, Ditch running
R-2	06/29/98	13.67	13.67	0.00	15.39	98.05	82.48	N/A	Leave system shut down, Ditch running
R-2	10/08/98	13.79	13.79	0.00	15.39	98.05	82.36	N/A	Leave system shut down, Ditch running
R-2	11/11/98	13.79	13.79	0.00	15.39	98.05	82.36	N/A	Leave system shut down, Ditch running
R-2	11/24/98	14.01	14.01	0.00	15.39	98.05	82.14	N/A	Leave system shut down, Ditch running
R-2	12/01/98	14.51	14.51	0.00	15.39	98.05	81.64	N/A	Leave system shut down, Ditch running
R-2	12/14/98	14.98	14.93	0.05	15.39	98.05	81.17	81.22	Leave system shut down, Ditch running
R-2	12/20/98	15.42	15.35	0.07	15.39	98.05	80.73	80.80	Leave system shut down, Ditch running
R-2	01/05/99	15.35	15.29	0.06	15.39	98.05	80.80	80.86	Leave system shut down, Ditch running
R-2	01/11/99	15.38	15.35	0.03	15.39	98.05	80.77	80.80	Leave system shut down, Ditch running
R-2	02/24/99	15.61	15.54	0.07	15.39	98.05	80.54	80.61	Took water level & product level
R-2	03/31/99	15.49	non detect		15.39	98.05	80.66		Water running in ditch
R-2	04/09/99	15.13	non detect		15.39	98.05	81.02		Canal flowing
R-2	04/16/99	14.50	14.15	0.35	15.39	98.05	81.65	82.00	Water running in ditch
R-3	02/19/98	16.29	N/A	N/A	N/A	99.29	83.00	N/A	
R-3	02/26/97	16.24	N/A	N/A	N/A	99.29	83.05	N/A	
R-3	03/05/97	16.36	N/A	N/A	N/A	99.29	82.93	N/A	
R-3	03/12/97	16.37	N/A	N/A	N/A	99.29	82.92	N/A	
R-3	03/17/97	16.81	N/A	N/A	N/A	99.29	82.48	N/A	
R-3	04/09/97	16.75	N/A	N/A	N/A	99.29	82.54	N/A	
R-3	04/16/97	17.22	N/A	N/A	N/A	99.29	82.07	N/A	
R-3	04/23/97	17.11	N/A	N/A	N/A	99.29	82.18	N/A	
R-3	05/01/97	15.43	N/A	N/A	N/A	99.29	83.86	N/A	
R-3	05/07/97	13.94	N/A	N/A	N/A	99.29	85.35	N/A	
R-3	05/13/97	13.96	N/A	N/A	N/A	99.29	85.33	N/A	
R-3	05/21/97	14.26	N/A	N/A	N/A	99.29	85.03	N/A	
R-3	05/28/97	14.48	N/A	N/A	N/A	99.29	84.81	N/A	
R-3	06/04/97	14.34	N/A	N/A	N/A	99.29	84.95	N/A	
R-3	06/11/97	14.13	N/A	N/A	N/A	99.29	85.16	N/A	
R-3	06/18/97	14.33	N/A	N/A	N/A	99.29	84.96	N/A	

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-3	06/27/97	14.17	N/A	N/A	N/A	99.29	85.12	N/A	
R-3	07/02/97	14.02	N/A	N/A	N/A	99.29	85.27	N/A	
R-3	07/09/97	14.02	N/A	N/A	N/A	99.29	85.27	N/A	
R-3	08/21/97	13.41	N/A	N/A	N/A	99.29	85.88	N/A	
R-3	11/10/97	14.87	N/A	N/A	N/A	99.29	84.42	N/A	
R-3	01/21/98	16.34	N/A	N/A	N/A	99.29	82.95	N/A	
R-3	01/28/98	16.38	N/A	N/A	N/A	99.29	82.91	N/A	
R-3	02/05/98	16.20	N/A	N/A	N/A	99.29	83.09	N/A	
R-3	02/11/98	16.84	N/A	N/A	N/A	99.29	82.45	N/A	Ditch empty
R-3	02/19/98	17.16	N/A	N/A	N/A	99.29	82.13	N/A	Ditch empty
R-3	02/25/98	17.26	N/A	N/A	N/A	99.29	82.03	N/A	Ditch empty
R-3	03/04/98	17.46	N/A	N/A	N/A	99.29	81.83	N/A	Ditch empty
R-3	03/11/98	17.38	N/A	N/A	N/A	99.29	81.91	N/A	Ditch empty
R-3	03/18/98	17.06	N/A	N/A	N/A	99.29	82.23	N/A	Ditch empty
R-3	03/25/98	17.02	N/A	N/A	N/A	99.29	82.27	N/A	Ditch empty
R-3	04/02/98	15.06	N/A	N/A	N/A	99.29	84.23	N/A	Ditch running
R-3	04/08/98	14.42	N/A	N/A	N/A	99.29	84.87	N/A	Ditch running
R-3	04/15/98	14.19	N/A	N/A	N/A	99.29	85.10	N/A	Ditch running
R-3	04/23/98	13.66	N/A	N/A	N/A	99.29	85.63	N/A	Ditch running
R-3	04/29/98	13.81	N/A	N/A	N/A	99.29	85.48	N/A	Ditch running
R-3	05/08/98	13.00	N/A	N/A	N/A	99.29	86.29	N/A	Ditch running
R-3	05/14/98	12.31	N/A	N/A	N/A	99.29	86.98	N/A	Ditch running
R-3	05/19/98	12.40	N/A	N/A	N/A	99.29	86.89	N/A	Ditch running
R-3	05/20/98	12.53	N/A	N/A	N/A	99.29	86.76	N/A	Ditch running
R-3	05/27/98	12.96	N/A	N/A	N/A	99.29	86.33	N/A	Ditch running
R-3	06/29/98	12.55	N/A	N/A	N/A	99.29	86.74	N/A	Ditch running
R-3	10/08/98	13.69	N/A	N/A	N/A	99.29	85.60	N/A	Ditch running
R-3	10/26/98	12.72	N/A	N/A	N/A	99.29	86.57	N/A	Ditch running
R-3	11/24/98	13.26	N/A	N/A	N/A	99.29	86.03	N/A	Ditch running
R-3	12/01/98	13.53	N/A	N/A	N/A	99.29	85.76	N/A	Ditch running
R-3	12/14/98	13.92	N/A	N/A	N/A	99.29	85.37	N/A	Ditch running
R-3	01/05/99	14.27	N/A	N/A	N/A	99.29	85.02	N/A	Ditch running
R-3	01/11/99	14.32	N/A	N/A	N/A	99.29	84.97	N/A	Ditch running
R-3	02/24/99	14.59	N/A	N/A	N/A	99.29	84.70	N/A	Took water level & product level

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-4	02/19/97	15.81	N/A	N/A	N/A	98.29	82.48	N/A	
R-4	02/26/97	15.75	N/A	N/A	N/A	98.29	82.54	N/A	
R-4	03/05/97	15.90	N/A	N/A	N/A	98.29	82.39	N/A	
R-4	03/12/97	15.89	N/A	N/A	N/A	98.29	82.40	N/A	
R-4	03/17/97	16.03	N/A	N/A	N/A	98.29	82.26	N/A	
R-4	04/09/97	16.24	N/A	N/A	N/A	98.29	82.05	N/A	
R-4	04/16/97	16.69	N/A	N/A	N/A	98.29	81.60	N/A	
R-4	04/23/97	16.56	N/A	N/A	N/A	98.29	81.73	N/A	
R-4	05/01/97	15.04	N/A	N/A	N/A	98.29	83.25	N/A	
R-4	05/13/97	13.63	N/A	N/A	N/A	98.29	84.66	N/A	
R-4	05/21/97	13.89	N/A	N/A	N/A	98.29	84.40	N/A	
R-4	05/28/97	14.09	N/A	N/A	N/A	98.29	84.20	N/A	
R-4	06/04/97	13.99	N/A	N/A	N/A	98.29	84.30	N/A	
R-4	06/11/97	13.73	N/A	N/A	N/A	98.29	84.56	N/A	
R-4	06/18/97	13.95	N/A	N/A	N/A	98.29	84.34	N/A	
R-4	06/27/97	13.85	N/A	N/A	N/A	98.29	84.44	N/A	
R-4	07/02/97	13.68	N/A	N/A	N/A	98.29	84.61	N/A	
R-4	07/09/97	13.16	N/A	N/A	N/A	98.29	85.13	N/A	
R-4	08/21/97	13.12	N/A	N/A	N/A	98.29	85.17	N/A	
R-4	11/10/97	14.55	N/A	N/A	N/A	98.29	83.74	N/A	
R-4	01/21/98	15.84	N/A	N/A	N/A	98.29	82.45	N/A	
R-4	01/28/98	15.83	N/A	N/A	N/A	98.29	82.46	N/A	
R-4	02/05/98	16.24	N/A	N/A	N/A	98.29	82.05	N/A	
R-4	02/11/98	16.28	N/A	N/A	N/A	98.29	82.01	N/A	Ditch empty
R-4	02/19/98	16.58	N/A	N/A	N/A	98.29	81.71	N/A	Ditch empty
R-4	02/25/98	16.68	N/A	N/A	N/A	98.29	81.61	N/A	Ditch empty
R-4	03/04/98	16.88	N/A	N/A	N/A	98.29	81.41	N/A	Ditch empty
R-4	03/11/98	16.86	N/A	N/A	N/A	98.29	81.43	N/A	Ditch empty
R-4	03/18/98	16.59	N/A	N/A	N/A	98.29	81.70	N/A	Ditch empty
R-4	03/25/98	16.52	N/A	N/A	N/A	98.29	81.77	N/A	Ditch empty
R-4	04/02/98	14.80	N/A	N/A	N/A	98.29	83.49	N/A	Ditch running
R-4	04/08/98	14.19	N/A	N/A	N/A	98.29	84.10	N/A	Ditch running
R-4	04/15/98	13.94	N/A	N/A	N/A	98.29	84.35	N/A	Ditch running
R-4	04/23/98	13.45	N/A	N/A	N/A	98.29	84.84	N/A	Ditch running
R-4	04/29/98	13.53	N/A	N/A	N/A	98.29	84.76	N/A	Ditch running

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-4	05/08/98	13.00	N/A	N/A	N/A	98.29	85.29	N/A	Ditch running
R-4	05/14/98	12.31	N/A	N/A	N/A	98.29	85.98	N/A	Ditch running
R-4	05/19/98	12.21	N/A	N/A	N/A	98.29	86.08	N/A	Ditch running
R-4	05/20/98	12.36	N/A	N/A	N/A	98.29	85.93	N/A	Ditch running
R-4	05/27/98	12.68	N/A	N/A	N/A	98.29	85.61	N/A	Ditch running
R-4	06/29/98	12.36	N/A	N/A	N/A	98.29	85.93	N/A	Ditch running
R-4	10/08/98	14.19	N/A	N/A	N/A	98.29	84.10	N/A	Ditch running
R-4	10/26/98	12.29	N/A	N/A	N/A	98.29	86.00	N/A	Ditch running
R-4	11/11/98	12.04	N/A	N/A	N/A	98.29	86.25	N/A	Ditch running
R-4	11/24/98	12.99	N/A	N/A	N/A	98.29	85.30	N/A	Ditch running
R-4	12/01/98	13.13	N/A	N/A	N/A	98.29	85.16	N/A	Ditch running
R-4	12/14/98	13.50	N/A	N/A	N/A	98.29	84.79	N/A	Ditch running
R-4	12/20/98	15.32	N/A	N/A	N/A	98.29	82.97	N/A	Ditch running
R-4	01/05/99	13.87	N/A	N/A	N/A	98.29	84.42	N/A	Ditch running
R-4	01/11/99	13.92	N/A	N/A	N/A	98.29	84.37	N/A	Ditch running
R-4	02/24/99	14.37	N/A	N/A	N/A	98.29	83.92	N/A	Took water level & product level
R-5	02/19/97	18.48	N/A	N/A	N/A	101.50	83.02	N/A	
R-5	02/26/97	18.33	N/A	N/A	N/A	101.50	83.17	N/A	
R-5	03/05/97	18.71	N/A	N/A	N/A	101.50	82.79	N/A	
R-5	03/12/97	18.50	N/A	N/A	N/A	101.50	83.00	N/A	
R-5	03/17/97	19.02	N/A	N/A	N/A	101.50	82.48	N/A	
R-5	04/09/97	18.92	N/A	N/A	N/A	101.50	82.58	N/A	
R-5	04/16/97	19.40	N/A	N/A	N/A	101.50	82.10	N/A	
R-5	04/23/97	19.20	N/A	N/A	N/A	101.50	82.30	N/A	
R-5	05/01/97	18.28	N/A	N/A	N/A	101.50	83.22	N/A	
R-5	05/07/97	17.46	N/A	N/A	N/A	101.50	84.04	N/A	
R-5	05/13/97	17.18	N/A	N/A	N/A	101.50	84.32	N/A	
R-5	05/20/97	17.25	N/A	N/A	N/A	101.50	84.25	N/A	
R-5	05/28/97	17.35	N/A	N/A	N/A	101.50	84.15	N/A	
R-5	06/04/97	17.26	N/A	N/A	N/A	101.50	84.24	N/A	
R-5	06/11/97	17.01	N/A	N/A	N/A	101.50	84.49	N/A	
R-5	06/18/97	17.09	N/A	N/A	N/A	101.50	84.41	N/A	
R-5	06/27/97	17.13	N/A	N/A	N/A	101.50	84.37	N/A	
R-5	07/02/97	16.87	N/A	N/A	N/A	101.50	84.63	N/A	

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-5	07/09/97	16.64	N/A	N/A	N/A	101.50	84.86	N/A	
R-5	08/21/97	16.50	N/A	N/A	N/A	101.50	85.00	N/A	
R-5	11/10/97	17.48	N/A	N/A	N/A	101.50	84.02	N/A	
R-5	01/21/98	18.46	N/A	N/A	N/A	101.50	83.04	N/A	
R-5	01/28/98	18.48	N/A	N/A	N/A	101.50	83.02	N/A	
R-5	02/05/98	18.92	N/A	N/A	N/A	101.50	82.58	N/A	
R-5	02/11/98	18.91	N/A	N/A	N/A	101.50	82.59	N/A	Ditch empty
R-5	02/19/98	19.31	N/A	N/A	N/A	101.50	82.19	N/A	Ditch empty
R-5	02/25/98	19.31	N/A	N/A	N/A	101.50	82.19	N/A	Ditch empty
R-5	03/04/98	19.51	N/A	N/A	N/A	101.50	81.99	N/A	Ditch empty
R-5	03/11/98	19.46	N/A	N/A	N/A	101.50	82.04	N/A	Ditch empty
R-5	03/18/98	19.21	N/A	N/A	N/A	101.50	82.29	N/A	Ditch empty
R-5	03/25/98	19.11	N/A	N/A	N/A	101.50	82.39	N/A	Ditch empty
R-5	04/02/98	18.28	N/A	N/A	N/A	101.50	83.22	N/A	Ditch running
R-5	04/08/98	17.80	N/A	N/A	N/A	101.50	83.70	N/A	Ditch running
R-5	04/15/98	17.42	N/A	N/A	N/A	101.50	84.08	N/A	Ditch running
R-5	04/23/98	16.95	N/A	N/A	N/A	101.50	84.55	N/A	Ditch running
R-5	04/29/98	16.94	N/A	N/A	N/A	101.50	84.56	N/A	Ditch running
R-5	05/08/98	12.87	N/A	N/A	N/A	101.50	88.63	N/A	Ditch running
R-5	05/14/98	15.92	N/A	N/A	N/A	101.50	85.58	N/A	Ditch running
R-5	05/19/98	15.90	N/A	N/A	N/A	101.50	85.60	N/A	Ditch running
R-5	05/20/98	15.81	N/A	N/A	N/A	101.50	85.69	N/A	Ditch running
R-5	05/27/98	15.99	N/A	N/A	N/A	101.50	85.51	N/A	Ditch running
R-5	06/29/98	15.57	N/A	N/A	N/A	101.50	85.93	N/A	Ditch running
R-5	10/08/98	15.49	N/A	N/A	N/A	101.50	86.01	N/A	Ditch running
R-5	10/26/98	15.36	N/A	N/A	N/A	101.50	86.14	N/A	Ditch running
R-5	11/11/98	15.52	N/A	N/A	N/A	101.50	85.98	N/A	Ditch running
R-5	11/24/98	15.79	N/A	N/A	N/A	101.50	85.71	N/A	Ditch running
R-5	12/01/98	15.96	N/A	N/A	N/A	101.50	85.54	N/A	Ditch running
R-5	12/14/98	16.17	N/A	N/A	N/A	101.50	85.33	N/A	Ditch running
R-5	12/20/98	16.71	N/A	N/A	N/A	101.50	84.79	N/A	Ditch running
R-5	01/05/99	16.59	N/A	N/A	N/A	101.50	84.91	N/A	Ditch running
R-5	01/11/99	16.53	N/A	N/A	N/A	101.50	84.97	N/A	Ditch running
R-5	02/24/99	16.89	N/A	N/A	N/A	101.50	84.61	N/A	Took water level & product level

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-1	02/19/97	6.23	N/A	N/A	N/A	84.84	78.61	N/A	
M-1	02/26/97	6.19	N/A	N/A	N/A	84.84	78.65	N/A	
M-1	03/05/97	6.12	N/A	N/A	N/A	84.84	78.72	N/A	
M-1	03/12/97	6.37	N/A	N/A	N/A	84.84	78.47	N/A	
M-1	03/17/97	6.59	N/A	N/A	N/A	84.84	78.25	N/A	
M-1	04/09/97	6.47	N/A	N/A	N/A	84.84	78.37	N/A	
M-1	04/16/97	6.83	N/A	N/A	N/A	84.84	78.01	N/A	
M-1	04/23/97	7.61	N/A	N/A	N/A	84.84	77.23	N/A	
M-1	05/01/97	5.79	N/A	N/A	N/A	84.84	79.05	N/A	
M-1	05/07/97	5.10	N/A	N/A	N/A	84.84	79.74	N/A	
M-1	05/13/97	4.59	N/A	N/A	N/A	84.84	80.25	N/A	
M-1	05/23/97	4.80	N/A	N/A	N/A	84.84	80.04	N/A	
M-1	05/28/97	5.05	N/A	N/A	N/A	84.84	79.79	N/A	
M-1	06/04/97	4.90	N/A	N/A	N/A	84.84	79.94	N/A	
M-1	06/11/97	4.47	N/A	N/A	N/A	84.84	80.37	N/A	
M-1	06/18/97	4.93	N/A	N/A	N/A	84.84	79.91	N/A	
M-1	06/27/97	5.01	N/A	N/A	N/A	84.84	79.83	N/A	
M-1	07/02/97	4.86	N/A	N/A	N/A	84.84	79.98	N/A	
M-1	07/09/97	4.29	N/A	N/A	N/A	84.84	80.55	N/A	
M-1	08/21/97	3.54	N/A	N/A	N/A	84.84	81.30	N/A	
M-1	11/10/97	5.41	N/A	N/A	N/A	84.84	79.43	N/A	
M-1	01/21/98	6.40	N/A	N/A	N/A	84.84	78.44	N/A	
M-1	01/28/98	6.48	N/A	N/A	N/A	84.84	78.36	N/A	
M-1	02/05/98	6.66	N/A	N/A	N/A	84.84	78.18	N/A	
M-1	02/11/98	6.50	N/A	N/A	N/A	84.84	78.34	N/A	Ditch empty
M-1	02/19/98	6.75	N/A	N/A	N/A	84.84	78.09	N/A	Ditch empty
M-1	02/25/98	6.83	N/A	N/A	N/A	84.84	78.01	N/A	Ditch empty
M-1	03/04/98	7.01	N/A	N/A	N/A	84.84	77.83	N/A	Ditch empty
M-1	03/11/98	7.15	N/A	N/A	N/A	84.84	77.69	N/A	Ditch empty
M-1	03/18/98	7.03	N/A	N/A	N/A	84.84	77.81	N/A	Ditch empty
M-1	03/25/98	6.97	N/A	N/A	N/A	84.84	77.87	N/A	Ditch empty
M-1	04/02/98	6.16	N/A	N/A	N/A	84.84	78.68	N/A	Ditch running
M-1	04/08/98	5.70	N/A	N/A	N/A	84.84	79.14	N/A	Ditch running
M-1	04/15/98	5.26	N/A	N/A	N/A	84.84	79.58	N/A	Ditch running
M-1	04/23/98	4.96	N/A	N/A	N/A	84.84	79.88	N/A	Ditch running

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-1	04/29/98	4.97	N/A	N/A	N/A	84.84	79.87	N/A	Ditch running
M-1	05/08/98	4.85	N/A	N/A	N/A	84.84	79.99	N/A	Ditch running
M-1	05/14/98	3.90	N/A	N/A	N/A	84.84	80.94	N/A	Ditch running
M-1	05/19/98	3.98	N/A	N/A	N/A	84.84	80.86	N/A	Ditch running
M-1	05/20/98	4.09	N/A	N/A	N/A	84.84	80.75	N/A	Ditch running
M-1	05/27/98	4.23	N/A	N/A	N/A	84.84	80.61	N/A	Ditch running
M-1	06/29/98	4.38	N/A	N/A	N/A	84.84	80.46	N/A	Ditch running
M-1	10/08/98	3.81	N/A	N/A	N/A	84.84	81.03	N/A	Ditch running
M-1	10/26/98	3.46	N/A	N/A	N/A	84.84	81.38	N/A	Ditch running
M-1	11/11/98	3.66	N/A	N/A	N/A	84.84	81.18	N/A	Ditch running
M-1	11/24/98	4.28	N/A	N/A	N/A	84.84	80.56	N/A	Ditch running
M-1	12/01/98	4.37	N/A	N/A	N/A	84.84	80.47	N/A	Ditch running
M-1	12/14/98	4.75	N/A	N/A	N/A	84.84	80.09	N/A	Ditch running
M-1	12/20/98	5.01	N/A	N/A	N/A	84.84	79.83	N/A	Ditch running
M-1	01/05/99	5.13	N/A	N/A	N/A	84.84	79.71	N/A	Ditch running
M-1	01/11/99	5.19	N/A	N/A	N/A	84.84	79.65	N/A	Ditch running
M-1	02/24/99	5.44	N/A	N/A	N/A	84.84	79.40	N/A	Took water level & product level
M-2	02/19/97	6.00	N/A	N/A	N/A	85.89	79.89	N/A	
M-2	02/26/97	6.02	N/A	N/A	N/A	85.89	79.87	N/A	
M-2	03/05/97	6.12	N/A	N/A	N/A	85.89	79.77	N/A	
M-2	03/12/97	6.19	N/A	N/A	N/A	85.89	79.70	N/A	
M-2	03/17/97	6.32	N/A	N/A	N/A	85.89	79.57	N/A	
M-2	04/09/97	6.31	N/A	N/A	N/A	85.89	79.58	N/A	
M-2	04/16/97	6.62	N/A	N/A	N/A	85.89	79.27	N/A	
M-2	04/23/97	6.70	N/A	N/A	N/A	85.89	79.19	N/A	
M-2	05/01/97	4.23	N/A	N/A	N/A	85.89	81.66	N/A	
M-2	05/07/97	3.25	N/A	N/A	N/A	85.89	82.64	N/A	
M-2	05/13/97	3.67	N/A	N/A	N/A	85.89	82.22	N/A	
M-2	05/21/97	4.24	N/A	N/A	N/A	85.89	81.65	N/A	
M-2	05/28/97	4.79	N/A	N/A	N/A	85.89	81.10	N/A	
M-2	06/04/97	3.89	N/A	N/A	N/A	85.89	82.00	N/A	
M-2	06/11/97	3.86	N/A	N/A	N/A	85.89	82.03	N/A	
M-2	06/18/97	4.61	N/A	N/A	N/A	85.89	81.28	N/A	
M-2	06/27/97	4.27	N/A	N/A	N/A	85.89	81.62	N/A	

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-2	07/02/97	4.34	N/A	N/A	N/A	85.89	81.55	N/A	
M-2	07/09/97	3.43	N/A	N/A	N/A	85.89	82.46	N/A	
M-2	08/21/97	2.91	N/A	N/A	N/A	85.89	82.98	N/A	
M-2	11/10/97	4.76	N/A	N/A	N/A	85.89	81.13	N/A	
M-2	01/21/98	6.36	N/A	N/A	N/A	85.89	79.53	N/A	
M-2	01/28/98	6.48	N/A	N/A	N/A	85.89	79.41	N/A	
M-2	02/05/98	6.62	N/A	N/A	N/A	85.89	79.27	N/A	
M-2	02/11/98	6.50	N/A	N/A	N/A	85.89	79.39	N/A	Ditch empty
M-2	02/19/98	6.70	N/A	N/A	N/A	85.89	79.19	N/A	Ditch empty
M-2	02/25/98	6.78	N/A	N/A	N/A	85.89	79.11	N/A	Ditch empty
M-2	03/04/98	6.92	N/A	N/A	N/A	85.89	78.97	N/A	Ditch empty
M-2	03/11/98	7.05	N/A	N/A	N/A	85.89	78.84	N/A	Ditch empty
M-2	03/18/98	6.95	N/A	N/A	N/A	85.89	78.94	N/A	Ditch empty
M-2	03/25/98	6.90	N/A	N/A	N/A	85.89	78.99	N/A	Ditch empty
M-2	04/02/98	4.94	N/A	N/A	N/A	85.89	80.95	N/A	Ditch running
M-2	04/08/98	3.90	N/A	N/A	N/A	85.89	81.99	N/A	Ditch running
M-2	04/15/98	3.72	N/A	N/A	N/A	85.89	82.17	N/A	Ditch running
M-2	04/23/98	3.91	N/A	N/A	N/A	85.89	81.98	N/A	Ditch running
M-2	04/29/98	4.27	N/A	N/A	N/A	85.89	81.62	N/A	Ditch running
M-2	05/08/98	4.52	N/A	N/A	N/A	85.89	81.37	N/A	Ditch running
M-2	05/14/98	3.08	N/A	N/A	N/A	85.89	82.81	N/A	Ditch running
M-2	05/19/98	3.50	N/A	N/A	N/A	85.89	82.39	N/A	Ditch running
M-2	05/20/98	3.64	N/A	N/A	N/A	85.89	82.25	N/A	Ditch running
M-2	05/27/98	4.26	N/A	N/A	N/A	85.89	81.63	N/A	Ditch running
M-2	06/29/98	4.08	N/A	N/A	N/A	85.89	81.81	N/A	Ditch running
M-2	10/08/98	3.12	N/A	N/A	N/A	85.89	82.77	N/A	Ditch running
M-2	10/26/98	2.75	N/A	N/A	N/A	85.89	83.14	N/A	Ditch running
M-2	11/11/98	3.00	N/A	N/A	N/A	85.89	82.89	N/A	Ditch running
M-2	11/24/98	3.82	N/A	N/A	N/A	85.89	82.07	N/A	Ditch running
M-2	12/01/98	3.97	N/A	N/A	N/A	85.89	81.92	N/A	Ditch running
M-2	12/14/98	4.51	N/A	N/A	N/A	85.89	81.38	N/A	Ditch running
M-2	12/20/98	4.43	N/A	N/A	N/A	85.89	81.46	N/A	Ditch running
M-2	01/05/99	4.84	N/A	N/A	N/A	85.89	81.05	N/A	Ditch running
M-2	01/11/99	4.93	N/A	N/A	N/A	85.89	80.96	N/A	Ditch running
M-2	02/24/99	5.16	N/A	N/A	N/A	85.89	80.73	N/A	Took water level & product level

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-3	02/19/97	6.90	N/A	N/A	N/A	87.79	80.89	N/A	
M-3	02/26/97	6.86	N/A	N/A	N/A	87.79	80.93	N/A	
M-3	03/05/97	6.94	N/A	N/A	N/A	87.79	80.85	N/A	
M-3	03/12/97	6.99	N/A	N/A	N/A	87.79	80.80	N/A	
M-3	03/17/97	8.41	N/A	N/A	N/A	87.79	79.38	N/A	
M-3	04/09/97	7.41	N/A	N/A	N/A	87.79	80.38	N/A	
M-3	04/16/97	5.78	N/A	N/A	N/A	87.79	82.01	N/A	
M-3	04/23/97	7.61	N/A	N/A	N/A	87.79	80.18	N/A	
M-3	05/01/97	6.51	N/A	N/A	N/A	87.79	81.28	N/A	
M-3	05/07/97	5.62	N/A	N/A	N/A	87.79	82.17	N/A	
M-3	05/13/97	5.04	N/A	N/A	N/A	87.79	82.75	N/A	
M-3	05/21/97	5.18	N/A	N/A	N/A	87.79	82.61	N/A	
M-3	05/28/97	5.41	N/A	N/A	N/A	87.79	82.38	N/A	
M-3	06/04/97	5.50	N/A	N/A	N/A	87.79	82.29	N/A	
M-3	06/11/97	5.08	N/A	N/A	N/A	87.79	82.71	N/A	
M-3	06/18/97	5.35	N/A	N/A	N/A	87.79	82.44	N/A	
M-3	06/27/97	5.50	N/A	N/A	N/A	87.79	82.29	N/A	
M-3	07/02/97	5.28	N/A	N/A	N/A	87.79	82.51	N/A	
M-3	07/09/97	4.96	N/A	N/A	N/A	87.79	82.83	N/A	
M-3	08/21/97	4.81	N/A	N/A	N/A	87.79	82.98	N/A	
M-3	11/10/97	6.07	N/A	N/A	N/A	87.79	81.72	N/A	
M-3	01/21/98	6.92	N/A	N/A	N/A	87.79	80.87	N/A	
M-3	01/28/98	6.86	N/A	N/A	N/A	87.79	80.93	N/A	
M-3	02/05/98	7.26	N/A	N/A	N/A	87.79	80.53	N/A	
M-3	02/11/98	7.30	N/A	N/A	N/A	87.79	80.49	N/A	Ditch empty
M-3	02/19/98	7.56	N/A	N/A	N/A	87.79	80.23	N/A	Ditch empty
M-3	02/25/98	7.69	N/A	N/A	N/A	87.79	80.10	N/A	Ditch empty
M-3	03/04/98	7.95	N/A	N/A	N/A	87.79	79.84	N/A	Ditch empty
M-3	03/11/98	8.09	N/A	N/A	N/A	87.79	79.70	N/A	Ditch empty
M-3	03/18/98	7.85	N/A	N/A	N/A	87.79	79.94	N/A	Ditch empty
M-3	03/25/98	7.74	N/A	N/A	N/A	87.79	80.05	N/A	Ditch empty
M-3	04/02/98	6.77	N/A	N/A	N/A	87.79	81.02	N/A	Ditch running
M-3	04/08/98	6.20	N/A	N/A	N/A	87.79	81.59	N/A	Ditch running
M-3	04/15/98	5.80	N/A	N/A	N/A	87.79	81.99	N/A	Ditch running

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-3	04/23/98	5.25	N/A	N/A	N/A	87.79	82.54	N/A	Ditch running
M-3	04/29/98	5.07	N/A	N/A	N/A	87.79	82.72	N/A	Ditch running
M-3	05/08/98	4.67	N/A	N/A	N/A	87.79	83.12	N/A	Ditch running
M-3	05/14/98	3.66	N/A	N/A	N/A	87.79	84.13	N/A	Ditch running
M-3	05/19/98	3.75	N/A	N/A	N/A	87.79	84.04	N/A	Ditch running
M-3	05/20/98	3.83	N/A	N/A	N/A	87.79	83.96	N/A	Ditch running
M-3	05/27/98	4.08	N/A	N/A	N/A	87.79	83.71	N/A	Ditch running
M-3	06/29/98	4.24	N/A	N/A	N/A	87.79	83.55	N/A	Ditch running
M-3	08/26/98	4.53	N/A	N/A	N/A	87.79	83.26	N/A	Ditch running
M-3	10/08/98	3.84	N/A	N/A	N/A	87.79	83.95	N/A	Ditch running
M-3	10/26/98	3.54	N/A	N/A	N/A	87.79	84.25	N/A	Ditch running
M-3	11/11/98	3.66	N/A	N/A	N/A	87.79	84.13	N/A	Ditch running
M-3	11/24/98	4.34	N/A	N/A	N/A	87.79	83.45	N/A	Ditch running
M-3	12/01/98	4.43	N/A	N/A	N/A	87.79	83.36	N/A	Ditch running
M-3	12/14/98	4.65	N/A	N/A	N/A	87.79	83.14	N/A	Ditch running
M-3	02/24/99	5.63	N/A	N/A	N/A	87.79	82.16	N/A	Took water level & product level
M-4	02/19/98	5.36	N/A	N/A	N/A	88.01	82.65	N/A	
M-4	02/26/97	6.96	N/A	N/A	N/A	88.01	81.05	N/A	
M-4	03/05/97	6.87	N/A	N/A	N/A	88.01	81.14	N/A	
M-4	03/12/97	4.79	N/A	N/A	N/A	88.01	83.22	N/A	
M-4	03/17/97	7.43	N/A	N/A	N/A	88.01	80.58	N/A	
M-4	04/09/97	6.65	N/A	N/A	N/A	88.01	81.36	N/A	
M-4	04/16/97	5.78	N/A	N/A	N/A	88.01	82.23	N/A	
M-4	04/23/97	6.10	N/A	N/A	N/A	88.01	81.91	N/A	
M-4	05/01/97	4.65	N/A	N/A	N/A	88.01	83.36	N/A	
M-4	05/07/97	3.45	N/A	N/A	N/A	88.01	84.56	N/A	
M-4	05/13/97	3.33	N/A	N/A	N/A	88.01	84.68	N/A	
M-4	05/21/97	3.64	N/A	N/A	N/A	88.01	84.37	N/A	
M-4	05/28/97	3.92	N/A	N/A	N/A	88.01	84.09	N/A	
M-4	06/04/97	3.78	N/A	N/A	N/A	88.01	84.23	N/A	
M-4	06/11/97	3.45	N/A	N/A	N/A	88.01	84.56	N/A	
M-4	06/18/97	3.79	N/A	N/A	N/A	88.01	84.22	N/A	
M-4	06/27/97	3.79	N/A	N/A	N/A	88.01	84.22	N/A	
M-4	07/02/97	3.69	N/A	N/A	N/A	88.01	84.32	N/A	

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-4	07/09/97	3.07	N/A	N/A	N/A	88.01	84.94	N/A	
M-4	08/21/97	2.86	N/A	N/A	N/A	88.01	85.15	N/A	
M-4	11/10/97	4.41	N/A	N/A	N/A	88.01	83.60	N/A	
M-4	01/21/98	5.48	N/A	N/A	N/A	88.01	82.53	N/A	
M-4	01/28/98	5.59	N/A	N/A	N/A	88.01	82.42	N/A	
M-4	02/05/98	5.76	N/A	N/A	N/A	88.01	82.25	N/A	
M-4	02/11/98	5.86	N/A	N/A	N/A	88.01	82.15	N/A	Ditch empty
M-4	02/19/98	6.08	N/A	N/A	N/A	88.01	81.93	N/A	Ditch empty
M-4	02/25/98	6.17	N/A	N/A	N/A	88.01	81.84	N/A	Ditch empty
M-4	03/04/98	6.37	N/A	N/A	N/A	88.01	81.64	N/A	Ditch empty
M-4	03/11/98	6.42	N/A	N/A	N/A	88.01	81.59	N/A	Ditch empty
M-4	03/18/98	6.21	N/A	N/A	N/A	88.01	81.80	N/A	Ditch empty
M-4	03/25/98	6.12	N/A	N/A	N/A	88.01	81.89	N/A	Ditch empty
M-4	04/02/98	4.54	N/A	N/A	N/A	88.01	83.47	N/A	Ditch running
M-4	04/08/98	3.97	N/A	N/A	N/A	88.01	84.04	N/A	Ditch running
M-4	04/15/98	3.73	N/A	N/A	N/A	88.01	84.28	N/A	Ditch running
M-4	04/23/98	3.34	N/A	N/A	N/A	88.01	84.67	N/A	Ditch running
M-4	04/29/98	3.42	N/A	N/A	N/A	88.01	84.59	N/A	Ditch running
M-4	05/08/98	2.98	N/A	N/A	N/A	88.01	85.03	N/A	Ditch running
M-4	05/14/98	2.12	N/A	N/A	N/A	88.01	85.89	N/A	Ditch running
M-4	05/19/98	2.26	N/A	N/A	N/A	88.01	85.75	N/A	Ditch running
M-4	05/20/98	2.31	N/A	N/A	N/A	88.01	85.70	N/A	Ditch running
M-4	05/27/98	2.66	N/A	N/A	N/A	88.01	85.35	N/A	Ditch running
M-4	06/29/98	2.54	N/A	N/A	N/A	88.01	85.47	N/A	Ditch running
M-4	08/26/98	3.02	N/A	N/A	N/A	88.01	84.99	N/A	Ditch running
M-4	10/08/98	2.33	N/A	N/A	N/A	88.01	85.68	N/A	Ditch running
M-4	10/26/98	2.13	N/A	N/A	N/A	88.01	85.88	N/A	Ditch running
M-4	11/11/98	2.24	N/A	N/A	N/A	88.01	85.77	N/A	Ditch running
M-4	11/24/98	2.87	N/A	N/A	N/A	88.01	85.14	N/A	Ditch running
M-4	12/01/98	2.97	N/A	N/A	N/A	88.01	85.04	N/A	Ditch running
M-4	12/14/98	3.37	N/A	N/A	N/A	88.01	84.64	N/A	Ditch running
M-4	01/05/99	3.73	N/A	N/A	N/A	88.01	84.28	N/A	Ditch running
M-4	01/11/99	3.79	N/A	N/A	N/A	88.01	84.22	N/A	Ditch running
M-4	02/24/99	8.38	N/A	N/A	N/A	88.01	79.63	N/A	Took water level & product level

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-5	02/19/98	8.49	N/A	N/A	N/A	86.82	78.33	N/A	
M-5	02/26/97	6.59	N/A	N/A	N/A	86.82	80.23	N/A	
M-5	03/05/97	6.69	N/A	N/A	N/A	86.82	80.13	N/A	
M-5	03/12/97	6.74	N/A	N/A	N/A	86.82	80.08	N/A	
M-5	03/17/97	6.99	N/A	N/A	N/A	86.82	79.83	N/A	
M-5	04/09/97	6.92	N/A	N/A	N/A	86.82	79.90	N/A	
M-5	04/16/97	7.32	N/A	N/A	N/A	86.82	79.50	N/A	
M-5	04/23/97	7.32	N/A	N/A	N/A	86.82	79.50	N/A	
M-5	05/01/97	5.50	N/A	N/A	N/A	86.82	81.32	N/A	
M-5	05/07/97	3.88	N/A	N/A	N/A	86.82	82.94	N/A	
M-5	05/13/97	4.30	N/A	N/A	N/A	86.82	82.52	N/A	
M-5	05/21/97	4.76	N/A	N/A	N/A	86.82	82.06	N/A	
M-5	05/28/97	5.10	N/A	N/A	N/A	86.82	81.72	N/A	
M-5	06/04/97	4.79	N/A	N/A	N/A	86.82	82.03	N/A	
M-5	06/11/97	4.55	N/A	N/A	N/A	86.82	82.27	N/A	
M-5	06/18/97	5.00	N/A	N/A	N/A	86.82	81.82	N/A	
M-5	06/27/97	4.89	N/A	N/A	N/A	86.82	81.93	N/A	
M-5	07/02/97	4.81	N/A	N/A	N/A	86.82	82.01	N/A	
M-5	07/09/97	4.06	N/A	N/A	N/A	86.82	82.76	N/A	
M-5	08/21/97	3.40	N/A	N/A	N/A	86.82	83.42	N/A	
M-5	11/10/97	5.32	N/A	N/A	N/A	86.82	81.50	N/A	
M-5	01/21/98	6.75	N/A	N/A	N/A	86.82	80.07	N/A	
M-5	01/28/98	6.81	N/A	N/A	N/A	86.82	80.01	N/A	
M-5	02/05/98	7.60	N/A	N/A	N/A	86.82	79.22	N/A	
M-5	02/11/98	7.12	N/A	N/A	N/A	86.82	79.70	N/A	Ditch empty
M-5	02/19/98	7.28	N/A	N/A	N/A	86.82	79.54	N/A	Ditch empty
M-5	02/25/98	7.37	N/A	N/A	N/A	86.82	79.45	N/A	Ditch empty
M-5	03/04/98	7.55	N/A	N/A	N/A	86.82	79.27	N/A	Ditch empty
M-5	03/11/98	7.62	N/A	N/A	N/A	86.82	79.20	N/A	Ditch empty
M-5	03/18/98	7.43	N/A	N/A	N/A	86.82	79.39	N/A	Ditch empty
M-5	03/25/98	7.36	N/A	N/A	N/A	86.82	79.46	N/A	Ditch empty
M-5	04/02/98	5.00	N/A	N/A	N/A	86.82	81.82	N/A	Ditch running
M-5	04/08/98	4.43	N/A	N/A	N/A	86.82	82.39	N/A	Ditch running
M-5	04/15/98	4.43	N/A	N/A	N/A	86.82	82.39	N/A	Ditch running
M-5	04/23/98	4.21	N/A	N/A	N/A	86.82	82.61	N/A	Ditch running

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-5	04/29/98	4.39	N/A	N/A	N/A	86.82	82.43	N/A	Ditch running
M-5	05/08/98	4.15	N/A	N/A	N/A	86.82	82.67	N/A	Ditch running
M-5	05/14/98	3.08	N/A	N/A	N/A	86.82	83.74	N/A	Ditch running
M-5	05/17/98	3.37	N/A	N/A	N/A	86.82	83.45	N/A	Ditch running
M-5	05/20/98	3.40	N/A	N/A	N/A	86.82	83.42	N/A	Ditch running
M-5	05/27/98	3.96	N/A	N/A	N/A	86.82	82.86	N/A	Ditch running
M-5	06/29/98	3.83	N/A	N/A	N/A	86.82	82.99	N/A	Ditch running
M-5	10/08/98	3.45	N/A	N/A	N/A	86.82	83.37	N/A	Ditch running
M-5	10/26/98	3.15	N/A	N/A	N/A	86.82	83.67	N/A	Ditch running
M-5	11/11/98	3.28	N/A	N/A	N/A	86.82	83.54	N/A	Ditch running
M-5	11/24/98	4.00	N/A	N/A	N/A	86.82	82.82	N/A	Ditch running
M-5	12/01/98	4.12	N/A	N/A	N/A	86.82	82.70	N/A	Ditch running
M-5	12/14/98	4.62	N/A	N/A	N/A	86.82	82.20	N/A	Ditch running
M-5	12/20/98	4.84	N/A	N/A	N/A	86.82	81.98	N/A	Ditch running
M-5	01/05/99	4.93	N/A	N/A	N/A	86.82	81.89	N/A	Ditch running
M-5	01/11/99	5.01	N/A	N/A	N/A	86.82	81.81	N/A	Ditch running
M-5	02/24/99	5.26	N/A	N/A	N/A	86.82	81.56	N/A	Took water level & product level

TABLE 2

TABLE 2
JAQUEZ COM. C #1 & JAQUEZ COM. E #1
SUMMARY OF ANALYTICAL RESULTS

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
R-1	N30969	9/7/93	991	164	113	1111	2379	No	ND	NA
R-1	N31056	10/4/93	1280	1328	74	799	3481	No	1"	NA
R-1	N31240	11/10/93	242	322	15.0	93.9	673	No	ND	NA
R-1	N31384	12/15/93	328	411	26.6	196	962	No	ND	NA
R-1	940026	1/12/94	1830	1965	90.3	1053	4938	No	17"	NA
R-1	940233	2/9/94	1255	1504	42.3	730	3531	No	32"	NA
R-1	940491	3/7/94	7600	8500	280	2700	19080	Yes	4"	NA
R-1	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	10"	NA
R-1	941003	6/13/94	1450	1930	70.0	944	4394	No	11"	NA
R-1	N/A	9/7/94	No Test	No Test	No Test	No Test	No Test	No	2"	NA
R-1	941619	12/15/94	1890	2130	105.0	990	5115	No	TR	NA
R-1	N/A	8/25/95	No Test	No Test	No Test	No Test	No Test	No	TR	NA
R-1	951178	11/2/95	2330	2400	108	946	5784	No	ND	NA
R-1	N/A	2/5/96	No Test	No Test	No Test	No Test	No Test	Yes	0.24"	NA
R-1	N/A	5/28/96	No Test	No Test	No Test	No Test	No Test	No	4.8"	NA
R-1	960684	8/6/96	2970	3080	130	1200	7380	No	TR	NA
R-1	960900	10/28/96	1690	1970	60.8	800	4520	No	ND	NA
R-1	961007	11/20/96	1240	1540	61.9	600	3450	No	ND	NA
R-1	N/A	2/19/97	No Test	No Test	No Test	No Test	No Test	No	29.76"	NA
R-1		2/24/99	No Test	No Test	No Test	No Test	No Test	No	.09'	NA
R-2	N30970	9/7/93	278	651	59.0	538	1526	No	ND	NA
R-2	N31057	10/4/93	509	789	73.0	741	2112	No	ND	NA
R-2	N31241	11/10/93	284	470	38.0	401	1193	No	ND	NA
R-2	N31385	12/15/93	529	864	65.3	709	2167	No	1"	NA
R-2	940027	1/12/94	1722	2501	150	1702	6075	No	24"	NA

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
R-2	940234	2/9/94	2806	3667	89.5	1520	8083	No	26"	NA
R-2	940492	3/7/94	5600	6800	290	2700	15390	Yes	4"	NA
R-2	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	7"	NA
R-2	941004	6/13/94	3210	3790	139	1670	8809	No	7"	NA
R-2	N/A	9/7/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
R-2	941620	12/15/94	1140	2200	148	1520	5008	No	0.6"	NA
R-2	N/A	8/25/95	No Test	No Test	No Test	No Test	No Test	No	TR	NA
R-2	951179	11/2/95	1250	2030	116	1010	4406	No	TR	NA
R-2	N/A	2/5/96	No Test	No Test	No Test	No Test	No Test	Yes	2.52	NA
R-2	N/A	5/28/96	No Test	No Test	No Test	No Test	No Test	No	2.04"	NA
R-2	960685	8/6/96	2610	3960	165	1540	8275	No	0.72"	NA
R-2	960901	10/28/96	1100	2300	85.4	1100	4585	No	0.96"	NA
R-2	961009	11/20/96	428	1340	87.3	821	2680	No	0.48"	NA
R-2	N/A	2/19/97	No Test	No Test	No Test	No Test	No Test	No	NA	NA
R-2	N/A	2/24/99	No Test	No Test	No Test	No Test	No Test	No	0.07	NA
R-3	N30971	9/7/93	<2.0	61.4	22.0	207	290	No	ND	NA
R-3	N31058	10/4/93	21	179	32.0	310	542	No	ND	NA
R-3	N31242	11/10/93	6.19	27.7	10.4	89.2	134	No	ND	NA
R-3	N31386	12/15/93	26	88.4	19.4	178	312	No	ND	NA
R-3	940028	1/12/94	4.4	2.9	2.7	18	28	No	ND	NA
R-3	940235	2/9/94	<2.0	10.9	8.3	59.6	79	No	ND	NA
R-3	940493	3/7/94	7.7	43	24	220	295	Yes	ND	NA
R-3	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
R-3	941005	6/13/94	3.03	41.4	18.4	188	251	No	ND	NA
R-3	941259	9/7/94	<2.5	18	6.9	67.9	93	No	ND	NA
R-3	941621	12/15/94	11.7	12.2	12.4	114	150	No	ND	NA
R-3	950099	2/9/95	7.36	2.7	2.68	20.8	34	Yes	ND	NA
R-3	950562	5/8/95	16.6	11.7	13.9	126	168	No	ND	NA
R-3	950896	8/25/95	<2.5	15.2	13.6	101	130	No	ND	NA
R-3	951180	11/2/95	<2.5	14.0	9.3	82	105	No	ND	NA

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
R-3	960095	2/5/96	5.34	14.0	12.8	108	140	Yes	ND	NA
R-3	960479	5/28/96	1.05	18.7	22.9	203	246	No	ND	NA
R-3	960686	8/6/96	1.24	24.7	25.9	236	288	No	ND	NA
R-3	960902	10/28/96	<1.0	10.7	12.6	109	132	No	ND	NA
R-3	961010	11/20/96	<1.0	12.5	12.4	114	139	No	ND	NA
R-3	970124	2/19/97	2.12	1.9	2.29	12.6	19	Yes	ND	NA
R-3	970501	5/28/97	<1.0	15.3	13.5	130	159	No	ND	<1.2
R-3	970917	8/21/97	<1.0	20.8	18.6	176	215	No	ND	<1.2
R-3	971196	11/10/97	<1.0	13.6	17.2	149	180	No	ND	<1.2
R-3	980164	2/18/98	<1.0	<1.0	<1.0	<3	<6	Yes	ND	<1.2
R-3	980405	5/19/98	<1.0	11.9	12.5	125	150	No	ND	NA
R-3	990254	5/25/99	0.5	3.3	6.3	26	36	Yes	ND	NA
R-4	N30972	9/7/93	104	267	39.9	370	781	No	ND	NA
R-4	N31060	10/4/93	118	266	41	364	789	No	ND	NA
R-4	N31243	11/10/93	93.6	132	40.4	347	613	No	ND	NA
R-4	N31387	12/15/93	102	161	48.4	418	729	No	ND	NA
R-4	940030	1/12/94	124	101	38.5	353	617	No	ND	NA
R-4	940237	2/9/94	120	51.4	20.8	150	342	No	ND	NA
R-4	940494	3/7/94	150	63	20	190	423	Yes	ND	NA
R-4	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
R-4	941007	6/13/94	179	60.6	17.2	176	433	No	ND	NA
R-4	941260	9/7/94	238	102	26	218	584	No	ND	NA
R-4	941622	12/15/94	222	63.3	26.9	213	525	No	ND	NA
R-4	950100	2/9/95	273	61	20.4	165	519	Yes	ND	NA
R-4	950564	5/8/95	278	251	23.1	220	772	No	ND	NA
R-4	950897	8/25/95	646	278	50.8	544	1519	No	ND	NA
R-4	951181	11/2/95	343	60.4	35.1	284	723	No	ND	NA
R-4	960097	2/5/96	218	43.3	23.1	200	484	Yes	ND	NA
R-4	960481	5/28/96	716	199.0	36.6	394	1346	No	ND	NA
R-4	960687	8/6/96	384	156.0	24	275	839	No	ND	NA

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
R-4	960904	10/28/96	320	53.4	20.1	237	631	No	ND	NA
R-4	9601011	11/20/96	289	31.2	19.3	220	560	No	ND	NA
R-4	970125	2/19/97	162	65.9	34.4	337	599	Yes	ND	NA
R-4	970503	5/28/97	189	92.5	13.3	144	439	No	ND	<1.2
R-4	970918	8/21/97	343	377.0	45.5	408	1174	No	ND	<1.2
R-4	971197	11/10/97	542	129.0	31.1	267	969	No	ND	<1.2
R-4	980166	2/18/98	98.0	15.9	10.0	79.3	203	Yes	ND	<1.2
R-4	980406	5/19/98	916.0	244.0	38.1	304	1502	No	ND	NA
R-4	990255	5/25/99	110.0	63.0	15.0	144	332			
R-5	N30973	9/7/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	N31061	10/4/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	N31244	11/10/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	N31388	12/15/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	940031	1/12/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	940238	2/9/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	940496	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND	NA
R-5	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
R-5	941008	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	941261	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	941623	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	950102	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
R-5	950565	5/8/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	950898	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	951182	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	960098	2/5/96	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
R-5	960482	5/28/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
R-5	960689	8/6/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
R-5	960905	10/28/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
R-5	961012	11/20/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
R-5	970127	2/19/97	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	NA
R-5	970504	5/28/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
R-5	970919	8/21/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
R-5	971199	11/10/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
R-5	980167	2/18/98	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	<1.2
R-5	980407	5/19/98	<1.0	<1.0	<1.0	<3.0	<6	No	ND	NA
R-5	990256	5/25/99	0.5	0.5	0.5	1.5	3			
M-1	N30974	9/8/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	N31062	10/5/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	N31245	11/11/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	N31389	12/16/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	940032	1/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	940239	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	940497	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND	NA
M-1	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-1	941009	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	941262	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	941624	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	950103	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-1	950566	5/8/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	950899	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	951183	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	960099	2/5/96	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-1	960483	5/28/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-1	960690	8/6/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-1	960906	10/28/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-1	961013	11/20/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-1	970128	2/19/97	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	NA
M-1	970505	5/28/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-1	970920	8/21/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-1	971200	11/10/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-1	980168	2/18/98	5.08	<1.0	<1.0	<3.0	N/A	Yes	ND	<1.2

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
M-1	980408	5/19/98	<1.0	<1.0	<1.0	<3.0	<6.0	No	ND	<0.1
M-1	990257	5/25/99	0.5	0.5	0.5	1.5	3			0.05
M-2	N30975	9/8/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	N31063	10/5/93	2.0	2.0	<2.0	<2.0	4.0	No	ND	NA
M-2	N31246	11/11/93	2.3	2.0	<2.0	<2.0	4.3	No	ND	NA
M-2	N31390	12/16/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	940033	1/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	940240	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	940498	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND	NA
M-2	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-2	941010	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	941263	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	941625	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	950104	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-2	950567	5/5/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	950900	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	951184	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	960100	2/5/96	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-2	960484	5/28/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-2	960691	8/6/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-2	960907	10/28/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-2	961014	11/20/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-2	970129	2/19/97	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	NA
M-2	970506	5/28/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-2	970921	8/21/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-2	971201	11/10/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-2	980169	2/18/98	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	<1.2
M-2	980409	5/19/98	<1.0	<1.0	<1.0	<3.0	<6	No	ND	<0.1
M-2	990258	5/25/99	0.5	0.5	0.5	1.5	3			0.05

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
M-3	N30976	9/8/93	116	<2.0	3.0	37.6	157	No	ND	NA
M-3	N31064	10/5/93	306	<2.0	4.0	19	329	No	ND	NA
M-3	N31247	11/11/93	8.4	5.3	<2.0	2.6	16	No	ND	NA
M-3	N31391	12/16/93	42	<2.0	<2.0	<2.0	42	No	ND	NA
M-3	940034	1/13/94	19	2.1	<2.0	<2.0	21	No	ND	NA
M-3	940241	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-3	940499	3/7/94	<0.5	<0.5	<0.5	2.5	3	Yes	ND	NA
M-3	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-3	941011	6/13/94	3.65	<2.0	<2.0	<2.0	4	No	ND	NA
M-3	941264	9/7/94	2.87	<2.5	<2.5	2.5	5	No	ND	NA
M-3	941626	12/15/94	<2.5	<2.5	<2.5	5.61	6	No	ND	NA
M-3	950105	2/9/95	11.4	<2.5	<2.5	<2.5	11	Yes	ND	NA
M-3	950568	5/8/95	180	67.2	<2.5	53.9	301	No	ND	NA
M-3	950901	8/25/95	11.8	<2.5	<2.5	16.8	29	No	ND	NA
M-3	951185	11/2/95	<2.5	<2.5	<2.5	5.03	5	No	ND	NA
M-3	960101	2/5/96	236	<2.5	5.77	22.2	264	Yes	ND	NA
M-3	960485	5/28/96	88.4	<1.0	5.93	20.3	115	No	ND	NA
M-3	960692	8/6/96	96.4	<1.0	2.5	3.27	102	No	ND	NA
M-3	960908	10/29/96	17.4	<1.0	1.55	2.23	21	No	ND	NA
M-3	961015	11/20/96	70.2	<1.0	1.89	<3	72	No	ND	NA
M-3	970130	2/19/97	2.44	<1.0	2.61	7.43	12	Yes	ND	NA
M-3	970507	5/28/97	38	6.1	<1	13.5	58	No	ND	20.1
M-3	970922	8/21/97	<1	<1	<1	7.68	8	No	ND	<1.2
M-3	971202	11/10/97	<1	<1	<1	7.68	8	No	ND	<1.2
M-3	980170	2/18/98	<1	<1	<1	<3	<6	Yes	ND	<1.2
M-3	980410	5/19/98	26.7	<1	<1	2.52	29	No	ND	0.32
M-3	980589	8/26/98	<1	2.8	<1	<3	3	No	ND	0.30
M-3	980786	11/5/98	1.93	3.2	<1	<3	5	No	ND	NA
M-3	990047	2/23/99	<1	<1	<1	<3	<6	No	ND	<1
M-3	990259	5/25/99	4.2	0.8	0.5	1.5	7	No	ND	0.05
M-3	990352	8/5/99	<1	1.8	<1	<3	<6	No	ND	<.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	Nitrates PPM
M-3	990454	11/12/99	6	2.2	1.7	5.4	15	No	ND	ND
M-4	N30977	9/8/93	213	13.3	58	519	803	No	ND	NA
M-4	N31065	10/5/93	302	2.0	55	395	754	No	ND	NA
M-4	N31248	11/11/93	234	2.0	56	383	675	No	ND	NA
M-4	N31392	12/16/93	171	<2.0	34.3	244	449	No	ND	NA
M-4	940035	1/13/94	175	2.5	38	288	504	No	ND	NA
M-4	940242	2/10/94	137	<2.0	29.8	192	359	No	ND	NA
M-4	940500	3/7/94	120	<2.5	27	220	367	Yes	ND	NA
M-4	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-4	941012	6/13/94	151	<2.0	28.4	246	425	No	ND	NA
M-4	941265	9/7/94	145	<2.5	24.1	231	400	No	ND	NA
M-4	941628	12/15/94	184	<2.5	22.3	215	421	No	ND	NA
M-4	950106	2/9/95	160	<2.5	19.6	186	366	Yes	ND	NA
M-4	950569	5/8/95	108	<2.5	11.7	119	239	No	ND	NA
M-4	950902	8/25/95	29.3	<2.5	13	116	158	No	ND	NA
M-4	951187	11/2/95	15.1	<2.5	12.9	136	164	No	ND	NA
M-4	960102	2/5/96	33.5	<2.5	19.3	209	262	Yes	ND	NA
M-4	960486	5/28/96	17	<1.0	8.93	93.6	120	No	ND	NA
M-4	960693	8/6/96	2.77	<1.0	3.5	38.5	45	No	ND	NA
M-4	960909	10/29/96	1.03	<1.0	3.66	55.5	60	No	ND	NA
M-4	961016	11/22/96	3.28	<1.0	7.77	90.3	101	No	ND	NA
M-4	970131	2/19/97	17.7	1.5	8.3	54	82	Yes	ND	NA
M-4	970508	5/28/97	53.6	11.6	43.4	366	475	No	ND	225
M-4	970923	8/2197	39.7	3.2	1.51	100	145	No	ND	20.8
M-4	971203	11/10/97	44.8	<1.0	<1.0	71	116	No	ND	1.31
M-4	980171	2/18/98	91.0	<1.0	1.1	74.9	167	Yes	ND	<1.2
M-4	980411	5/19/98	46.6	<1.0	2.81	83.1	133	No	ND	0.21
M-4	980590	8/26/98	51.0	2.6	2.08	45.1	101	No	ND	43.9
M-4	980787	11/5/98	69.0	<1.0	<1.0	33	102	No	ND	NA
M-4	990048	2/23/99	133.0	<1	1.31	59.3	194	No	ND	283

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
M-4	990260	5/25/99	230.0	1.8	1.2	63	296	Yes	ND	190
M-4	990353	8/5/99	100.0	<2	<2	15.3	115	No	ND	54.9
M-4	990455	11/12/99	110.0	<2.5	<2.5	56	166	No	ND	57
M-5	N30979	9/8/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	N31066	10/5/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	N31250	11/11/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	N31393	12/16/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	940036	1/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	940243	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	940501	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND	NA
M-5	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-5	941013	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	941267	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	941629	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	950107	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-5	950570	5/8/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	950904	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	951188	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	960103	2/5/96	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-5	960487	5/28/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-5	960694	8/6/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-5	960910	10/29/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-5	961017	11/21/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-5	970132	2/19/97	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	NA
M-5	970509	5/28/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-5	970925	8/21/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-5	971204	8/21/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-5	980172	2/18/98	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	<1.2
M-5	980413	5/19/98	<1.0	<1.0	<1.0	<3.0	<6	No	ND	<0.1
M-5	990262	5/25/99	0.5	0.5	0.5	1.5	3	Yes	ND	0.05

TABLE 3

Table 3

Sample #	Date	Time	Sample Location Map Point	Sample Depth	Sample Matrix	Sample Color	Field PID (PPM)	TPH MG/KG	Benzene Soil - MG/KG	Total BTEX Soil - MB/KG
990293	6/30/99	850	#1	4' - 2"	Soil	Brown	< 5.0	< 20	< 0.025	< 0.1
990294	6/30/99	910	#2	4' - 2"	Soil	Brown	< 5.0	< 20	< 0.025	< 0.1
990295	6/30/99	930	#3	4'	Soil	Brown	< 5.0	< 20	< 0.025	< 0.1
990296	6/30/99	945	#4	4'	Soil	Brown	< 5.0	< 20	< 0.025	< 0.1
990297	6/30/99	1000	#6	4'	Soil	Gray	2346	6850	28	262
990298	6/30/99	1015	#8	4'	Soil	Brown	< 5.0	< 20	< 0.025	< 0.1
990299	6/30/99	1025	#9	4'	Soil	Gray	2387	1443	< 2.6	46.5
990300	6/30/99	1040	#5	4'	Soil	Brown	< 5.0	< 20	< 0.025	< 0.1
990301	6/30/99	1050	#5	4'	Water	Clear	NA	NA	< 0.5	< 2.0
990302	6/30/99	1140	#10	7' - 4"	Soil	Black	Not Run	< 20	< 0.025	< 0.1
990303	6/30/99	1145	#10	7' - 4"	Water	Clear	NA	NA	1100	3060
990304	6/30/99	1010	#7	4'	Soil	Brown	< 5.0	< 20	< 0.025	< 0.1

TABLE 4

Table 4

November 24, 1999

Soil Investigation Summary Table

Lab ID	Location	Date	Matrix	Benzene (PPM)	Toulene (PPM)	Ethyl Benzene (PPM)	Total Xylenes	Total BTEX (PPM)	TPH (PPM)
990461	TT - 01	11/24/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
990462	TT - 02	11/24/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
990463	TT - 03	11/24/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
990464	TT - 04	11/24/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
990465	TT - 05	11/24/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
990466	TT - 06	11/24/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20

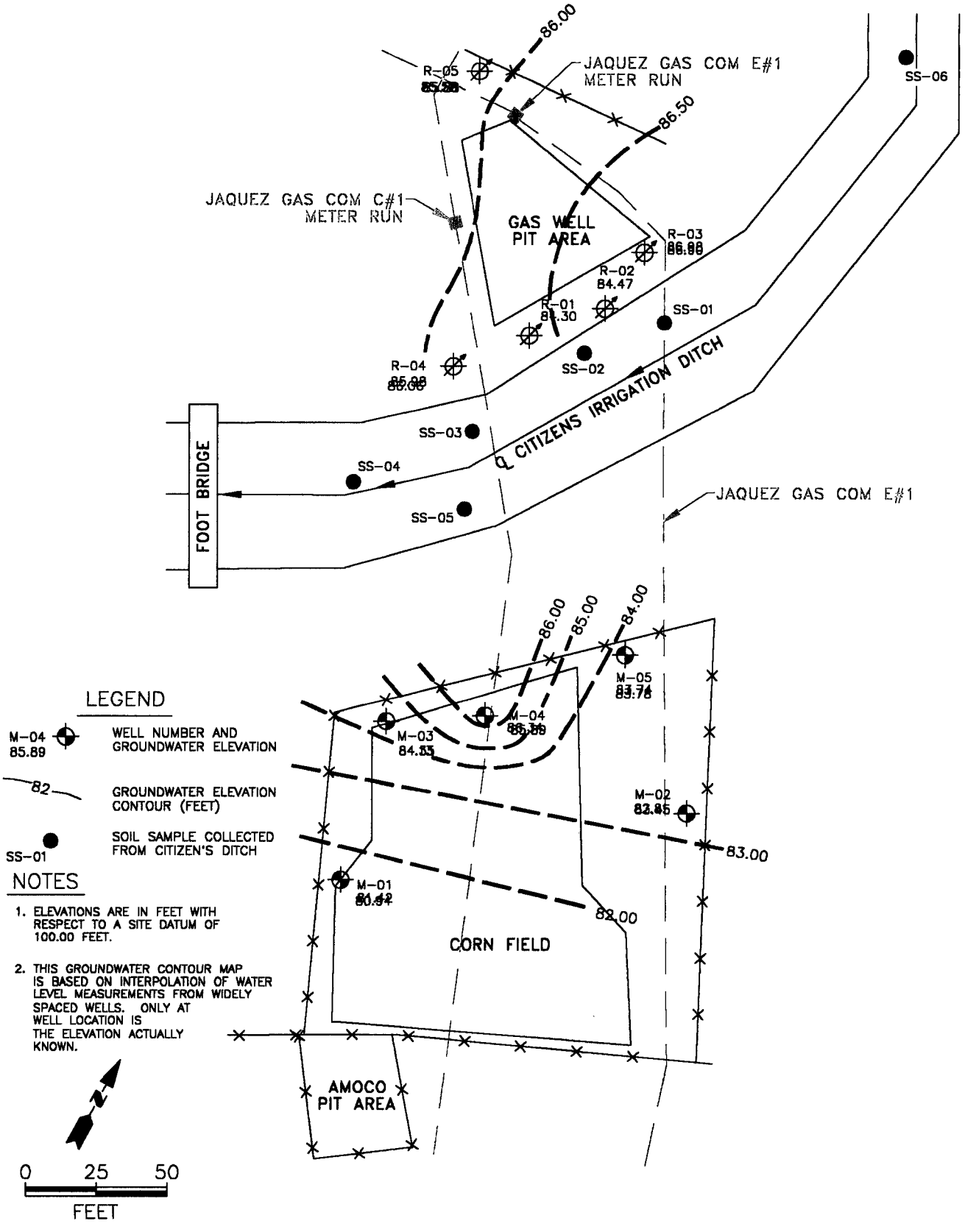
TABLE 5

Table 5

December 22, 1999

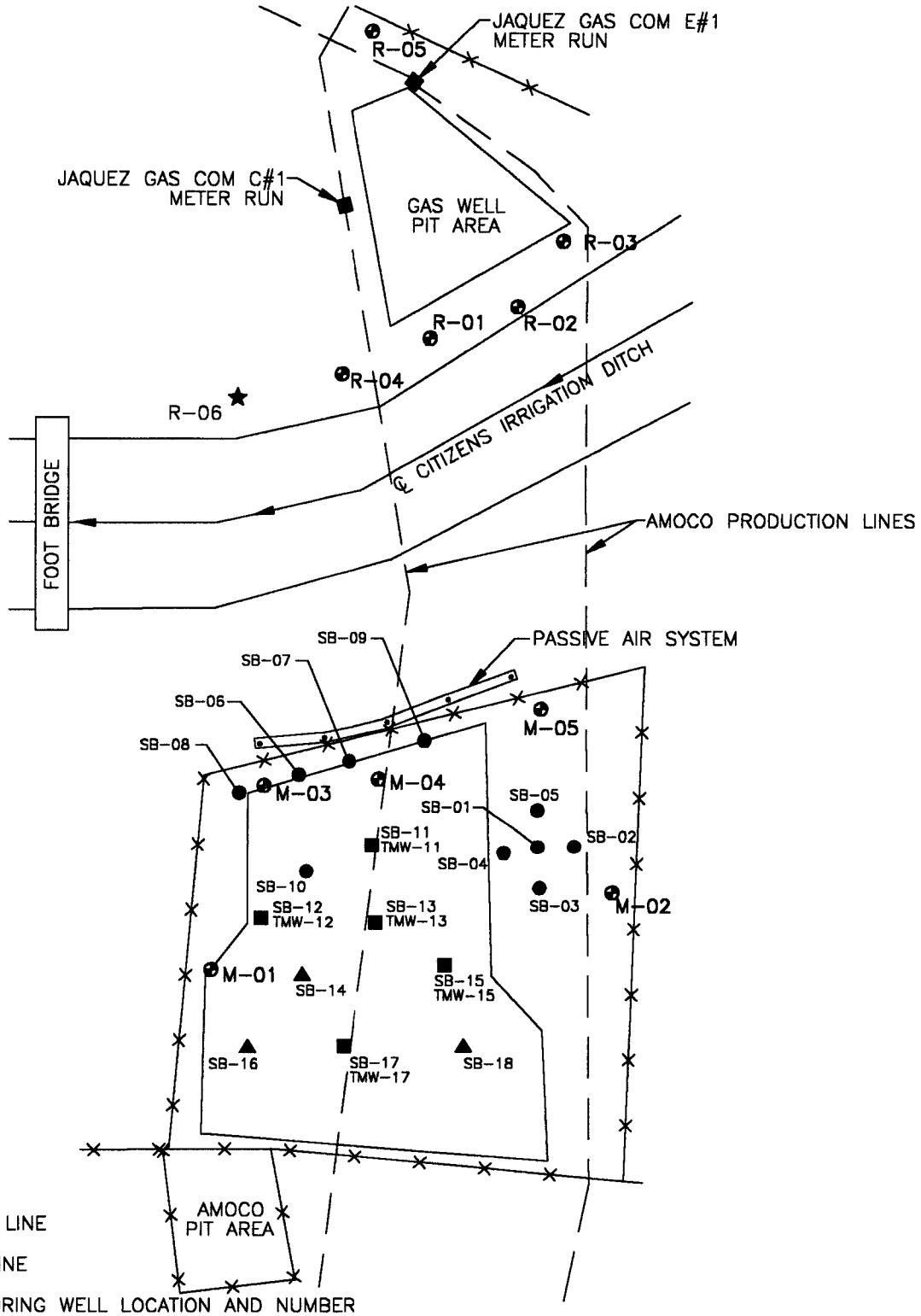
Soil Investigation Summary Table

Sample #	Date	Matrix	Benzene (PPM)	Toulene (PPM)	Ethyl Benzene (PPM)	Total Xylenes	Total BTEX (PPM)	TPH (PPM)
TP - 01	12/22/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
TP - 02	12/22/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
TP - 03	12/22/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
TP - 03 - 01	12/22/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
TP - 03 - 02	12/22/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
TP - 04	12/22/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
TT - 03 - 02	12/22/99	Soil	< 0.025	= 0.45	= 0.41	= 2.90	= 3.79	= 4360
TT - 07	12/22/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
TT - 08	12/22/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20
TT - 09	12/22/99	Soil	< 0.025	< 0.025	< 0.025	< 0.025	< 0.10	< 20



TITLE: JAQUEZ GAS COM E#1 & C#1 GROUNDWATER ELEVATION CONTOURS MAY 25, 1999	DWN: CJG	DES.: MRC	PROJECT NO.: 17444 EL PASO FIELD JAQUEZ, NEW MEXICO
	CHKD:	APPD:	
	DATE: 03/09/00	REV.: A	FIGURE 1

COL2 G:\EPNG-NM\HYDRO\MAPS\1998\GW9805-B.DWG



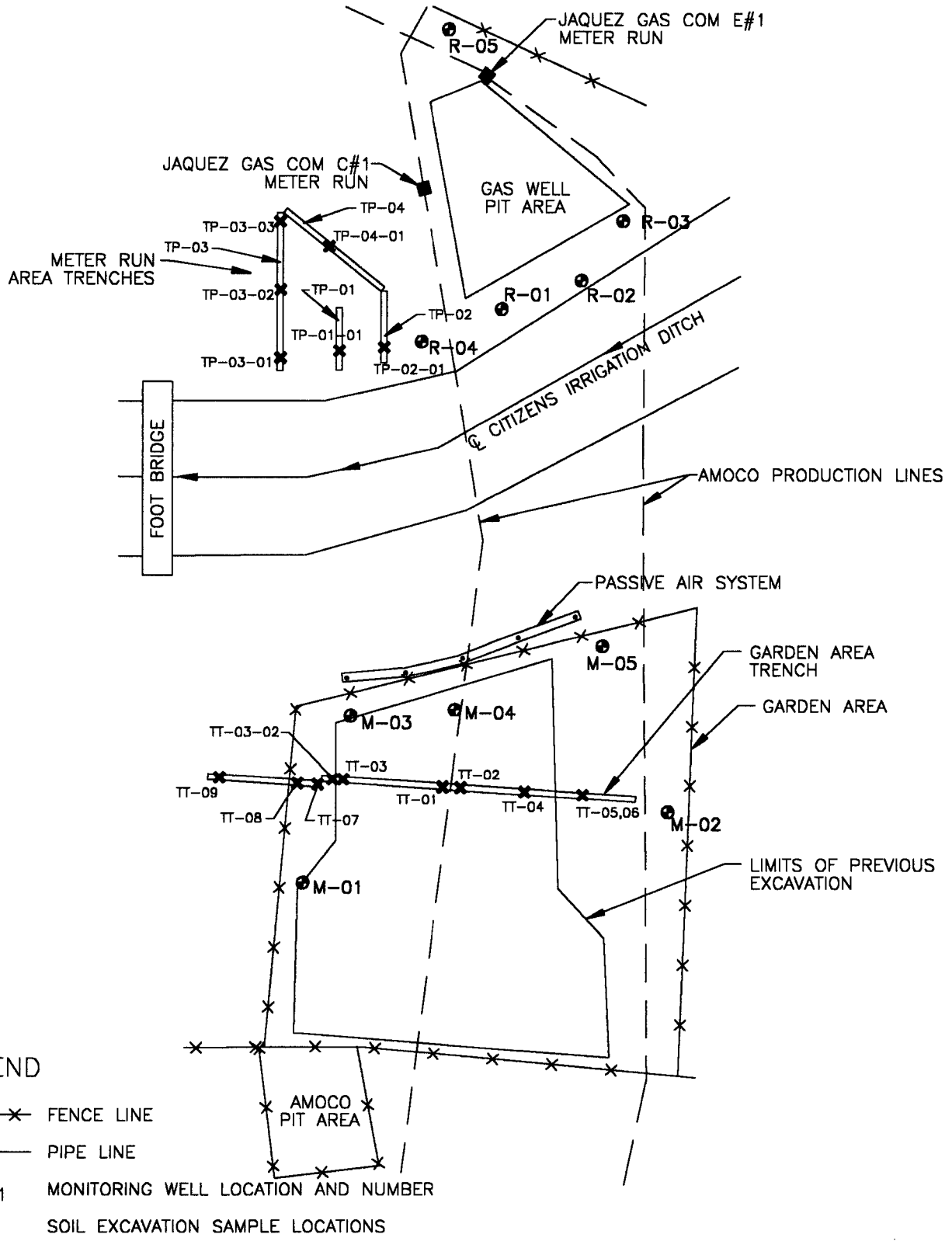
LEGEND

- FENCE LINE
- PIPE LINE
- M-01 MONITORING WELL LOCATION AND NUMBER
- SB-01 EXISTING SOIL BORING LOCATION
- SB-14 PROPOSED SOIL BORING LOCATION
- SB-11 PROPOSED SOIL BORING AND GROUNDWATER LOCATIONS
- R-06 PROPOSED MONITORING WELL LOCATION

0 50
FEET

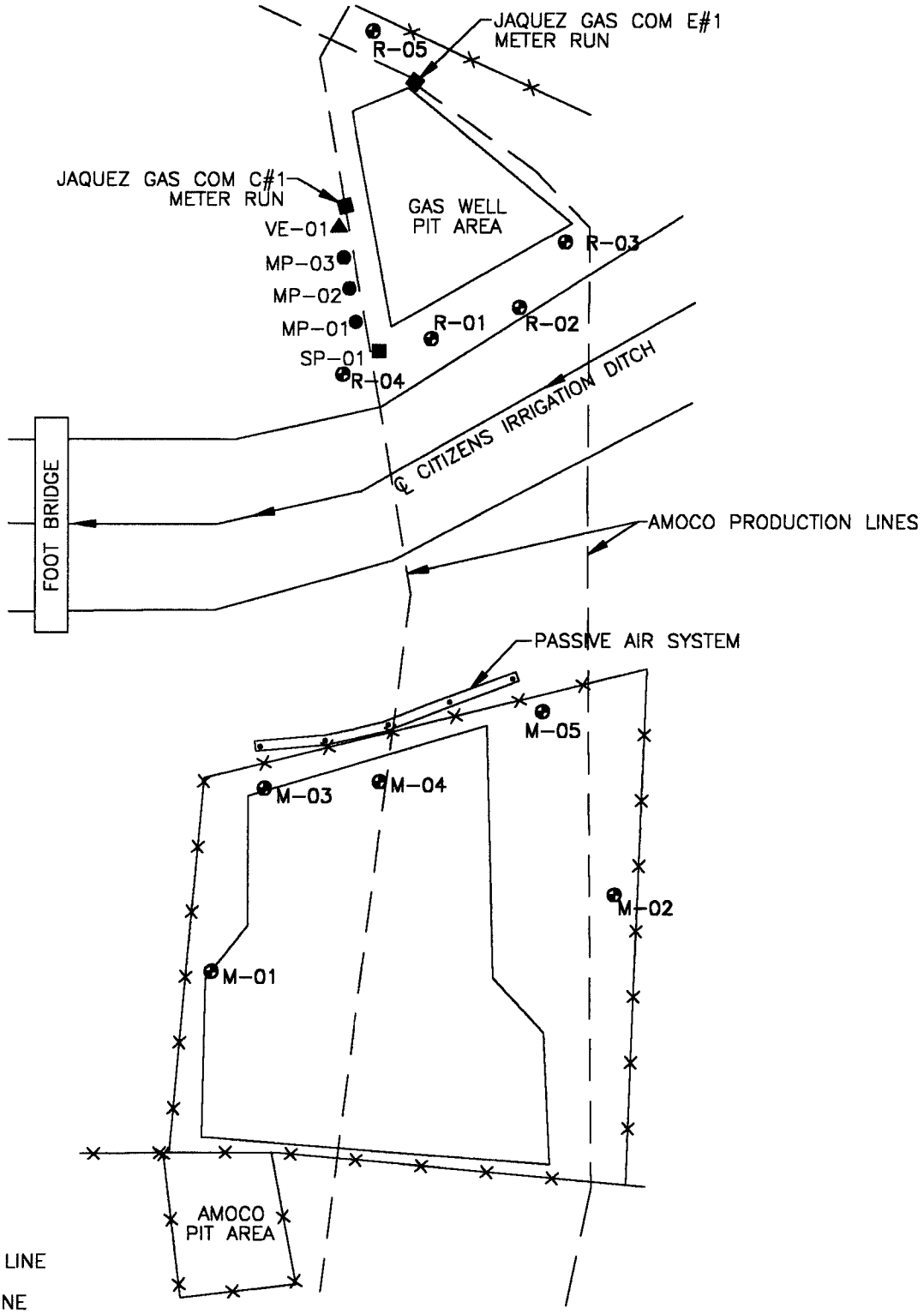
PSC	TITLE: JAQUEZ CORNFIELD SOIL AND GROUNDWATER INVESTIGATION JUNE 30, 1999	DWN: CJG	DES.: CI	PROJECT NO.: 17444 EL PASO FIELD SERVICE COMPANY
		CHKD: SP	APPD:	
		DATE: 03/17/00	REV.: 1	FIGURE 2

COL 17444B-003



TITLE: RECENT SOIL INVESTIGATION/ SOIL SAMPLE LOCATIONS NOVEMBER 24 & DECEMBER 22, 1999	DWN: CJG	DES.: CI	PROJECT NO.: 17444 EL PASO FIELD SERVICE COMPANY
	CHKD: SP	APPD:	
	DATE: 03/17/00	REV.: 2	FIGURE 3

COL 174448-008



LEGEND

- FENCE LINE
- PIPE LINE
- M-01 MONITORING WELL LOCATION AND NUMBER
- SP-01 GROUNDWATER SPARGE POINT
- VE-01 VAPOR EXTRACTION POINT
- MP-01 MONITORING POINT

0 50
FEET

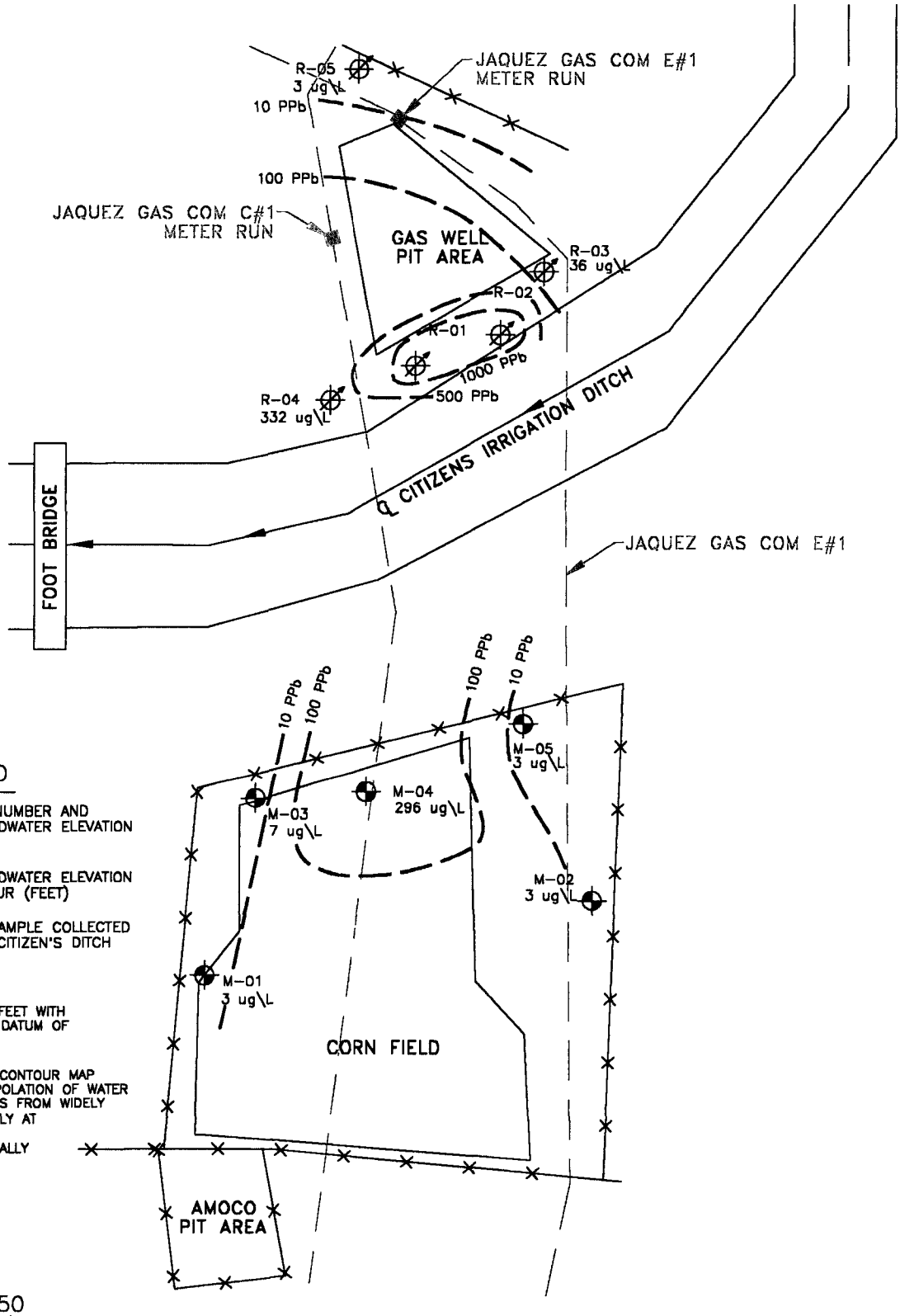
N

PSC

TITLE:
LOCATIONS OF VAPOR EXTRACTION, GROUNDWATER SPARGE POINT AND MONITORING POINTS

DWN:	DES.:	PROJECT NO.: 17444
CJG	CI	EL PASO FIELD SERVICE COMPANY
CHKD: CI	APPD:	
DATE: 03/17/00	REV.: 0	FIGURE 4

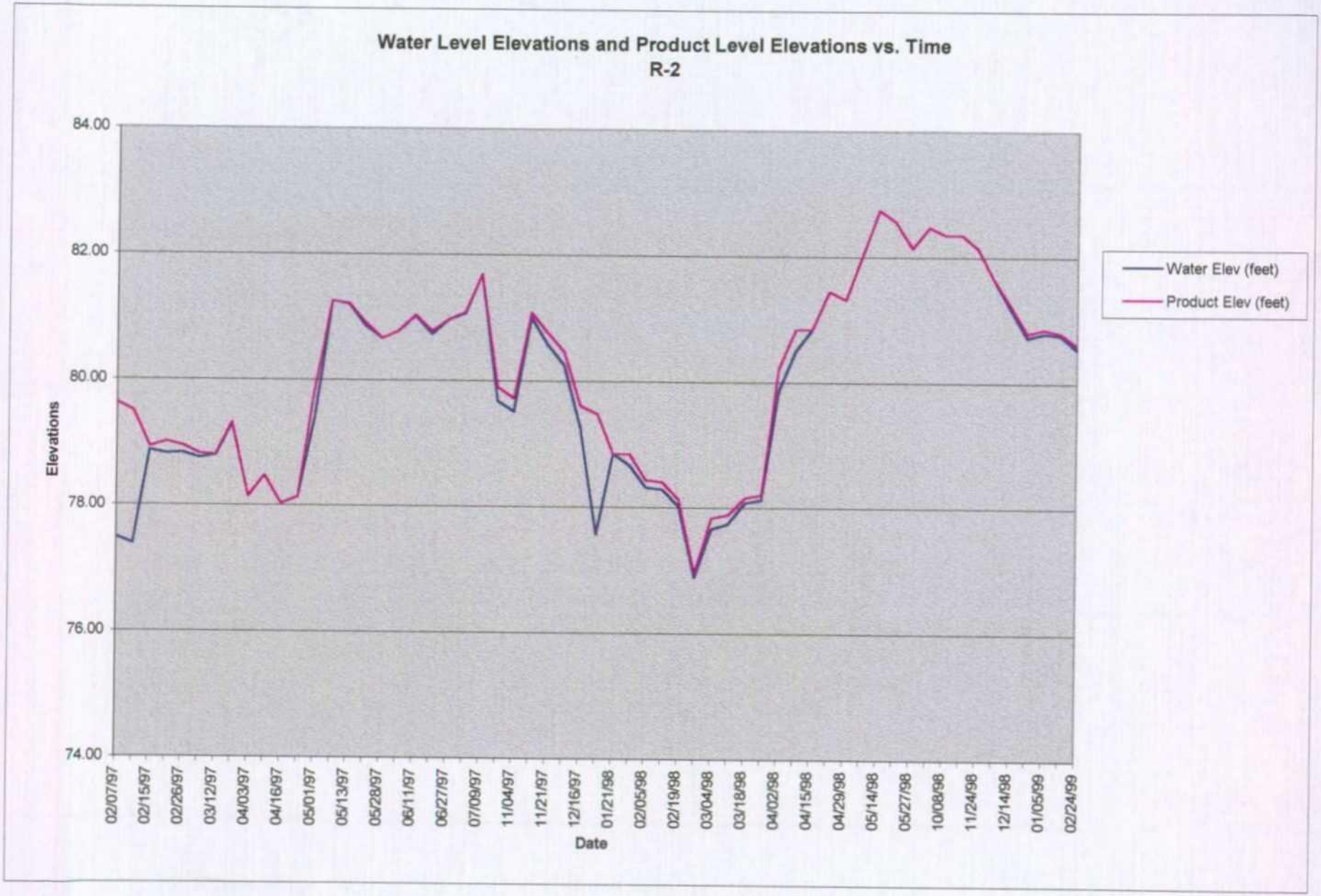
COL 174448-002



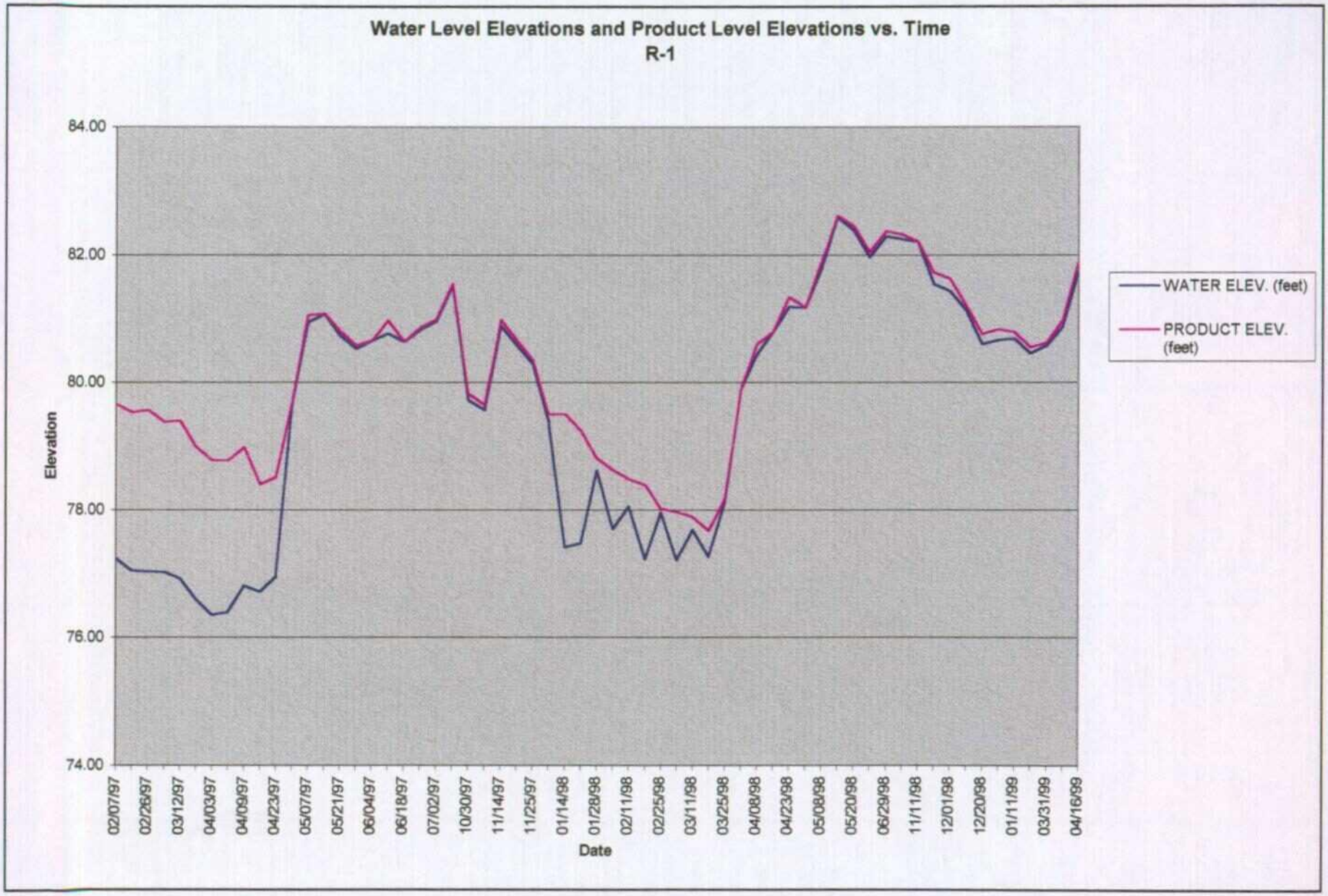
TITLE: JAQUEZ GAS COM E#1 & C#1 GROUNDWATER ELEVATION CONTOURS MAY 25, 1999 TOTAL BTEX ISOCONCENTRATION MAP	DWN: CJG	DES.: MRC	PROJECT NO.: 17444 EL PASO FIELD JAQUEZ, NEW MEXICO
	CHKD:	APPD:	
	DATE: 03/17/00	REV.: A	FIGURE 5

COL2 G:\EPNG-NM\HYDRO\MAPS\1998\GW9805-8.DWG

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

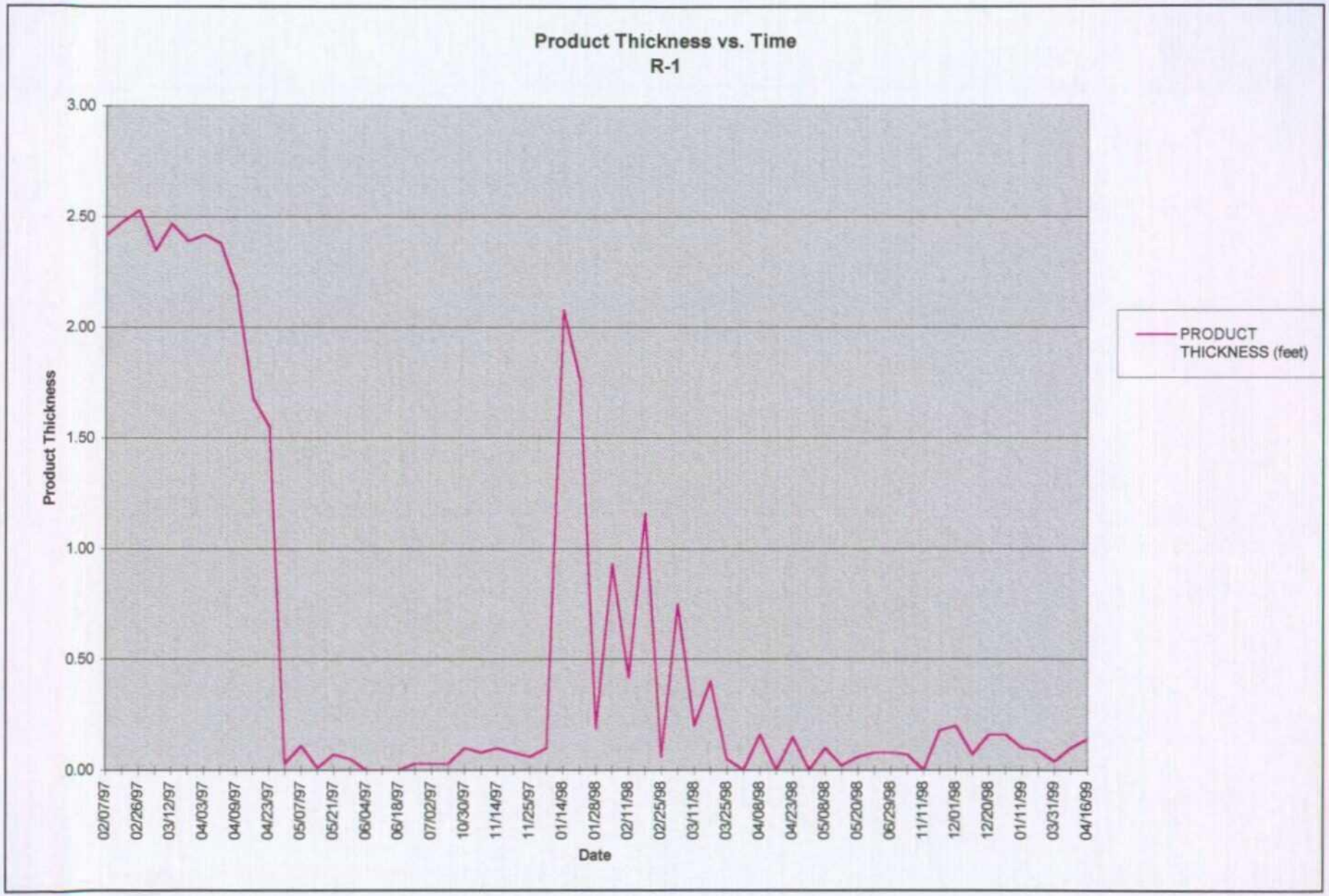


J:/17444/Reports/00annual/99WWD2.xls

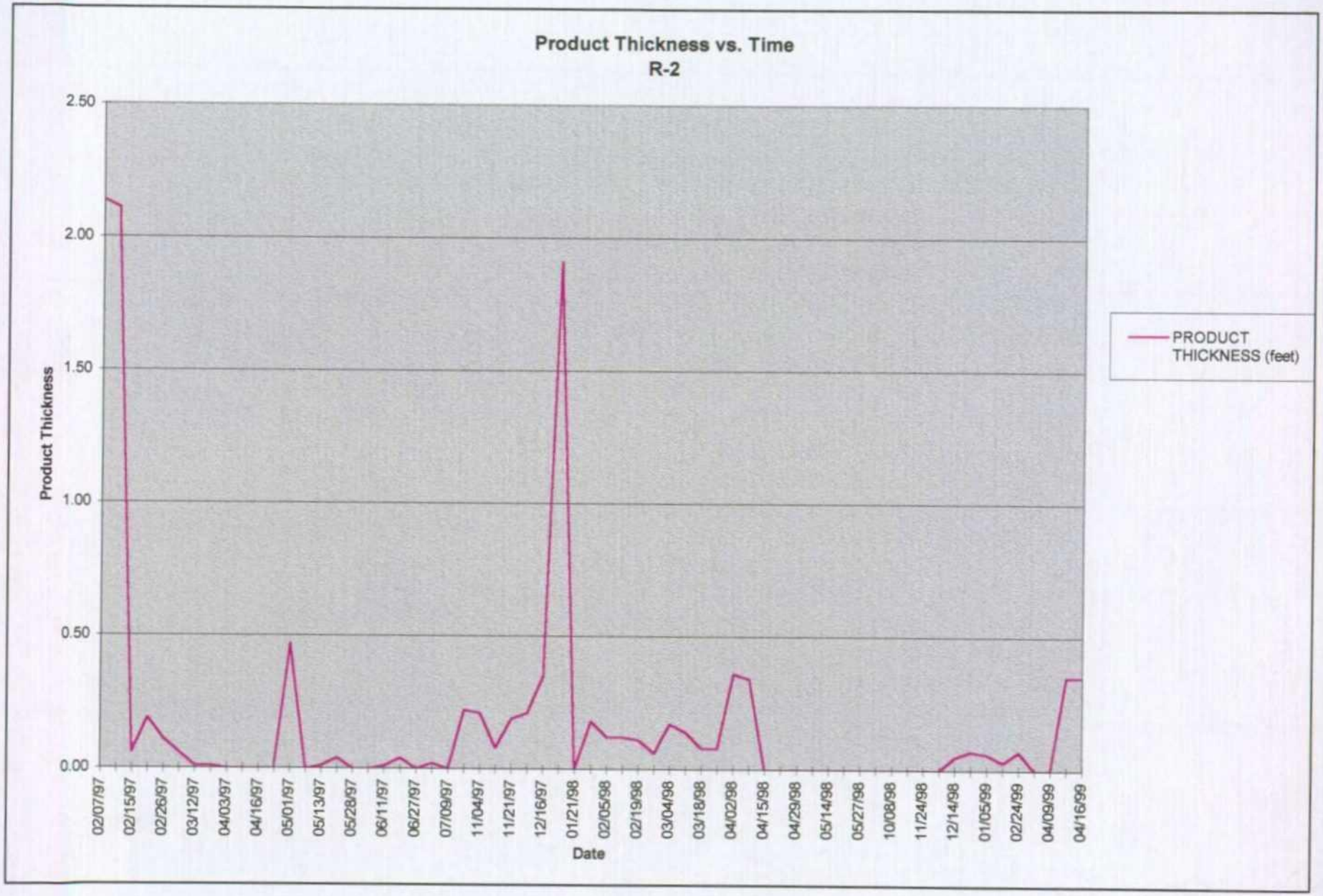

Water Level Elevations and Product Level Elevations vs. Time
R-1
84.00
82.00
80.00
78.00
76.00
74.00
Elevation
02/07/97
02/26/97
03/12/97
04/03/97
04/09/97
04/23/97
05/07/97
05/21/97
06/04/97
06/18/97
07/02/97
10/30/97
11/14/97
11/25/97
01/14/98
01/28/98
02/11/98
02/25/98
03/11/98
03/25/98
04/08/98
04/23/98
05/08/98
05/20/98
06/29/98
11/11/98
12/01/98
12/20/98
01/11/99
03/31/99
04/16/99
Date
WATER ELEV. (feet)
PRODUCT ELEV. (feet)

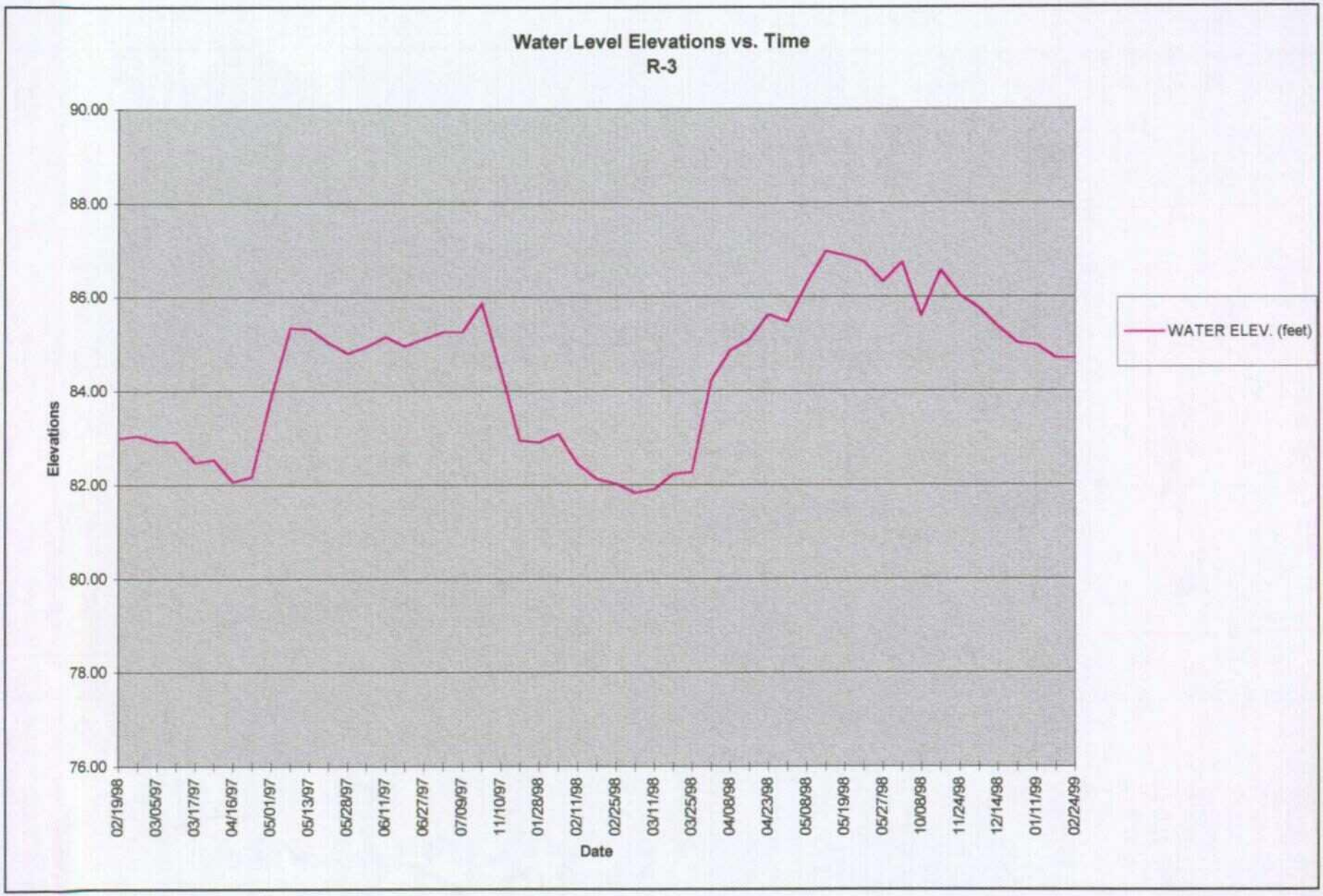
Appendix B - Groundwater Elevations vs. Time

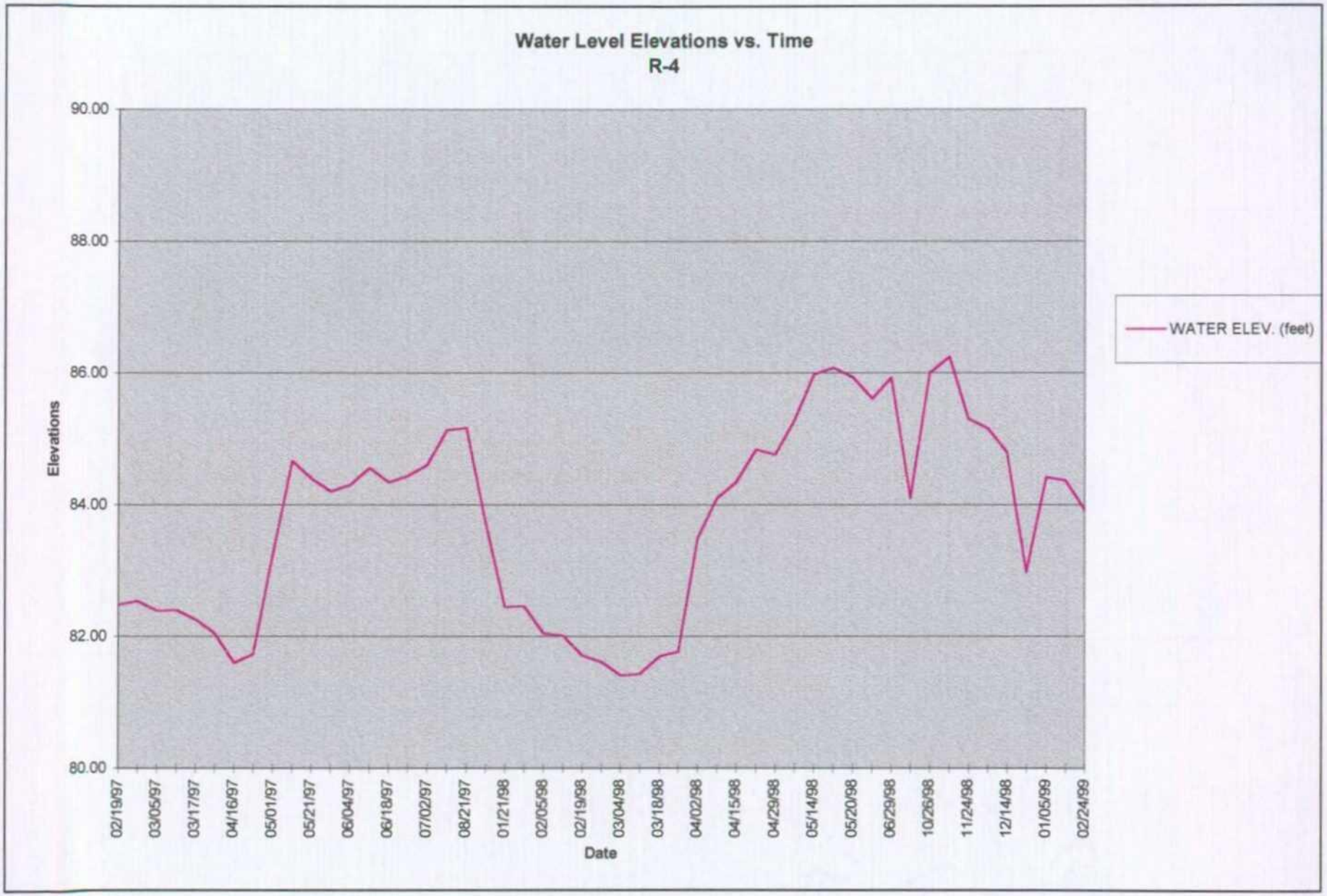
R-1 Product Thickness vs. Time Chart 2

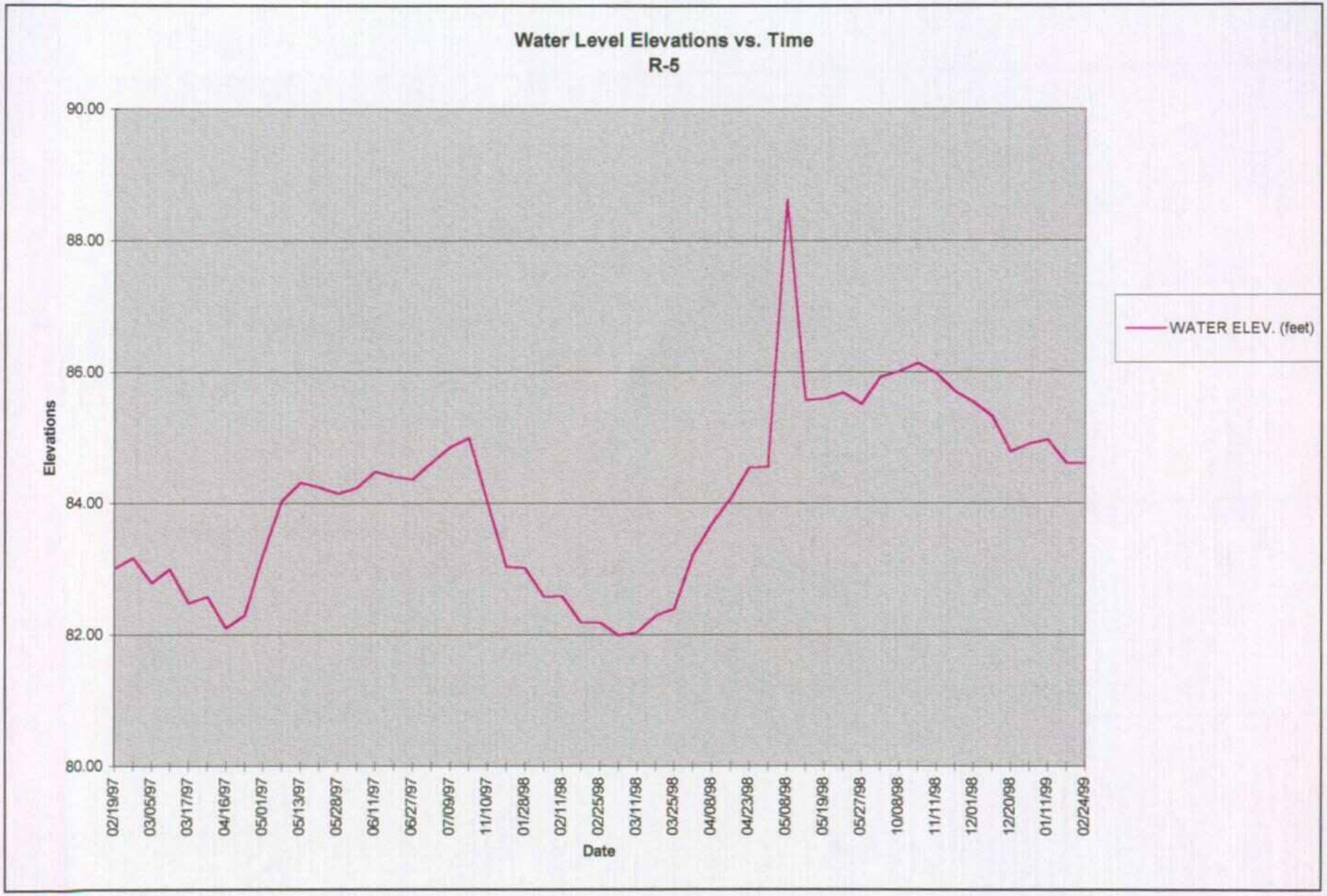


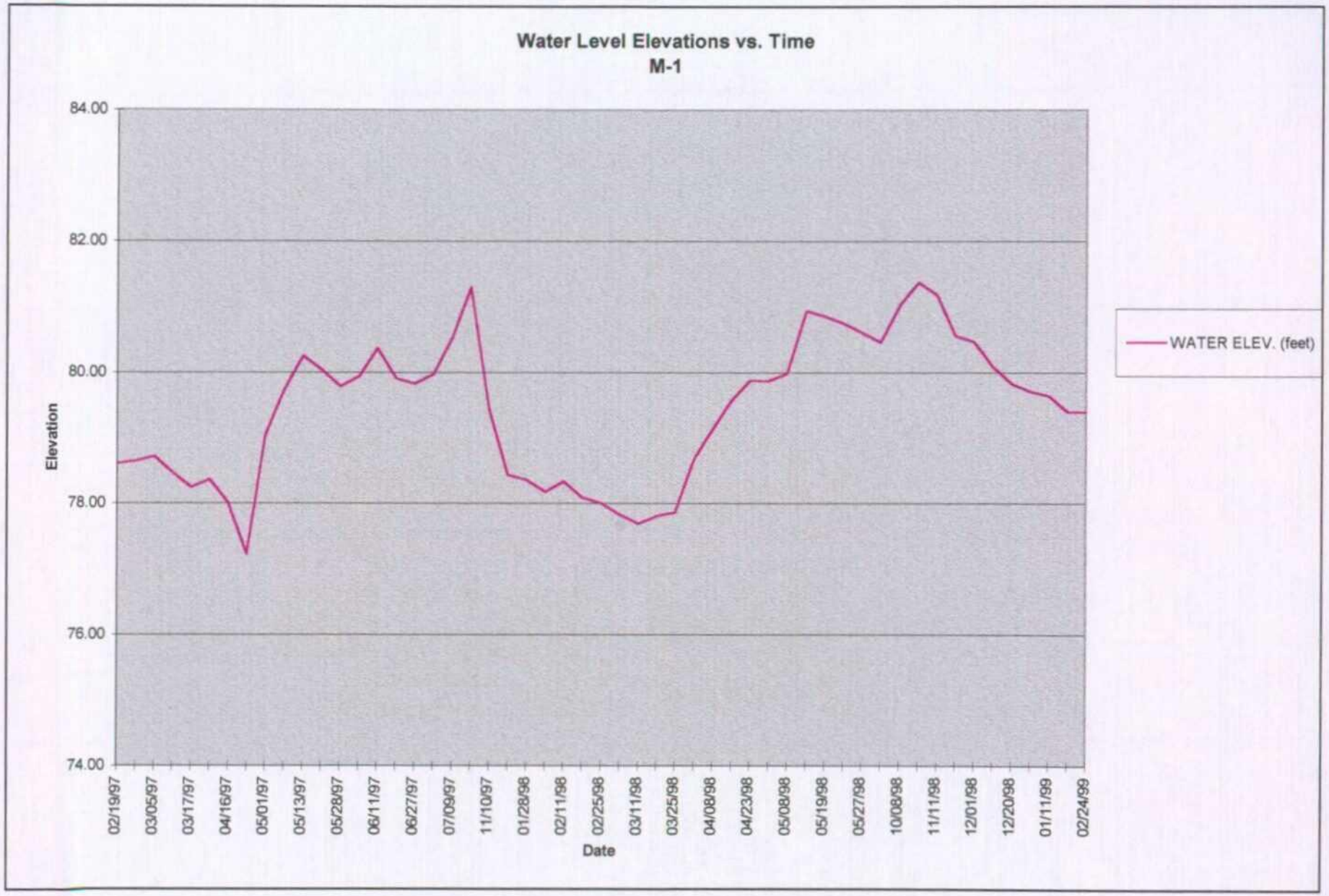
R-2 Product Thickness vs. Time Chart 2

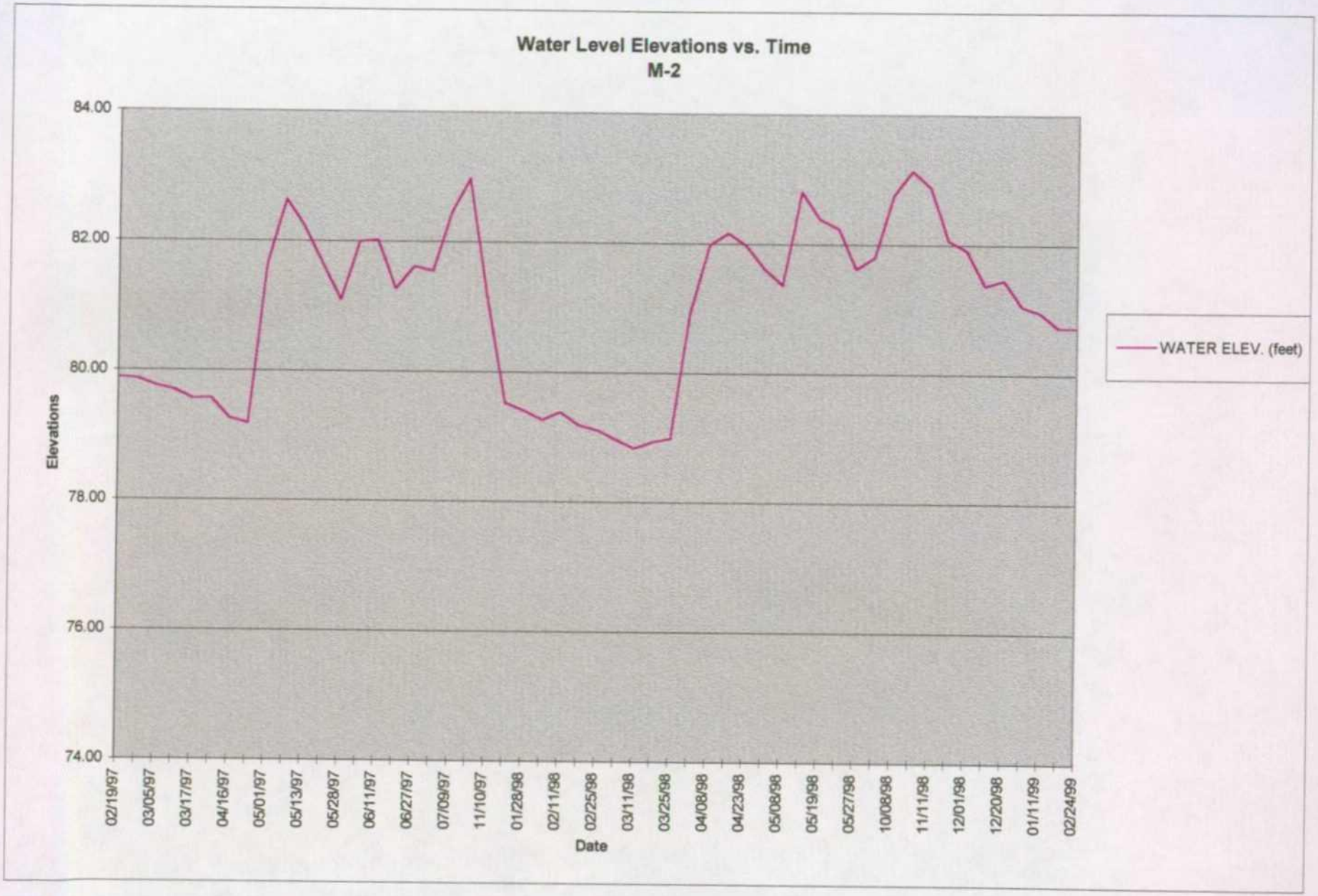


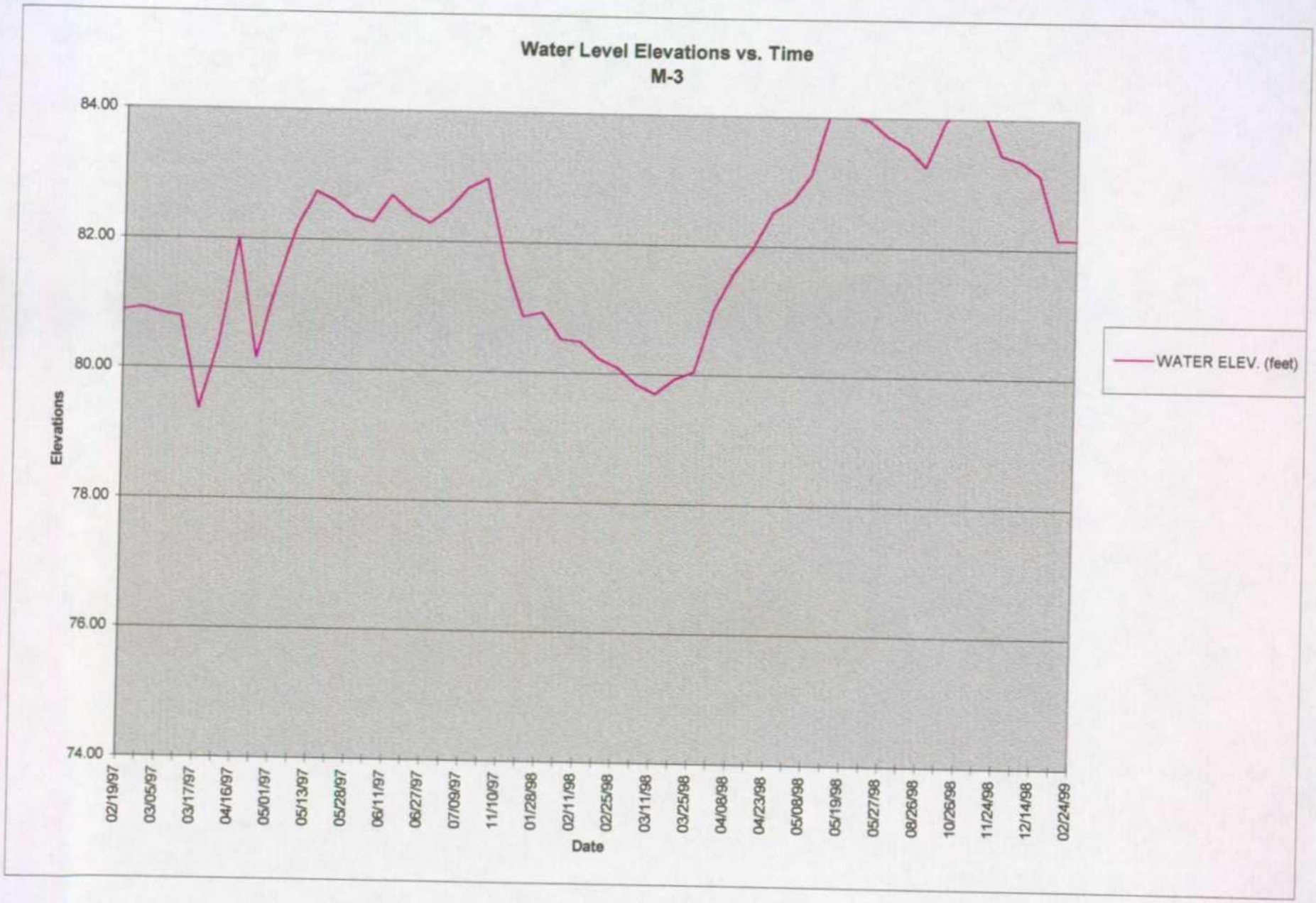

Water Level Elevations vs. Time
R-3
90.00
88.00
86.00
84.00
82.00
80.00
78.00
76.00
Elevations
02/19/98
03/05/97
03/17/97
04/16/97
05/01/97
05/13/97
05/28/97
06/11/97
06/27/97
07/09/97
11/10/97
01/28/98
02/11/98
02/25/98
03/11/98
03/25/98
04/08/98
04/23/98
05/08/98
05/19/98
05/27/98
10/08/98
11/24/98
12/14/98
01/11/99
02/24/99
Date
WATER ELEV. (feet)

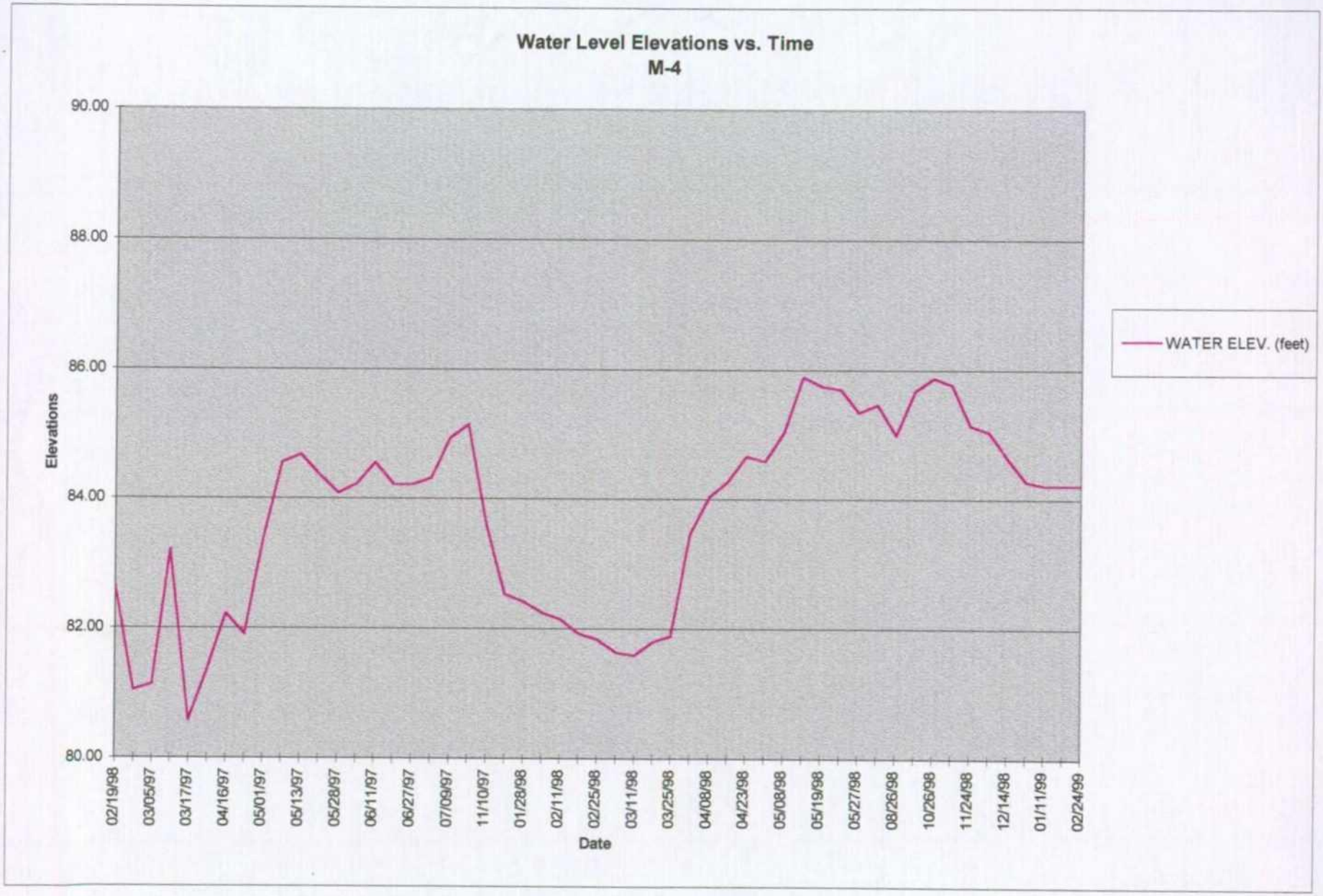

Water Level Elevations vs. Time
R-4
90.00
88.00
86.00
84.00
82.00
80.00
Elevations
02/19/97
03/05/97
03/17/97
04/16/97
05/01/97
05/21/97
06/04/97
06/18/97
07/02/97
08/21/97
01/21/98
02/05/98
02/19/98
03/04/98
03/18/98
04/02/98
04/15/98
04/29/98
05/14/98
05/20/98
06/29/98
10/26/98
11/24/98
12/14/98
01/05/99
02/24/99
Date
WATER ELEV. (feet)

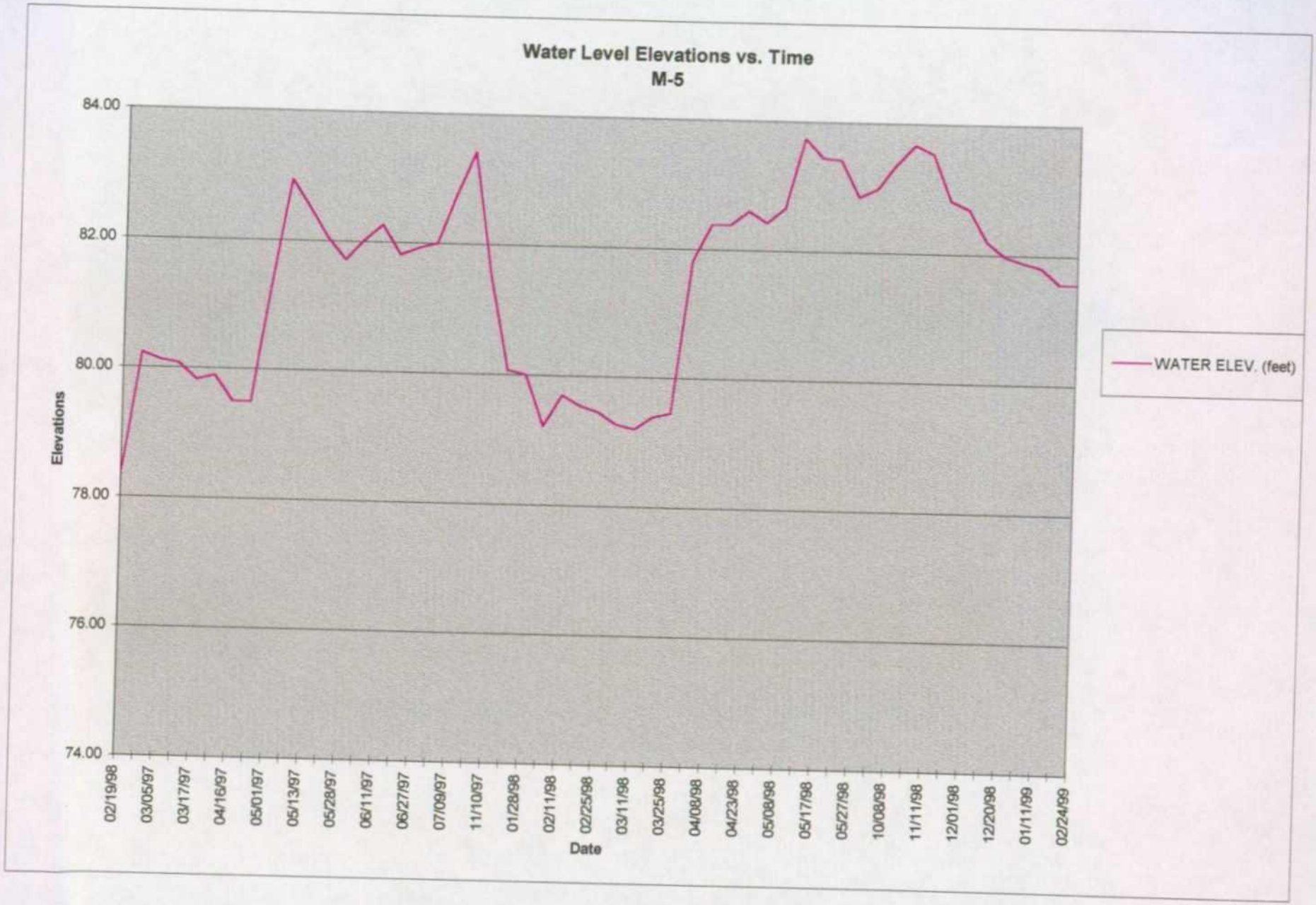

Water Level Elevations vs. Time
R-5
90.00
88.00
86.00
84.00
82.00
80.00
Elevations
02/19/97
03/05/97
03/17/97
04/16/97
05/01/97
05/13/97
05/28/97
06/11/97
06/27/97
07/09/97
11/10/97
01/28/98
02/11/98
02/25/98
03/11/98
03/25/98
04/08/98
04/23/98
05/08/98
05/19/98
05/27/98
10/08/98
11/11/98
12/01/98
12/20/98
01/11/99
02/24/99
Date
WATER ELEV. (feet)


Water Level Elevations vs. Time
M-1
84.00
82.00
80.00
78.00
76.00
74.00
Elevation
02/19/97
03/05/97
03/17/97
04/16/97
05/01/97
05/13/97
05/28/97
06/11/97
06/27/97
07/09/97
11/10/97
01/28/98
02/11/98
02/25/98
03/11/98
03/25/98
04/08/98
04/23/98
05/08/98
05/19/98
05/27/98
10/08/98
11/11/98
12/01/98
12/20/98
01/11/99
02/24/99
Date
WATER ELEV. (feet)


Water Level Elevations vs. Time
M-2
84.00
82.00
80.00
78.00
76.00
74.00
Elevations
02/19/97
03/05/97
03/17/97
04/16/97
05/01/97
05/13/97
05/28/97
06/11/97
06/27/97
07/09/97
11/10/97
01/28/98
02/11/98
02/25/98
03/11/98
03/25/98
04/08/98
04/23/98
05/08/98
05/19/98
05/27/98
10/08/98
11/11/98
12/01/98
12/20/98
01/11/99
02/24/99
Date
WATER ELEV. (feet)


Water Level Elevations vs. Time
M-3
84.00
82.00
80.00
78.00
76.00
74.00
Elevations
02/19/97
03/05/97
03/17/97
04/16/97
05/01/97
05/13/97
05/28/97
06/11/97
06/27/97
07/09/97
11/10/97
01/28/98
02/11/98
02/25/98
03/11/98
03/25/98
04/08/98
04/23/98
05/08/98
05/19/98
05/27/98
08/26/98
10/26/98
11/24/98
12/14/98
02/24/99
Date
WATER ELEV. (feet)


Water Level Elevations vs. Time
M-4
90.00
88.00
86.00
84.00
82.00
80.00
Elevations
02/19/98
03/05/97
03/17/97
04/16/97
05/01/97
05/13/97
05/28/97
06/11/97
06/27/97
07/09/97
11/10/97
01/28/98
02/11/98
02/25/98
03/11/98
03/25/98
04/08/98
04/23/98
05/08/98
05/19/98
05/27/98
08/26/98
10/26/98
11/24/98
12/14/98
01/11/99
02/24/99
Date
WATER ELEV. (feet)


Water Level Elevations vs. Time
M-5
84.00
82.00
80.00
78.00
76.00
74.00
Elevations
02/19/98
03/05/97
03/17/97
04/16/97
05/01/97
05/13/97
05/28/97
06/11/97
06/27/97
07/09/97
11/10/97
01/28/98
02/11/98
02/25/98
03/11/98
03/25/98
04/08/98
04/23/98
05/08/98
05/17/98
05/27/98
10/08/98
11/11/98
12/01/98
12/20/98
01/11/99
02/24/99
Date
WATER ELEV. (feet)

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

March 11, 1999

1st Quarter 1999 REPORT

Jaquez Corn Field
Monitor Well Analytical Results
Lab Sample #'s 990047 to 990049
Sampled February 23, 1999
Sampled by Dennis Bird

Report Distribution:

Sandra Miller
Cecil Irby - Philip Services Company
Results File
Monitor Well Historic Excel

Attachments

El Paso Natural Gas Company

A 2435

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Requested Analysis: Preservation Technique	Requested Analysis: BTXE	Requested Analysis: NITRATE-N	Requested Analysis:	Requested Analysis:	Remarks
	JAQUEZ							

Samplers: (Signature) Dennis Bird Date: 2-23-99

MATRIX	Date	Time	Comp.	GRAB	Sample Number							
WATER	2-23-99	1421		X	990047	G-2 P-1	3HPF	X	X			MONITOR WELL M-3
WATER	2-23-99	1545		X	990048	G-2 P-1	3HPF	X	X			MONITOR WELL M-4
WATER	2-23-99	1545		X	990049	G-2 P-1	3HPF	X	X			MONITOR WELL M-4 FIELD DUP

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Dennis Bird	2-23-99 1726				
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:	
		John Saudi	2/24/98 1430		
Carrier Co:		Carrier Phone No.		Date Results Reported / by: (Signature)	
Air Bill No.:					

san juan repro Form 71-55 A

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	990047
MTR CODE | SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE | TIME (Hrs):	2/23/99	1421
PROJECT:	Monitor Well	
DATE OF BTEX EXT. | ANAL.:	N/A	2/24/99
TYPE | DESCRIPTION:	M-3	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1.0	PPB				
TOLUENE	<1.0	PPB				
ETHYL BENZENE	<1.0	PPB				
TOTAL XYLENES	<3.0	PPB				
TOTAL BTEX	<6.0	PPB				

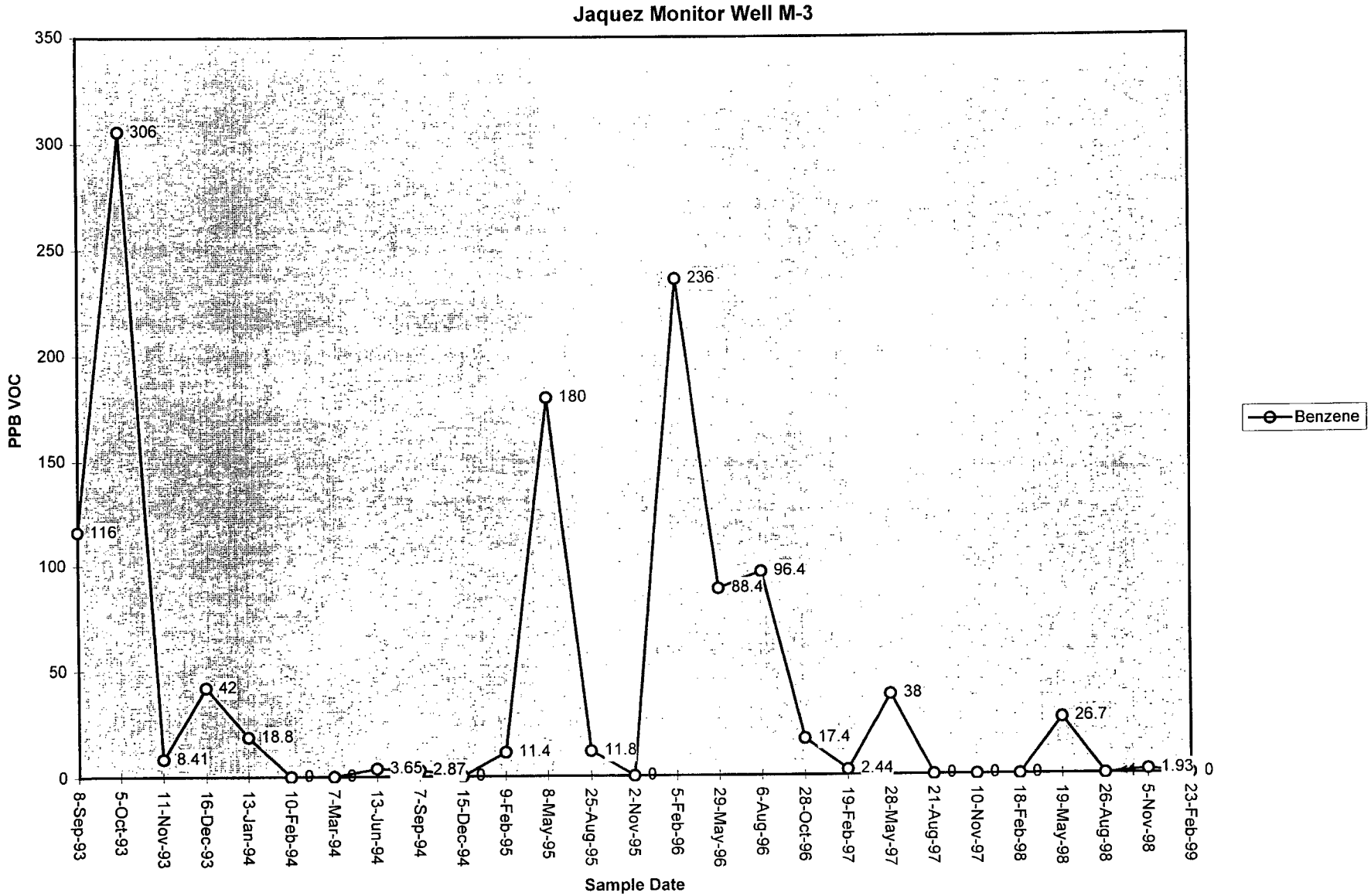
--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 117 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Fowler Date: 3/11/99


Jaquez Monitor Well M-3
PPB VOC
Sample Date
Benzene
350
300
250
200
150
100
50
0
306
116
8.41
42
18.8
0
0
0
3.65
2.87
0
11.4
180
11.8
0
236
88.4
96.4
17.4
2.44
38
0
0
0
0
26.7
0
1.93
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
19-Feb-97
28-May-97
21-Aug-97
10-Nov-97
18-Feb-98
19-May-98
26-Aug-98
5-Nov-98
23-Feb-99

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	990048
MTR CODE | SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE | TIME (Hrs):	2/23/99	1548
PROJECT:	Monitor Well	
DATE OF BTEX EXT. | ANAL.:	N/A	2/24/99
TYPE | DESCRIPTION:	M-4	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS DF	Q		
BENZENE	133	PPB				
TOLUENE	<1.0	PPB				
ETHYL BENZENE	1.31	PPB				
TOTAL XYLENES	59.3	PPB				
TOTAL BTEX	194	PPB				

--BTEX is by EPA Method 8020 --

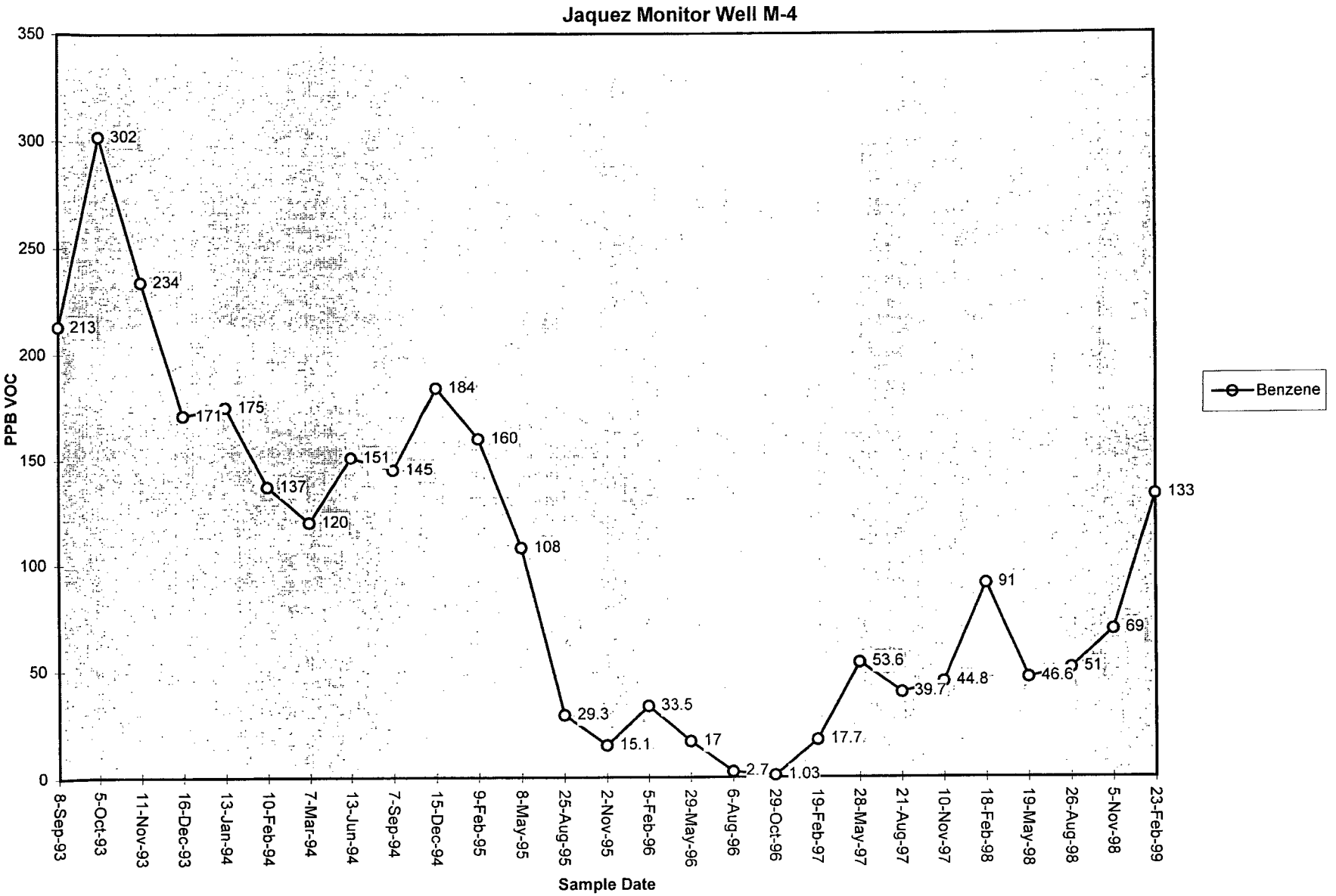
The Surrogate Recovery was at 97.7 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: _____ Date: 3/11/99

990048BTEXJacquezCornfield,3/11/99


Jaquez Monitor Well M-4
PPB VOC
Sample Date
Benzene
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
29-Oct-96
19-Feb-97
28-May-97
21-Aug-97
10-Nov-97
18-Feb-98
19-May-98
26-Aug-98
5-Nov-98
23-Feb-99
213
302
234
171
175
137
120
151
145
184
160
108
29.3
15.1
33.5
17
2.7
1.03
17.7
53.6
39.7
44.8
91
46.6
51
69
133

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	990049
MTR CODE | SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE | TIME (Hrs):	2/23/99	1548
PROJECT:	Monitor Well	
DATE OF BTEX EXT. | ANAL.:	N/A	2/24/99
TYPE | DESCRIPTION:	M-4 Field Duplicate	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	136	PPB				
TOLUENE	<1.0	PPB				
ETHYL BENZENE	1.42	PPB				
TOTAL XYLENES	67.8	PPB				
TOTAL BTEX	205	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 95.9 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Saulder Date: 3/11/99

990049BTEXJacquezCornfield,3/11/99

EL PASO FIELD SERVICES

Field Services Laboratory
Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	990047
DATE SAMPLED:	02/23/99
TIME SAMPLED (Hrs):	1421
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	M-3

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as NO_3-N	<0.1	PPM	02/24/99
Nitrite as NO_2-N	<0.1	PPM	02/24/99

Lab Remarks:

Reported By: J.S

Approved By: John Scalchi

Date: 3/11/99

EL PASO FIELD SERVICES

Field Services Laboratory
Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	990048
DATE SAMPLED:	02/23/99
TIME SAMPLED (Hrs):	1548
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	M-4

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $N0_3$-N	280	PPM	02/24/99
Nitrite as $N0_2$-N	3.6	PPM	02/24/99

Lab Remarks:

Reported By: J.P. Approved By: John Faulds Date: 3/11/99

EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	990049
DATE SAMPLED:	02/23/99
TIME SAMPLED (Hrs):	1548
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	M-4 Field Duplicate

FIELD REMARKS: ______

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $N0_3$-N	281	PPM	02/24/99
Nitrite as $N0_2$-N	3.5	PPM	02/24/99

Lab Remarks:

Reported By: J.S.

Approved By: John Lavalla

Date: 3/11/99

990049Nitrate-Nitrite, 3/11/99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-3

Site Name JAQUEZ

Meter Code NA

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) 15.20
Initial Depth to Water (feet) 5.49
Height of Water Column in Well (feet) 9.71
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		6.4	19.3
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

KVTZ SEPARATOR

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	Cumulative	Increment	Cumulative					
2-23-99	1332										13.7	6.62	681		
2-23-99	1338						5.0	5.0			10.7	6.12	554		
2-23-99	1344						5.0	10.0			9.5	6.53	485		
2-23-99	1353						5.0	15.0			9.3	6.94	496		
2-23-99	1400						5.0	20.0			9.2	6.96	474		
2-23-99	1409						5.0	25.0			9.2	7.04	475	3.5	

Comments REMOVED THE OXYGEN RELEASE COMPOUND SOCKS 36 DAYS BEFORE SAMPLING.

Developer's Signature Dennis Bird Date 2-23-99 Reviewer John Leach Date 3/11/99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-4

Site Name JAQUEZ

Meter Code NA

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) 15.30
Initial Depth to Water (feet) 3.99
Height of Water Column in Well (feet) 11.31
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.5	22.4
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

KUTZ SEPARATOR

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	Cumulative	Increment	Cumulative					
2-23-99	1448										10.2	7.33	3430		
2-23-99	1453						5.0	5.0			9.8	7.51	3440		
2-23-99	1502						3.0	8.0			9.7	7.83	3430		
2-23-99	1523						2.0	10.0			10.1	7.88	3490	5.5	

Comments THE WELL BAILED DRY @ 10.0 GALLONS. REMOVED THE OXYGEN COMPOUND SOCKS 36 DAYS BEFORE SAMPLING.

Developer's Signature Dennis Bird Date 2-23-99 Reviewer John Ford Date 3/11/99

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

Samples: 990038, 39 and 990044 to 990049

QA/QC for 02/24/99 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER ICV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE RANGE	YES	NO
Benzene	Standard	50.0	51.8	103.7	75 - 125 %	X	
Toluene	Standard	50.0	51.6	103.1	75 - 125 %	X	
Ethylbenzene	Standard	50.0	51.6	103.2	75 - 125 %	X	
m & p - Xylene	Standard	100	103.9	103.9	75 - 125 %	X	
o - Xylene	Standard	50.0	51.8	103.6	75 - 125 %	X	
SAMPLE NUMBER LCS LA-45476 25 PPB	**TYPE**	**EXPECTED RESULT PPB**	**ANALYTICAL RESULT PPB**	**%R**	**ACCEPTABLE RANGE**	**YES**	**NO**
Benzene	Standard	25.0	24.9	100	39 - 150	X	
Toluene	Standard	25.0	24.9	100	46 - 148	X	
Ethylbenzene	Standard	25.0	25.1	100	32 - 160	X	
m & p - Xylene	Standard	50.0	50.2	100	Not Given	X	
o - Xylene	Standard	25.0	25.2	101	Not Given	X	

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE ID 990045	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE RANGE	YES	NO
Benzene	Matrix Duplicate	4.4	4.4	1.46	+/- 20 %	X	
Toluene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X	
Ethylbenzene	Matrix Duplicate	7.8	7.7	1.67	+/- 20 %	X	
m & p - Xylene	Matrix Duplicate	<2	<2	0.00	+/- 20 %	X	
o - Xylene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X	

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID 2nd Analysis 990045	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE RANGE	YES	NO
Benzene	25	4.4	24.0	78	75 - 125 %	X	
Toluene	25	<1	19.0	76	75 - 125 %	X	
Ethylbenzene	25	7.8	27.2	77	75 - 125 %	X	
m & p - Xylene	50	<2	39.2	78	75 - 125 %	X	
o - Xylene	25	<1	19.5	78	75 - 125 %	X	

Narrative: Acceptable.

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

Narrative: Acceptable.

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

Narrative: Acceptable.

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

Narrative: Acceptable.

TRIP BLANK 021699 & 022399	SOURCE	PPB (two analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

Reported By: J.L. Approved By: John Tarden Date: 2/26/99

July16, 1999

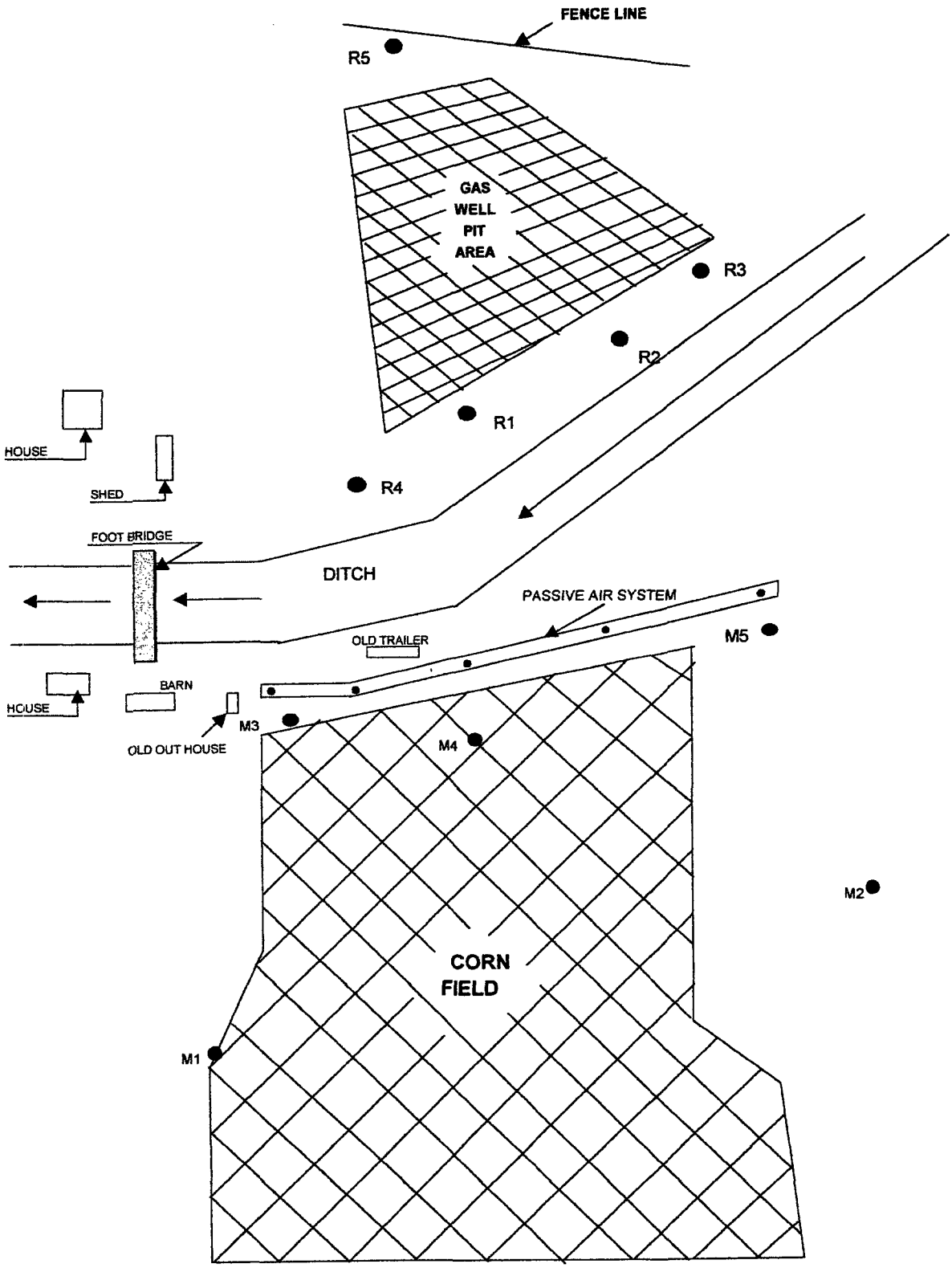
2nd Quarter 1999 REPORT

Jaquez Corn Field
Monitor Well Analytical Results
Lab Sample #'s 990254 to 990264
Sampled May 25, 1999
Sampled by Dennis Bird

Report Distribution:

Scott Pope
Cecil Irby - Philip Services Company
Results File

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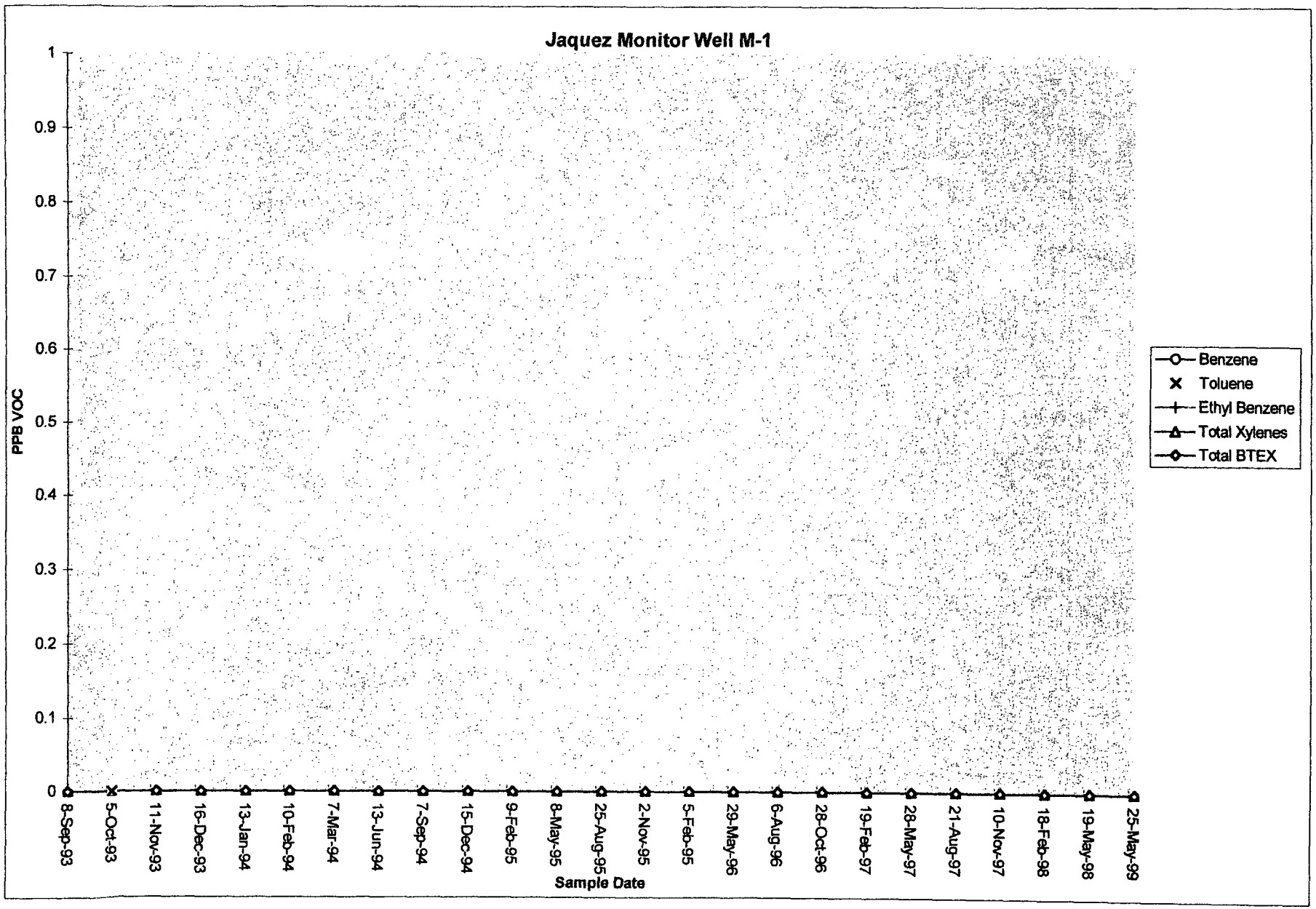
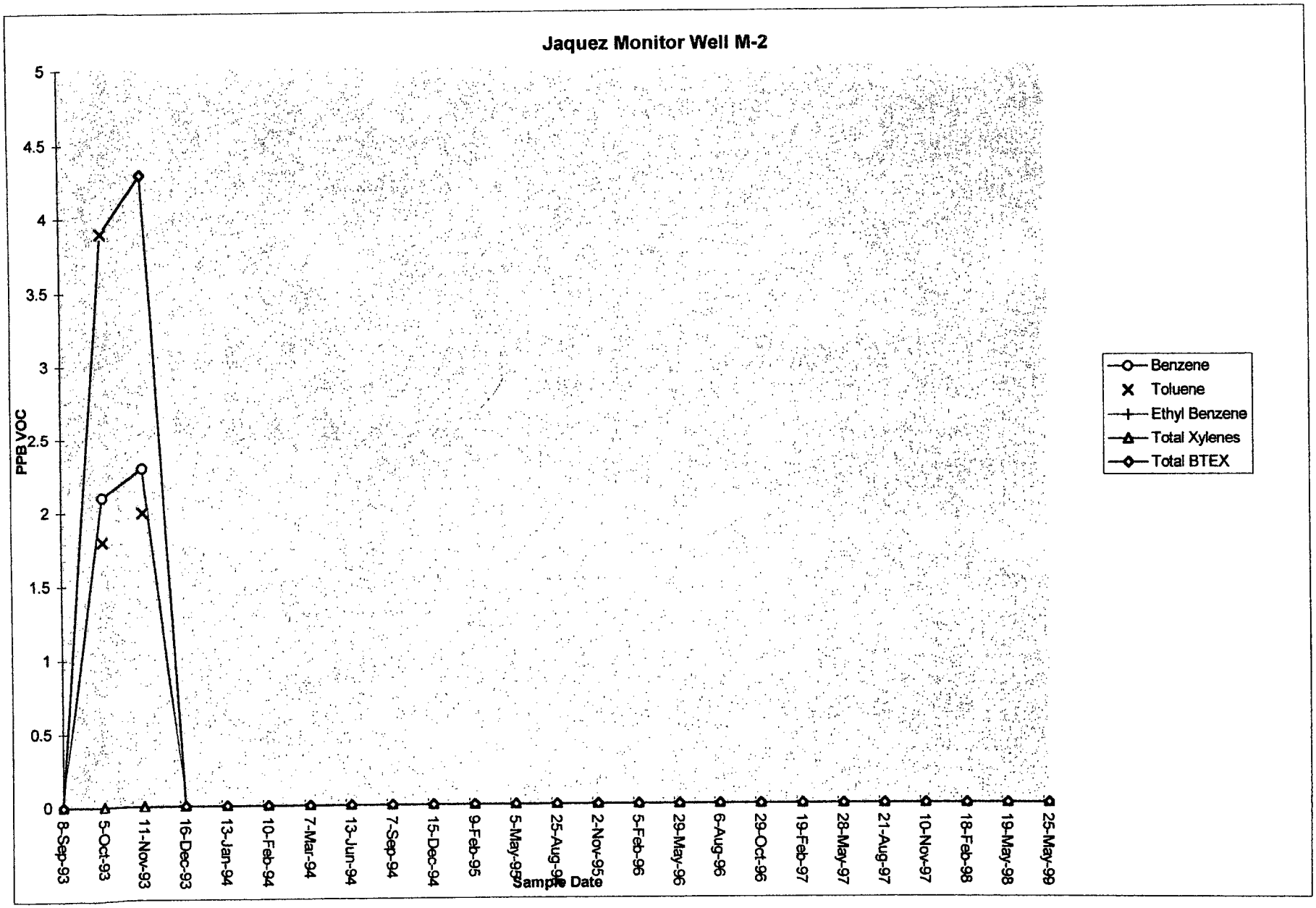
R5
GAS
WELL
PIT
AREA
R3
R2
R1
R4
HOUSE
SHED
FOOT BRIDGE
DITCH
PASSIVE AIR SYSTEM
OLD TRAILER
M5
HOUSE
BARN
OLD OUT HOUSE
M3
M4
M2
CORN
FIELD
M1


Jaquez Monitor Well M-1
PPB VOC
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
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-95
29-May-96
6-Aug-96
28-Oct-96
19-Feb-97
28-May-97
21-Aug-97
10-Nov-97
18-Feb-98
19-May-98
25-May-99
Sample Date
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX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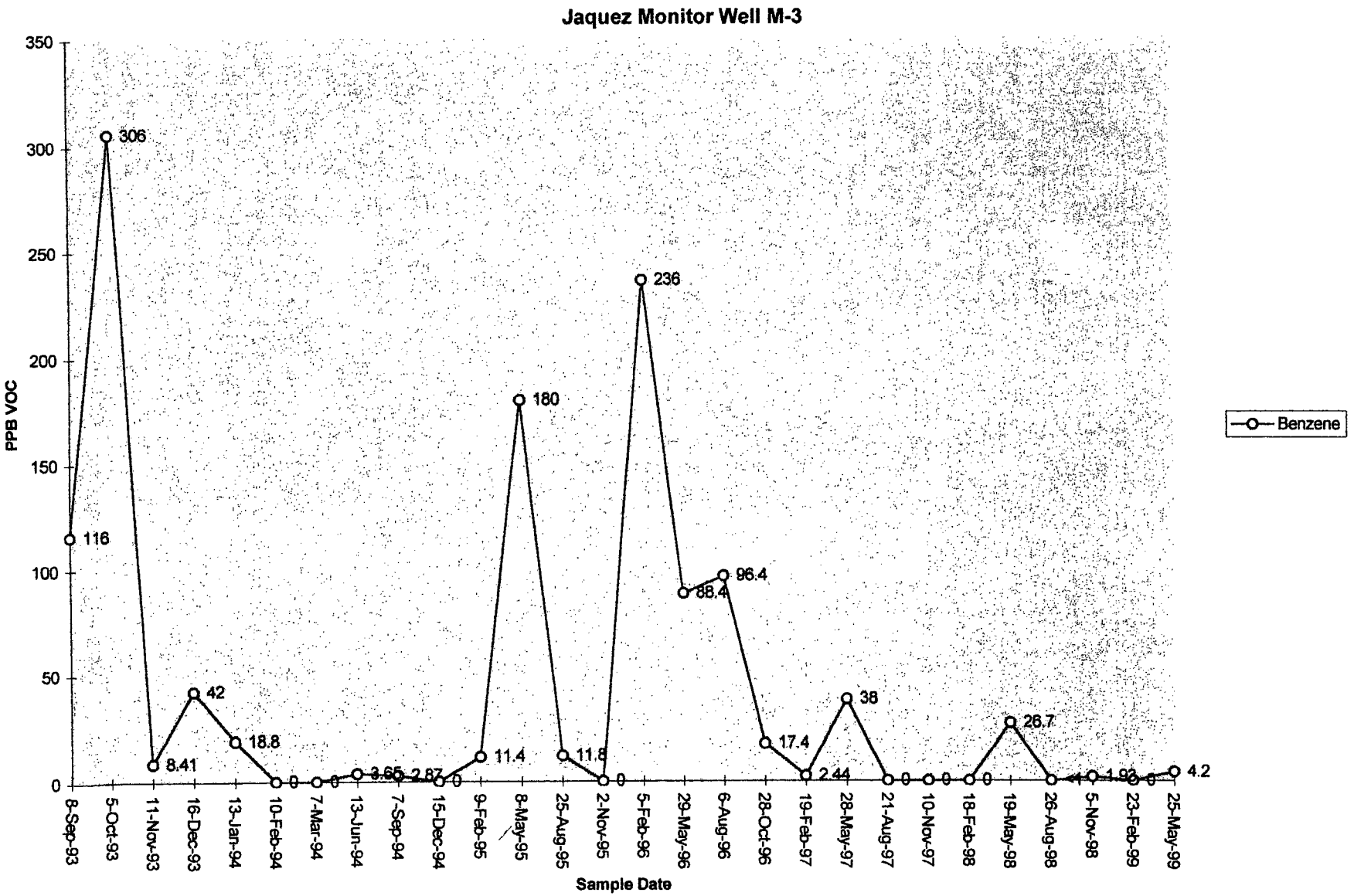
PPB VOC
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
8-Sep-93
5-Oct-93
11-Nov-93
16-Dec-93
13-Jan-94
10-Feb-94
7-Mar-94
13-Jun-94
7-Sep-94
15-Dec-94
9-Feb-95
5-May-95
25-Aug-95
2-Nov-95
5-Feb-96
29-May-96
6-Aug-96
29-Oct-96
19-Feb-97
28-May-97
21-Aug-97
10-Nov-97
18-Feb-98
19-May-98
25-May-99
Sample Date
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX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PPB VOC
Sample Date
Benzene
350
300
250
200
150
100
50
0
306
116
8.41
42
18.8
0
0
0
3.65
2.87
0
11.4
180
11.8
0
236
88.4
96.4
17.4
2.44
38
0
0
0
0
26.7
0
1.92
0
4.2
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
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19-Feb-97
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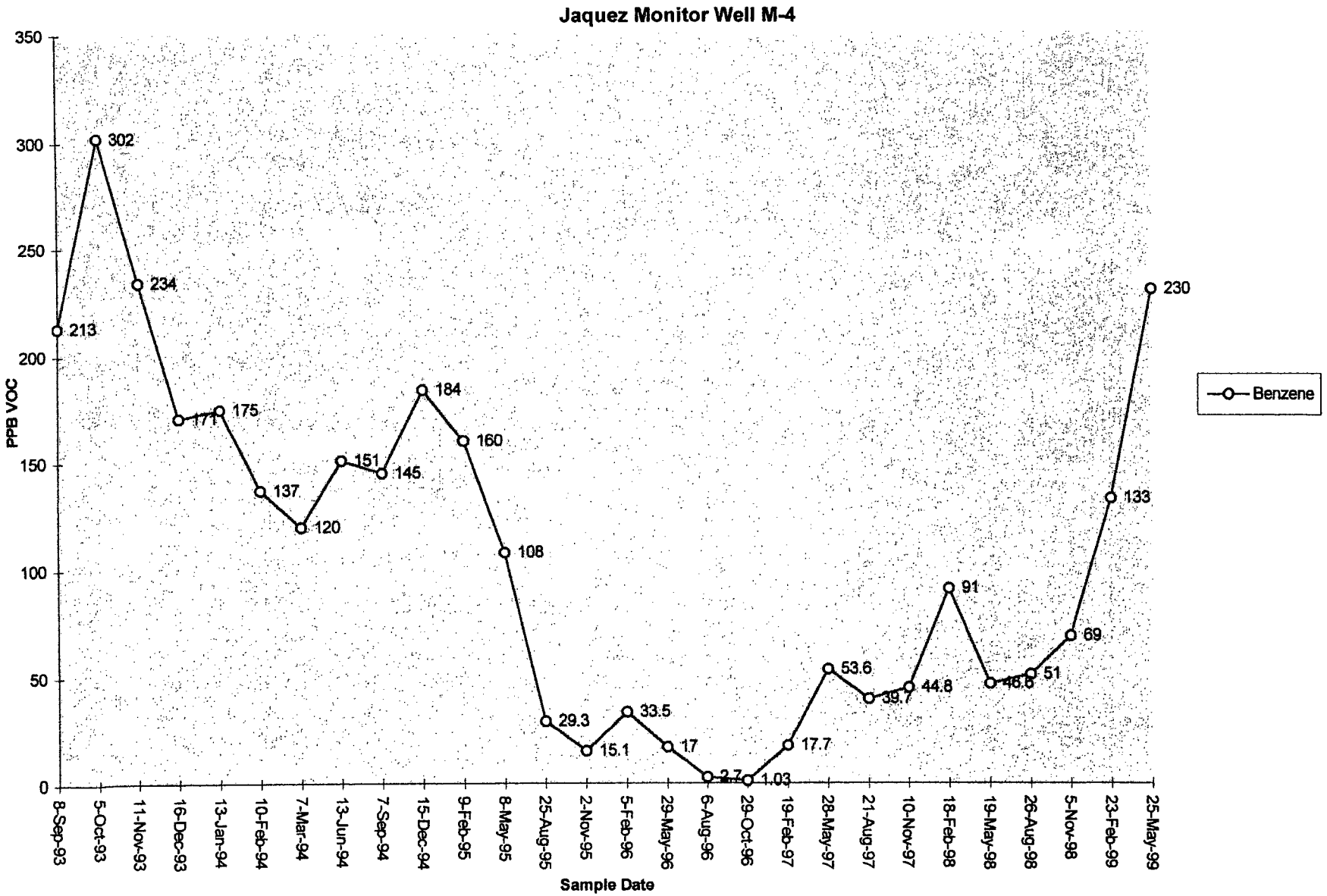
23-Feb-99
25-May-99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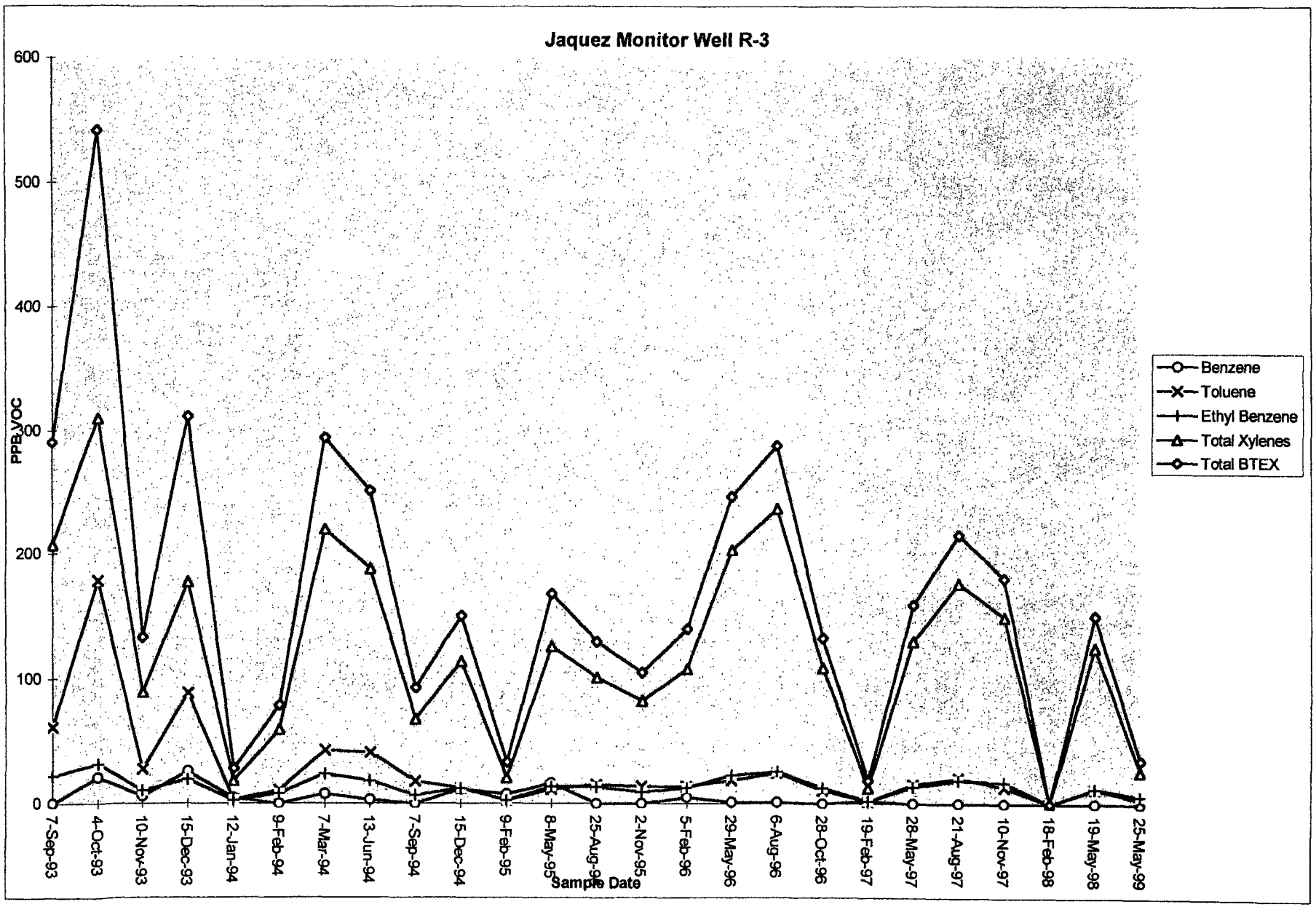
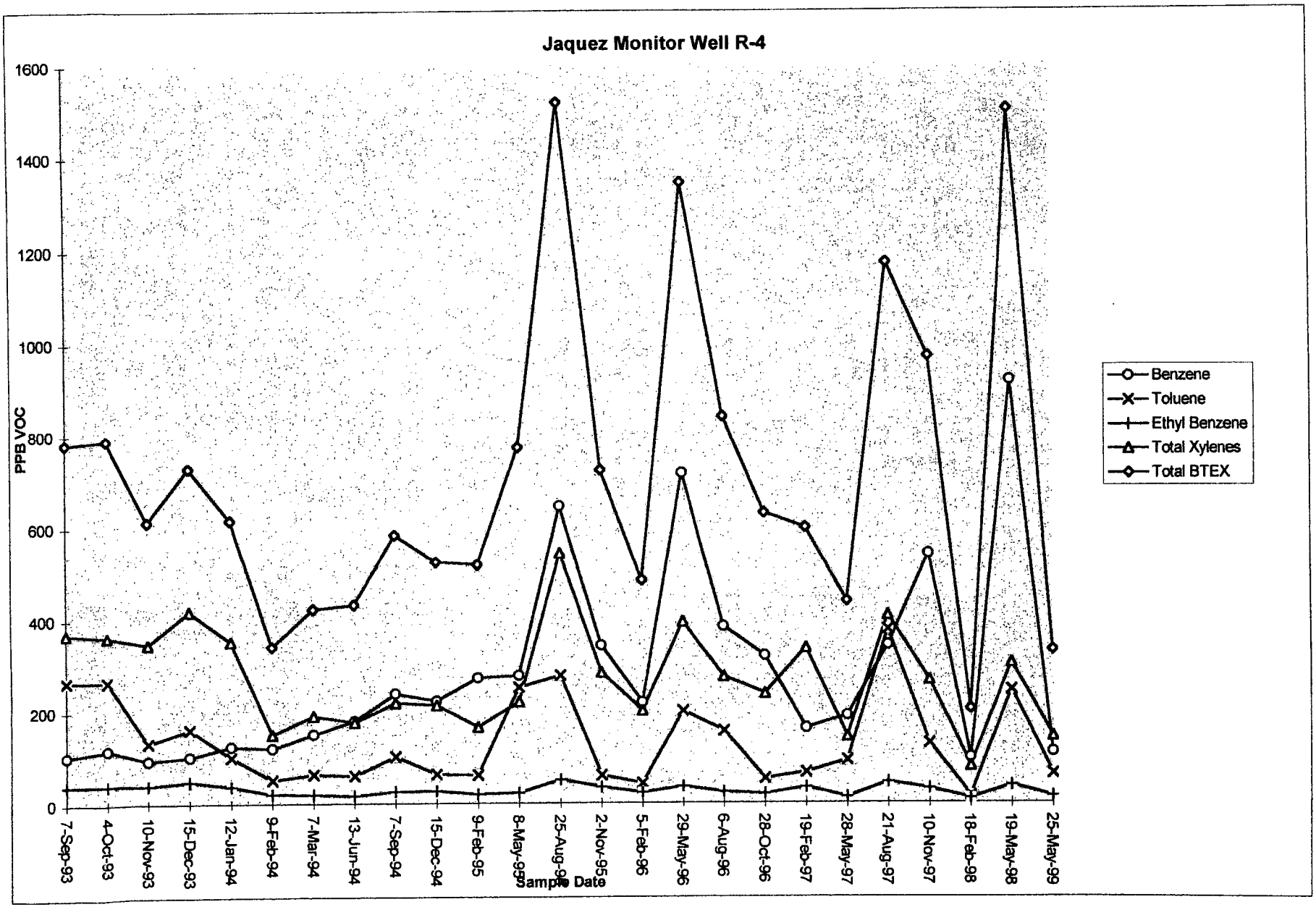
PPB VOC
Sample Date
Benzene
350
300
250
200
150
100
50
0
302
213
234
171
175
137
120
151
145
184
160
108
29.3
15.1
33.5
17
2.7
1.03
17.7
53.6
39.7
44.8
91
46.6
51
69
133
230
8-Sep-93
5-Oct-93
11-Nov-93
16-Dec-93
13-Jan-94
10-Feb-94
7-Mar-94
13-Jun-94
7-Sep-94
15-Dec-94
9-Feb-95
8-May-95
25-Aug-95
2-Nov-95
5-Feb-96
29-May-96
6-Aug-96
29-Oct-96
19-Feb-97
28-May-97
21-Aug-97
10-Nov-97
18-Feb-98
19-May-98
26-Aug-98
5-Nov-98
23-Feb-99
25-May-99

Jaquez Monitor Well M-5
PPB VOC
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
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
19-Feb-97
28-May-97
21-Aug-97
10-Nov-97
19-May-98
25-May-99
Sample Date
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX


Jaquez Monitor Well R-3
PPB VOC
600
500
400
300
200
100
0
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX
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
19-Feb-97
28-May-97
21-Aug-97
10-Nov-97
18-Feb-98
19-May-98
25-May-99
Sample Date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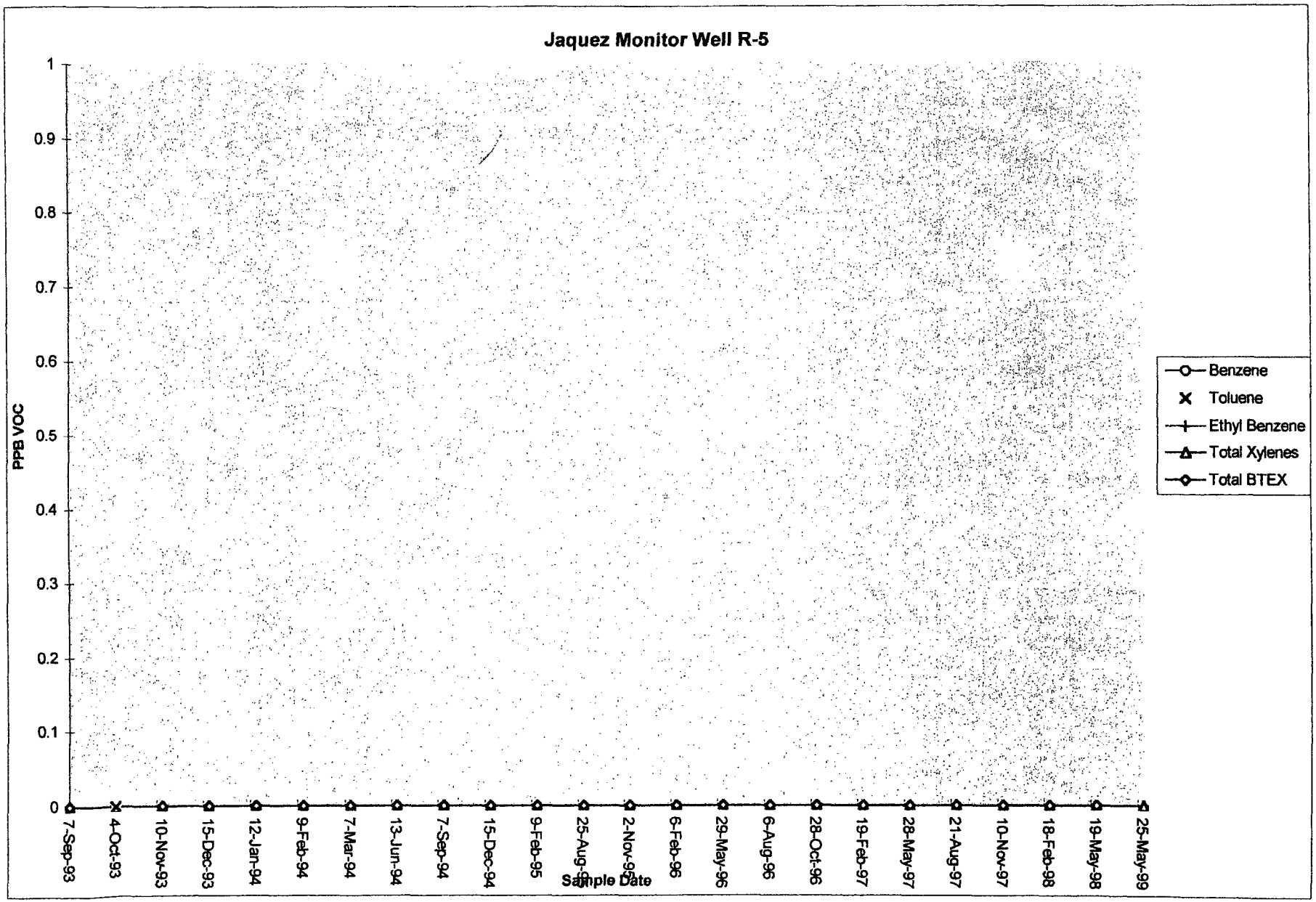
PPB VOC
1600
1400
1200
1000
800
600
400
200
0
7-Sep-93
4-Oct-93
10-Nov-93
15-Dec-93
12-Jan-94
9-Feb-94
7-Mar-94
13-Jun-94
7-Sep-94
15-Dec-94
9-Feb-95
8-May-95
25-Aug-95
2-Nov-95
5-Feb-96
29-May-96
6-Aug-96
28-Oct-96
19-Feb-97
28-May-97
21-Aug-97
10-Nov-97
18-Feb-98
19-May-98
25-May-99
Sample Date
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX


Jaquez Monitor Well R-5
PPB VOC
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
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
25-Aug-95
2-Nov-95
6-Feb-96
29-May-96
6-Aug-96
28-Oct-96
19-Feb-97
28-May-97
21-Aug-97
10-Nov-97
18-Feb-98
19-May-98
25-May-99
Sample Date
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-1

Site Name JAQUEZ

Meter Code NA

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) 15.30
Initial Depth to Water (feet) 3.61
Height of Water Column in Well (feet) 11.69
Diameter (inches): Well 4 Gravel Pack

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

Instruments

☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other 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	Cumulative	Increment	Cumulative					
5-25-99	1304										15.8	7.25	265		
5-25-99	1308						5.0	5.0			12.2	6.97	276		
5-25-99	1315						3.0	8.0			11.4	6.98	287		
5-25-99	1325						2.0	10.0			11.7	7.05	288	3.5	

Comments THE WELL BAILED DRY @ 10.0 GALLONS.

Developer's Signature Dennis Bird Date 5-25-99 Reviewer John Boldon Date 7/16/99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-2

Site Name JAQUEZ

Meter Code NA

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) 15.10
Initial Depth to Water (feet) 3.00
Height of Water Column in Well (feet) 12.10
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		8.0	24.0
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate	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	Cumulative	Increment	Cumulative					
5-25-99	1338										14.2	7.05	481		
5-25-99	1343						5.0	5.0			12.7	6.89	507		
5-25-99	1348						5.0	10.0			12.4	6.85	503		
5-25-99	1355						5.0	15.0			12.3	6.88	498		
5-25-99	1400						5.0	20.0			12.3	6.87	489		
5-25-99	1408						5.0	25.0			12.4	6.92	491	1.5	

Comments

Developer's Signature Dennis Bird Date 5-25-99 Reviewer John Saenz Date 7/16/99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-3

Site Name JAQUEZ

Meter Code NA

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 15.20
Initial Depth to Water (feet) 3.61
Height of Water Column in Well (feet) 11.59
Diameter (inches): Well 4 Gravel Pack_____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.7	23.0
Gravel Pack			
Drilling Fluids			
Total			

Instruments

☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.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		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	Cumulative	Increment	Cumulative					
5-25-99	1506										16.4	6.49	407		
5-25-99	1510						5.0	5.0			14.5	5.98	490		
5-25-99	1515						5.0	10.0			12.6	5.92	449		
5-25-99	1524						5.0	15.0			12.5	6.14	417		
5-25-99	1528						5.0	20.0			12.2	6.32	391		
5-25-99	1538						5.0	25.0			11.8	6.36	381	2.5	

Comments REMOVED THE OXYGEN RELEASE COMPOUND SOCKS 43 DAYS BEFORE SAMPLING.

Developer's Signature Dennis Bird Date 5-25-99 Reviewer John Linder Date 7/16/99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-4

Site Name JAQUEZ

Meter Code NA

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) 15.30
Initial Depth to Water (feet) 2.16
Height of Water Column in Well (feet) 13.14
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		8.7	26.1
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate	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	Cumulative	Increment	Cumulative					
5-25-99	1620										16.1	7.57	2290		
5-25-99	1625						5.0	5.0			14.0	7.88	2420		
5-25-99	1631						3.0	8.0			12.4	8.06	2390		
5-25-99	1636						2.0	10.0			11.9	8.28	2320		
5-25-99	1643						1.0	11.0			11.8	8.46	2090	3.5	

Comments THE WELL BAILED DRY @ 11.0 GALLONS. REMOVED THE OXYGEN COMPOUND SOCKS 43 DAYS BEFORE SAMPLING.

Developer's Signature Dennis Bird Date 5-25-99 Reviewer John Leeds Date 7/16/99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-5

Site Name JAQUEZ

Meter Code NA

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) 15.10
Initial Depth to Water (feet) 3.36
Height of Water Column in Well (feet) 11.74
Diameter (inches): Well 4 Gravel Pack_____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.8	23.3
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

ON SITE BARRELS

Water Removal Data

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	Cumulative	Increment	Cumulative					
5-25-99	1702										14.7		315		
5-25-99	1707						5.0	5.0			12.3		417		
5-25-99	1712						5.0	10.0			11.3		424		
5-25-99	1723						5.0	15.0			11.6		427		
5-25-99	1732						5.0	20.0			11.6		422		
5-25-99	1744						5.0	25.0			11.4	7.05	423		

Comments_____

Developer's Signature Dennis Bird Date 5-25-99 Reviewer John Landon Date 7/16/99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number R-3

Site Name JAQUEZ

Meter Code NA

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) 22.10
Initial Depth to Water (feet) 12.61
Height of Water Column in Well (feet) 9.49
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well Cubic Feet	Water Volume in Well Gallons	Gallons to be Removed
Well Casing		6.3	18.8
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) Cumulative	Product Volume Removed (gallons) Increment	Product Volume Removed (gallons) Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
5-25-99	0906										13.0	6.54	756		
5-25-99	0913						5.0	5.0			12.0	6.75	795		
5-25-99	0921						5.0	10.0			11.9	6.56	646		
5-25-99	0930						5.0	15.0			12.3	6.54	560		
5-25-99	0940						5.0	20.0			12.4	6.95	471	2.5	

Comments REMOVED THE OXYGEN RELEASE COMPOUND SOCKS 43 DAYS BEFORE SAMPLING.

Developer's Signature Dennis Bird Date 5-25-99 Reviewer John Landi Date 7/16/99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number P-4

Site Name JAQUEZ

Meter Code NA

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) 22.10
Initial Depth to Water (feet) 12.28
Height of Water Column in Well (feet) 9.82
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		6.5	19.5
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate	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	Cumulative	Increment	Cumulative					
5-25-99	1013										15.3	7.66	542		
5-25-99	1020						5.0	5.0			14.3	7.31	529		
5-25-99	1028						5.0	10.0			14.1	7.14	542		
5-25-99	1036						5.0	15.0			14.4		850		
5-25-99	1049						5.0	20.0			16.3		880	1.5	

Comments REMOVED THE OXYGEN RELEASE COMPOUND SOCKS 43 DAYS BEFORE SAMPLING.

Developer's Signature Dennis Bird Date 5-25-99 Reviewer John Low Date 7/16/99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number R-5

Site Name JAQUEZ

Meter Code NA

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) 24.40
Initial Depth to Water (feet) 15.51
Height of Water Column in Well (feet) 8.89
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		5.9	17.6
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate	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	Cumulative	Increment	Cumulative					
5-25-99	1119										17.9	8.16	553		
5-25-99	1125						5.0	5.0			16.1	7.87	604		
5-25-99	1131						3.0	8.0			16.0	7.66	685		
5-25-99	1135						2.0	10.0			16.1	7.67	1638		
5-25-99	1149						3.0	13.0			16.6	7.64	784	2.5	

Comments THE WELL BAILED ORY @ 13.0 GALLONS.

Developer's Signature Dennis Bird Date 5-25-99 Reviewer John Laska Date 7/16/99

PARAGON ANALYTICS, INC.
225 Commerce Drive ◆ Fort Collins, CO 80524 ◆ (800) 443-1511 ◆ (970) 490-1511 ◆ FAX (970) 490-1522

July 14, 1999

Mr. John Lambdin
El Paso Field Services
770 West Navajo
Farmington, NM 87401

RE: Paragon Workorder: 99-05-185
Client Project Name: Jaquez Monitor Wells
Client Project Number: None Submitted

Dear Mr. Lambdin:

Ten water samples were received from El Paso Field Services on May 27, 1999. The samples were scheduled for the following analyses:

Inorganics	pages 1-8
PAHs by HPLC	pages 1-13
Aromatic Volatiles Organics	pages 1-19

The results for these analyses are contained in the enclosed reports.

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

Sincerely,

Debbie Fazio

Paragon Analytics, Inc.
Debbie Fazio
Project Manager

DF/rm
Enclosure: Report

Reviewed & Accepted
7/16/99
J. Sanders

EPFS ID	MW #	
990254	R-3	
990255	R-4	
990256	R-5	
990257	M-1	
990258	M-2	
990259	M-3	
990260	M-4	
990261	M-4	Field Dup
990262	M-5	
990263	M-4	→ Run In-House as QC Check J Sanders 7/16/99

PARAGON ANALYTICS, INC.
225 Commerce Drive Ft. Collins, CO 80524
(800) 443-1511 or (970) 490-1511
(970) 490-1522 - Fax

CHAIN OF CUSTODY

DATE 5-27-99 Page 1 of 1

*ACCESSION NUMBER (LAB ID) 990185

REPORT TO: JOHN CAMBURN
COMPANY: EL PASO FIELD SERVICES
ADDRESS: 614 REILLY AVENUE
FARMINGTON NM 87401
SAMPLER: Dennis Bird
505-599-2047 505-599-2261
PHONE NO. FAX NO.

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	8020 - BETX only	8310/610 - HPLC PNA's	Total Metals *(specify in comments)	% Moisture	NITRATE AS N-N	Number of Containers
990254	5-27-99	0751	WATER		X	X			X	4
990255	5-27-99	1059	WATER		X	X				4
990256	5-27-99	1212	WATER		X	X				4
990257	5-27-99	1420	WATER		X	X			X	5
990258	5-27-99	1441	WATER		X	X			X	5
990259	5-27-99	1652	WATER		X	X			X	5
990260	5-27-99	1653	WATER		X	X			X	5
990261	5-27-99	1655	WATER		X				X	3
990262	5-27-99	1726	WATER		X	X			X	5
990263	5-27-99	—	WATER		X					1

Oil & Grease 9070/9071/413.2 | 418.1 - TRPH | 8015 Mod. - Gasoline | 8015 Mod. - Diesel | 8015m/8020 - Gasoline/BETX | 8240/8260 - GC/MS VOC's | 8270 - GC/MS SVOC's | 8080 - Pesticides/PCB's | 8080 - PCB's only | 8150 - Herbicides | 8141/614 - OP Pesticides | TOX - EOX - AOX - TX | TCLP: *(specify parameters in comments) | Gross Alpha / Beta | Gross Gamma | Gamma Spec | Isotopic Plutonium | Isotopic Uranium | Total Uranium (KPA) | Radium 226 / 228 | Tritium (H3) | Strontium 89 / 90 | 8315 - Formaldehyde

ANALYSIS REQUESTED

PROJECT INFORMATION
PROJECT NUMBER:
PROJECT NAME: JAQUEZ MONITOR WELLS
P.O. NUMBER:
TAT: X STANDARD RUSH DUE
SAMPLE DISPOSAL: HAZ WASTE $5.00 ea

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

COMMENTS: LOW LEVEL BENZO (A) PYRENE < 0.7 ppb

RELINQUISHED BY: 1	RELINQUISHED BY: 2	RELINQUISHED BY: 3
Sign. Dennis Bird Time 1045	Sign. Time	Sign. Time
Print DENNIS BIRD Date 5-27-99	Print Date	Print Date
Company EL PASO FIELD SERVICE	Company	Company
RECEIVED BY: 1	**RECEIVED BY: 2**	**RECEIVED BY: 3**
Sign. Time	Sign. Time	Sign. M. Christanson Time 930
Print Date	Print Date	Print Date 5.27.99
Company	Company	Company

* DO NOT WRITE IN SHADED AREAS

Paragon Analytics, Inc. - Fort Collins, Colorado

CONDITION OF SAMPLE UPON RECEIPT FORM

CLIENT: EPFS **PROJECT MANAGER:** _____

WORKORDER NO: 9905185 **INITIALS:** mc **DATE:** 5.27.99

1.	Does this project require any special handling in addition to standard PAI procedures? **PRESCREEN REQUIRED (Rad, DOE, etc.)**		Yes Yes	(No) (No)
2.	Are custody seals on the cooler intact? If so, how many 1	N/A	(Yes)	No
3.	Are custody seals on sample containers intact?	N/A	(Yes)	No
4.	Is there a Chain of Custody (COC) or other representative documents, letters, or shipping memos?		(Yes)	No
5.	Is the COC complete? Relinquished: Yes X No ___ Analyses Requested: Yes X No ___	N/A	(Yes)	No
6.	Is the COC in agreement with the samples received? No. of Samples: Yes X No ___ Sample ID's: Yes X No ___ Matrix: Yes X No ___ No. of Containers: Yes X No ___		(Yes)	No
7.	Are all aqueous samples requiring chemical preservation preserved correctly (excluding volatile organics)? Are all aqueous **non-preserved** samples at the correct pH?	N/A	(Yes) (Yes)	No No
8.	Is there enough sample? If so, are they in the proper containers?		(Yes)	No
9.	Are all samples within holding times for the requested analyses?		(Yes)	No
10.	Were the sample(s) shipped on ice?	N/A	(Yes)	No
11.	Were all sample containers received intact? (not broken or leaking, etc.)		(Yes)	No
12.	Are samples requiring no headspace, headspace free? (volatiles, reactive cyanide/sulfide) **Size of bubble < green pea > green pea**	N/A	(Yes)	No
13.	Are airbills present and removable?		(Yes)	No
14.	Shall Paragon dispose of samples?		(Yes)	No
15.	Were the cooler temperatures ≤ 6° C ?	N/A	(Yes)	No

Cooler #'s client ___ ___ ___ ___

Temperature 3° 4° ___ ___ ___ ___ °C

PM Reviewed/Date: DJ 5/28/99

A NO RESPONSE TO ANY QUESTION (EXCEPT # 1&13) REQUIRES THE COMPLETION OF PAGE 2 OF THE FORM

PLEASE FOLD THIS SHIPPING DOCUMENT IN HALF AND PLACE IT IN A WAYBILL POUCH AFFIXED TO YOUR SHIPMENT SO THAT THE BAR-CODE PORTION OF THE LABEL CAN BE READ AND SCANNED.
*****WARNING: USE ONLY THE PRINTED ORIGINAL LABEL FOR SHIPPING. USING A PHOTOCOPY OF THIS LABEL FOR SHIPPING PURPOSES IS FRAUDULENT AND COULD RESULT IN ADDITIONAL BILLING CHARGES, ALONG WITH THE CANCELLATION OF YOUR FEDEX ACCOUNT NUMBER.**

FROM: John Lambdin (505)599-2144
El Paso Field Services
770 West Navajo

Farmington, NM 87401

SHIPPER'S FEDEX ACCOUNT NUMBER

FedEx
Federal Express

TO: Sample Control (800)443-1511
Paragon Analytics, Inc.
225 Commerce Drive

Fort Collins, CO 80524-

SHIP DATE: 26MAY99
MAN-WGT: 54 LBS

REF: 006574

DELIVERY ADDRESS BARCODE (FEDEX-EDR)

CAD # 2223546 **PRIORITY OVERNIGHT** **THU**
AA

TRK # **7902 5382 3308** FORM 0201 **DEN** Deliver By: 27MAY99

80524-CO-US
DROP OFF

XF FTC

Paragon Analytics, Incorporated

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 9905185
Client Name: El Paso Field Services
Client Project Name: Jaquez Monitor Wells
Client Project Number:
Client PO Number:

Client Sample		Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
990254	R-3	9905185-1		WATER	5/25/99	9:51
990255	R-4	9905185-2		WATER	5/25/99	10:58
990256	R-5	9905185-3		WATER	5/25/99	12:12
990257	M-1	9905185-4		WATER	5/25/99	14:20
990258	M-2	9905185-5		WATER	5/25/99	14:47
990259	M-3	9905185-6		WATER	5/25/99	15:52
990260	M-4	9905185-7		WATER	5/25/99	16:58
990261	M-4 FD	9905185-8		WATER	5/25/99	16:58
990262	M-5	9905185-9		WATER	5/25/99	17:26
990264	Trip Blank	9905185-10		WATER	5/25/99	

Paragon Analytics, Inc.

Aromatic Volatile Organics Case Narrative

El Paso Field Services

Jaquez Monitor Wells

Order Number - 9905185

1. This report consists of 10 water samples received by Paragon on 5/27/99.

2. These samples were prepared and analyzed according to SW-846, 3rd Edition procedures. Specifically, the water sample was prepared by heating and purging 5 mls using purge and trap procedures based on Method 5030. The calibration curve was also prepared using the heated purge.

3. The samples were analyzed using a GC with a DB-VRX capillary column and a PID detector according to protocols based on SW-846 Method 8020. All positive results were quantitated using the responses from the initial calibration curve using the internal standard technique. Second column confirmation was performed on all samples with positive results on a DB-624 capillary column.

4. All continuing calibration criteria were met with the following exceptions;

   Continuing calibration #1 on the confirmation column on 6/08/99i.e., the DB 624 column) for sample -10 only (Benzene, toluene, ethylbenzene, m-xylene, p-xylene, and o-xylene were out high). Because the sensitivity of the instrument increased and no target compounds were detected, no further action was taken. Reporting limits are supported.

5. The method blank associated with this project was below the reporting limits for all analytes.

6. Laboratory control spike and laboratory control spike duplicate recoveries and RPD were within the acceptance criteria.

7. All matrix spike and matrix spike duplicate recoveries and RPDs were within acceptance criteria with the following exceptions:

Spiked Compound	QC Sample	Direction
BENZENE	MSD	high
TOLUENE	MSD	high
ETHYLBENZENE	MSD	high
M&P-XYLENES	MSD	high
O-XYLENE	MSD	high

Noted
5/14/99

The recoveries of these compounds in the laboratory control spike and laboratory control spike duplicate were within control limits, which suggest the outliers in the matrix spikes may have been due to matrix effects. No further action was warranted. Blank spike and blank spike duplicate results have been included.

8. All samples were analyzed within the established holding times.

9. All surrogate recoveries were within acceptable limits with the following exceptions:

Surrogate	Sample	Direction
2,3,4-TRIFLUOROTOLUENE	-6	high

Noted
5/14/99

The surrogate was only slightly out of control and when it was first noticed the holding time had expired. The compounds with "hits" were confrimed on the secondary column in which the surrogate was within control (109%). No further action was taken.

10. All internal standard recoveries were within acceptance criteria.

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

Eddy Hammerquist — 7.14.99
Eddy Hammerquist
Senior Organics Chemist — Date

EB — 7.14.99
Reviewer's Initials — Date

Paragon Analytics, Incorporated

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 9905185
Client Name: El Paso Field Services
Client Project Name: Jaquez Monitor Wells
Client Project Number:
Client PO Number:

Client Sample		Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
990254	R-3	9905185-1		WATER	5/25/99	9:51
990255	R-4	9905185-2		WATER	5/25/99	10:58
990256	R-5	9905185-3		WATER	5/25/99	12:12
990257	M-1	9905185-4		WATER	5/25/99	14:20
990258	M-2	9905185-5		WATER	5/25/99	14:47
990259	M-3	9905185-6		WATER	5/25/99	15:52
990260	M-4	9905185-7		WATER	5/25/99	16:58
990261	M-4 FD	9905185-8		WATER	5/25/99	16:58
990262	M-5	9905185-9		WATER	5/25/99	17:26
990264	~~M-6~~ Trip Blank	9905185-10		WATER	5/25/99	

7/16/99

Volatile Aromatics by GC/PID

Method SW8021

Method Blank

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905166
Client Name: El Paso Field Services
ClientProject ID: Old Blanco Field

Lab ID: HCG990603-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: N/A

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
File Name: G0603S03

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	0.5	0.5	U	
108-88-3	TOLUENE	1	0.5	0.5	U	
100-41-4	ETHYLBENZENE	1	0.5	0.5	U	
136777-61-	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	0.5	0.5	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	102		100	102	85 - 115

Data Package ID: *hcg9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

Field ID	990254 R-3
Lab ID	9905185-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 25-May-99
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
File Name: G0603S10

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	0.5	0.5	U	
108-88-3	TOLUENE	1	3.3	0.5		
100-41-4	ETHYLBENZENE	1	6.3	0.5		
136777-61-	M+P-XYLENE	1	18	1		
95-47-6	O-XYLENE	1	7.8	0.5		

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	109		100	109	85 - 115

Data Package ID: *hcg9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

Field ID	990255 R-4
Lab ID	9905185-2

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 25-May-99
Date Extracted: 07-Jun-99
Date Analyzed: 07-Jun-99

Prep Batch: HCG990607-1
QCBatchID: HCG990607-1-1
Run ID: HCG990607-1B
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
File Name: G0607S04

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	110	0.5		
108-88-3	TOLUENE	1	63	0.5		
100-41-4	ETHYLBENZENE	1	15	0.5		
136777-61-	M+P-XYLENE	1	110	1		
95-47-6	O-XYLENE	1	34	0.5		

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	112		100	112	85 - 115

Data Package ID: *HCG9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: *Jaquez Monitor Wells*

Field ID	990256 R-5
Lab ID	9905185-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 25-May-99
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
File Name: G0603S12

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	0.5	0.5	U	
108-88-3	TOLUENE	1	0.5	0.5	U	
100-41-4	ETHYLBENZENE	1	0.5	0.5	U	
136777-61-	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	0.5	0.5	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	99.6		100	100	85 - 115

Data Package ID: *hcg9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: *Jaquez Monitor Wells*

Field ID	990257 mw-1
Lab ID	9905185-4

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 25-May-99
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L

File Name: G0603S15

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	0.5	0.5	U	
108-88-3	TOLUENE	1	0.5	0.5	U	
100-41-4	ETHYLBENZENE	1	0.5	0.5	U	
136777-61-	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	0.5	0.5	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	103		100	103	85 - 115

Data Package ID: *hcg9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

Field ID	990258 MW-2
Lab ID	9905185-5

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 25-May-99
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
File Name: G0603S16

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	0.5	0.5	U	
108-88-3	TOLUENE	1	0.5	0.5	U	
100-41-4	ETHYLBENZENE	1	0.5	0.5	U	
136777-61-	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	0.5	0.5	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	102		100	102	85 - 115

Data Package ID: *hcg9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

Field ID	990259 M-3
Lab ID	9905185-6

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 25-May-99
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
File Name: G0603S17

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	4.2	0.5		
108-88-3	TOLUENE	1	0.76	0.5		
100-41-4	ETHYLBENZENE	1	0.5	0.5	U	
136777-61-	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	0.5	0.5	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	116	*	100	116	85 - 115

Data Package ID: *hcg9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

Field ID	990260 MW-4
Lab ID	9905185-7

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 25-May-99
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
File Name: G0603S18

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	230	0.5		
108-88-3	TOLUENE	1	1.8	0.5		
100-41-4	ETHYLBENZENE	1	1.2	0.5		
136777-61-	M+P-XYLENE	1	39	1		
95-47-6	O-XYLENE	1	24	0.5		

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	107		100	107	85 - 115

Data Package ID: *hcg9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

Field ID:	990261 M-4FD
Lab ID:	9905185-8

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 25-May-99
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
File Name: G0603S19

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	230	0.5		
108-88-3	TOLUENE	1	1.9	0.5		
100-41-4	ETHYLBENZENE	1	1.4	0.5		
136777-61-	M+P-XYLENE	1	41	1		
95-47-6	O-XYLENE	1	25	0.5		

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	106		100	106	85 - 115

Data Package ID: *hcg9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

FOGID	990262 M-5
LABID	9905185-9

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 25-May-99
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L

File Name: G0603S20

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	0.5	0.5	U	
108-88-3	TOLUENE	1	0.5	0.5	U	
100-41-4	ETHYLBENZENE	1	0.5	0.5	U	
136777-61-	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	0.5	0.5	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	103		100	103	85 - 115

Data Package ID: *hcg9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

Field ID	990264 TripBlnk
Lab ID	9905185-10

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 25-May-99
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
File Name: G0603S22

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	0.5	0.5	U	
108-88-3	TOLUENE	1	0.5	0.5	U	
100-41-4	ETHYLBENZENE	1	0.5	0.5	U	
136777-61-	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	0.5	0.5	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	105		100	105	85 - 115

Data Package ID: *hcg9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Method Blank

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

Lab ID: HCG990607-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 07-Jun-99
Date Analyzed: 07-Jun-99

Prep Batch: HCG990607-1
QCBatchID: HCG990607-1-1
Run ID: HCG990607-1B
Cleanup: NONE
Basis: N/A

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
File Name: G0607S03

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	0.5	0.5	U	
108-88-3	TOLUENE	1	0.5	0.5	U	
100-41-4	ETHYLBENZENE	1	0.5	0.5	U	
136777-61-	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	0.5	0.5	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	102		100	102	85 - 115

Data Package ID: *HCG9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Blank Spike And Blank Spike Duplicate

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905166
Client Name: El Paso Field Services
ClientProject ID: Old Blanco Field

Lab ID: HCG990603-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: N/A

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
71-43-2	BENZENE	100	103	0.5		103	85 - 115%
108-88-3	TOLUENE	100	103	0.5		103	85 - 115%
100-41-4	ETHYLBENZENE	100	103	0.5		103	85 - 115%
136777-61-	M+P-XYLENE	200	202	1		101	85 - 115%
95-47-6	O-XYLENE	100	101	0.5		101	85 - 115%

Lab ID: HCG990603-1LCSD

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	LCSD % Rec.	Result Qualifier	RPD	RPD Limits
71-43-2	BENZENE	100	110	0.5	110		7	20
108-88-3	TOLUENE	100	114	0.5	114		10	20
100-41-4	ETHYLBENZENE	100	115	0.5	115		11	20
136777-61-	M+P-XYLENE	200	229	1	114		12	20
95-47-6	O-XYLENE	100	114	0.5	114		13	20

Surrogate Recovery LCS/LCSD

CASNO	Target Analyte	Spike Added	LCS % Rec.	LCS Flag	LCSD % Rec.	LCSD Flag	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	100	102		100		85 - 115

Data Package ID: *hcg9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Matrix Spike And Matrix Spike Duplicate

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905166
Client Name: *El Paso Field Services*
ClientProject ID: Old Blanco Field

Field ID	990251
Lab ID	9905166-2MS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 24-May-99
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
71-43-2	BENZENE	0.5	U	112		0.5	100	112	85 - 115%
108-88-3	TOLUENE	0.5	U	114		0.5	100	114	85 - 115%
100-41-4	ETHYLBENZENE	0.5	U	115		0.5	100	115	85 - 115%
136777-61-	M+P-XYLENE	1	U	226		1	200	113	85 - 115%
95-47-6	O-XYLENE	0.5	U	113		0.5	100	113	85 - 115%

MSD Lab ID: 9905166-2MSD

CASNO	Target Analyte	Spike Added	MSD Result	MSD Qual	Reporting Limit	MSD % Rec.	RPD	RPD Limits
71-43-2	BENZENE	100	119	*	0.5	119	6	20
108-88-3	TOLUENE	100	120	*	0.5	120	5	20
100-41-4	ETHYLBENZENE	100	121	*	0.5	121	5	20
136777-61-	M+P-XYLENE	200	238	*	1	119	5	20
95-47-6	*O-XYLENE*	*100*	*119*	*	0.5	119	5	20

Surrogate Recovery MS/MSD

CASNO	Target Analyte	Spike Added	MS % Rec.	MS Flag	MSD % Rec.	MSD Flag	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	100	103		103		85 - 115

Data Package ID: *hcg9905185-1*

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Volatile Aromatics by GC/PID

Method SW8021

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905166
Client Name: El Paso Field Services
ClientProject ID: Old Blanco Field

Field ID	990251
Lab ID	9905166-2

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 24-May-99
Date Extracted: 03-Jun-99
Date Analyzed: 03-Jun-99

Prep Batch: HCG990603-1
QCBatchID: HCG990603-1-1
Run ID: HCG990603-1B
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L

File Name: G0603S05

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
71-43-2	BENZENE	1	0.5	0.5	U	
108-88-3	TOLUENE	1	0.5	0.5	U	
100-41-4	ETHYLBENZENE	1	0.5	0.5	U	
136777-61-	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	0.5	0.5	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	103		100	103	85 - 115

Data Package ID: *hcg9905185-1*

Volatile Aromatics by GC/PID

Method SW8021

Blank Spike And Blank Spike Duplicate

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

Lab ID: HCG990607-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 07-Jun-99
Date Analyzed: 07-Jun-99

Prep Batch: HCG990607-1
QCBatchID: HCG990607-1-1
Run ID: HCG990607-1B
Cleanup: NONE
Basis: N/A

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
71-43-2	BENZENE	100	94	0.5		94	85 - 115%
108-88-3	TOLUENE	100	101	0.5		101	85 - 115%
100-41-4	ETHYLBENZENE	100	104	0.5		104	85 - 115%
136777-61-	M+P-XYLENE	200	206	1		103	85 - 115%
95-47-6	O-XYLENE	100	103	0.5		103	85 - 115%

Lab ID: HCG990607-1LCSD

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	LCSD % Rec.	Result Qualifier	RPD	RPD Limits
71-43-2	BENZENE	100	88.1	0.5	88		6	20
108-88-3	TOLUENE	100	102	0.5	102		1	20
100-41-4	ETHYLBENZENE	100	107	0.5	107		4	20
136777-61-	M+P-XYLENE	200	212	1	106		3	20
95-47-6	O-XYLENE	100	107	0.5	107		4	20

Surrogate Recovery LCS/LCSD

CASNO	Target Analyte	Spike Added	LCS % Rec.	LCS Flag	LCSD % Rec.	LCSD Flag	Control Limits
13-10-5	2,3,4-TRIFLUOROTOLUENE	100	101		103		85 - 115

Data Package ID: *HCG9905185-1*

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Paragon Analytics, Inc.

INORGANICS CASE NARRATIVE

El Paso Field Services

Jaquez Monitor Wells

Order Number - 9905185

1. This report consists of data for six water samples.
2. The samples were received cool and intact on 05/27/99.
3. The samples had been correctly preserved for the requested analysis.
4. The samples were prepared for analysis based on Methods for the Chemical Analysis of Waters and Wastes (MCAWW), May 1994 procedures.
5. The samples were analyzed following MCAWW procedures for the following method:

Analyte	Method	SOP #
Nitrate/Nitrite as N	353.3	833 Rev 0

6. All standards and solutions were used within their recommended shelf life.
7. The samples were prepared and analyzed within the established hold time for this analysis.

All in house quality control procedures were followed, as described below.

8. General quality control procedures.
   - The initial calibration verification (ICV) and initial calibration blank (ICB) are reported in place of the laboratory control sample (LCS) and method blank for this test as this test does not require a preparation step.
   - All initial and continuing calibration blanks associated with this batch were below the reporting limit for the requested analyte.
   - All initial and continuing calibration verifications associated with this batch were within the acceptance criteria for the requested analyte. This indicates a valid calibration and stable instrument conditions.

9. Matrix specific quality control procedures.

   PAI sample ID 9906019-1 was designated as the quality control sample for this batch.

   - A matrix spike (MS) and matrix spike duplicate (MSD) were prepared and analyzed with this batch. All guidance criteria for precision and accuracy were met.

The data contained in the following report have been reviewed and approved by the personnel listed below:

Rachel Pierce — Reporter's Name
6/9/99 — Date

BT — Reviewer's Initials
6-9-99 — Date

CERTIFICATION

Paragon Analytics, Inc. certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Paragon Analytics, Incorporated

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 9905185
Client Name: El Paso Field Services
Client Project Name: Jaquez Monitor Wells
Client Project Number:
Client PO Number:

Client Sample	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
990254	9905185-1		WATER	5/25/99	9:51
990255	9905185-2		WATER	5/25/99	10:58
990256	9905185-3		WATER	5/25/99	12:12
990257	9905185-4		WATER	5/25/99	14:20
990258	9905185-5		WATER	5/25/99	14:47
990259	9905185-6		WATER	5/25/99	15:52
990260	9905185-7		WATER	5/25/99	16:58
990261	9905185-8		WATER	5/25/99	16:58
990262	9905185-9		WATER	5/25/99	17:26
990264	9905185-10		WATER	5/25/99	

Inorganic Data Reporting Qualifiers

The following qualifiers are used by the laboratory when reporting results of inorganic analyses.

- C (Concentration) qualifier -- If the analyte was analyzed for but not detected a "U" is entered.

- Q qualifier -- Specified entries and their meanings are as follows:

  N - Spiked sample recovery not within control limits.

  * - Duplicate analysis (relative percent difference) not within control limits.

  B - The method blank for the analysis contained the analyte of interest above the reporting limit.

Nitrate/Nitrite as N

Method EPA353.3

Sample Results

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: Jaquez Monitor Wells
Work Order Number: 9905185
Reporting Basis: As Received

Final Volume: 3 ML
Matrix: WATER
Result Units: MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Detection Limit	Flag	Sample Aliquot
990257 M-1	9905185-4	5/25/99	6/7/99	6/8/99	N/A	1	0.05	0.05	U	3 ML
990258 M-2	9905185-5	5/25/99	6/7/99	6/8/99	N/A	1	0.05	0.05	U	3 ML
990259 M-3	9905185-6	5/25/99	6/7/99	6/8/99	N/A	1	0.05	0.05	U	3 ML
990260 M-4	9905185-7	5/25/99	6/7/99	6/8/99	N/A	500	190	25		3 ML
990261 M-4FD	9905185-8	5/25/99	6/7/99	6/8/99	N/A	500	190	25		3 ML
990262 M-5	9905185-9	5/25/99	6/7/99	6/8/99	N/A	1	0.05	0.05	U	3 ML

Comments:

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

Data Package ID: *NN9905185-1*

Nitrate/Nitrite as N

Method EPA353.3

Matrix Spike And Matrix Spike Duplicate

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

Field ID: SHARED QC
LabID: 9906019-1MS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 02-Jun-99
Date Extracted: 07-Jun-99
Date Analyzed: 08-Jun-99

Prep Batch: NN990607-1
QCBatchID: NN990607-1-1
Run ID: NN990608-1A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 3 ML
Final Volume: 3 ML
Result Units: MG/L

Spike Added	Sample Result	Samp Qual	Reporting Limit	MS Result	MS % Rec.	MS Qualifier	Control Limits
250	120		25	355	96		75 - 125%

MSD Lab ID: 9906019-1MSD

Spike Added	MSD Result	MSD Qual	Reporting Limit	MSD % Rec.	RPD	RPD Limits
250	357		25	96	1	20

Data Package ID: *NN9905185-1*

Nitrate/Nitrite as N

Method EPA353.3

Calibration Verifications

Lab Name: Paragon Analytics, Inc.
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

Date Analyzed: 08-Jun-99
Run ID: NN990608-1A
Result Units: MG/L

Lab ID	Verification Type	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
ICV	Initial Calibration	0.5	0.531	0.05	N/A	106	90 - 110

Data Package ID: *NN9905185-1*

000007

Nitrate/Nitrite as N

Method EPA353.3

Calibration Blanks

Lab Name: *Paragon Analytics, Inc.*
Work Order Number: 9905185
Client Name: El Paso Field Services
ClientProject ID: Jaquez Monitor Wells

Date Analyzed: 08-Jun-99
Run ID: NN990608-1A
Result Units: MG/L

Lab ID	Verification Type	Date Analyzed	Result	Detection Limit	Flag
ICB	Initial Calibration	6/8/99	0.05	0.05	U

Data Package ID: *NN9905185-1*

000008

Paragon Analytics, Inc.

PAHs by HPLC Case Narrative

El Paso Field Services

Jaquez Monitor Wells

Order Number - 9905185

1. This report consists of 8 water samples received by Paragon on 5/27/99.

2. These samples were extracted and analyzed according to SW-846, 3rd Edition procedures. Specifically, the water samples were extracted using continuous liquid-liquid extractors, based on Method 3520.

3. The extracts were then analyzed using HPLC with UV and fluorescence detectors with a reverse phase C18 column according to protocols based on Method 8310. All compounds are analyzed using UV at 254 nm. Confirmation is performed for positive results using the fluorescence detector or confirmed by UV at 280 nm for those compounds that do not respond to the fluorescence detector. The quantitation of each analyte is usually taken from the detector that exhibits the fewest interferences. For compounds that only respond to UV, the result is taken from the wavelength that exhibits fewer interferences. These quantitations minimize the chances of reporting elevated results based on interferences.

4. All initial and continuing calibration criteria were within acceptance criteria.

5. The method blank associated with this project was below the reporting limits for all analytes.

6. All laboratory control spike and laboratory control spike duplicate recoveries and RPDs were within the acceptance criteria.

7. Matrix spikes and matrix spike duplicates could not be performed because of insufficient sample. A laboratory control spike and laboratory control spike duplicate were performed instead.

8. All samples were extracted and analyzed within the established holding times.

9. All surrogate recoveries were within acceptance criteria.

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

Preston Mathiesen
HPLC Analyst

6/22/99
Date

SB
Reviewer's Initials

6-28-99
Date

Paragon Analytics, Inc.
Data Qualifier Flags
Chromatography and Mass Spectrometry

U or ND: **This flag indicates that the compound was analyzed for but not detected.**

J: **This flag indicates an estimated value. This flag is used as follows : (1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; (2) when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the reporting limit (RL) but greater than the method detection limit (MDL); and (3) when the retention time data indicate the presence of a compound that meets the GC identification criteria, and the result is less then the RL but greater than the MDL.**

B: **This flag is used when the analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user. This flag shall be used for a tentatively identified compound (TIC) as well as for a positively identified target compound.**

E: **This flag identifies compounds whose concentration exceeds the upper level of the calibration range.**

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

Reagent Blank

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: Jaquez Monitor Wells

Lab Sample ID: WMB1, 5/29/99

Sample Matrix: Water
Cleanup: N/A

Date Collected: N/A
Date Extracted: 5/29/99
Date Analyzed: 6/01/99

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

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

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	89	35 - 119

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

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

990254

R-3

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: Jaquez Monitor Wells

Lab Sample ID: 9905185-1

Sample Matrix: Water
Cleanup: N/A

Date Collected: 5/25/99
Date Extracted: 5/29/99
Date Analyzed: 6/01/99

Sample Volume: 1070 mL
Final Volume: 1 mL
Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	0.86	0.47
Acenaphthylene	ND	0.93
1-Methylnaphthalene	0.47 J	0.93
2-Methylnaphthalene	0.69 J	0.93
Acenaphthene	ND	0.93
Fluorene	ND	0.093
Phenanthrene	0.025 J	0.047
Anthracene	ND	0.093
Fluoranthrene	ND	0.093
Pyrene	ND	0.047
Benzo(a)anthracene	ND	0.047
Chrysene	ND	0.047
Benzo(b)fluoranthrene	ND	0.093
Benzo(k)fluoranthrene	ND	0.047
Benzo(a)pyrene	ND	0.093
Dibenzo(a,h)anthracene	ND	0.093
Benzo(g,h,i)perylene	ND	0.093
Indeno(1,2,3-c,d)pyrene	ND	0.093

SURROGATE RECOVERY

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

ND = Not Detected at or above client requested reporting limit.
J = Estimated value. Below reporting limits.

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID
990255

R-4

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: Jaquez Monitor Wells

Lab Sample ID: 9905185-2

Sample Matrix: Water
Cleanup: N/A

Date Collected: 5/25/99
Date Extracted: 5/29/99
Date Analyzed: 6/01/99

Sample Volume: 1060 mL
Final Volume: 1 mL
Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	2.1	0.47
Acenaphthylene	ND	0.94
1-Methylnaphthalene	0.88 J	0.94
2-Methylnaphthalene	1.6	0.94
Acenaphthene	ND	0.94
Fluorene	0.19	0.094
Phenanthrene	0.23	0.047
Anthracene	ND	0.094
Fluoranthrene	ND	0.094
Pyrene	ND	0.047
Benzo(a)anthracene	ND	0.047
Chrysene	0.046 J	0.047
Benzo(b)fluoranthrene	ND	0.094
Benzo(k)fluoranthrene	ND	0.047
Benzo(a)pyrene	ND	0.094
Dibenzo(a,h)anthracene	ND	0.094
Benzo(g,h,i)perylene	ND	0.094
Indeno(1,2,3-c,d)pyrene	ND	0.094

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	81	35 - 119

ND = Not Detected at or above client requested reporting limit.
J = Estimated value. Below reporting limits.

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

990256

R-5

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: Jaquez Monitor Wells

Lab Sample ID: 9905185-3

Sample Matrix: Water
Cleanup: N/A

Date Collected: 5/25/99
Date Extracted: 5/29/99
Date Analyzed: 6/01/99

Sample Volume: 1055 mL
Final Volume: 1 mL
Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	ND	0.47
Acenaphthylene	ND	0.95
1-Methylnaphthalene	ND	0.95
2-Methylnaphthalene	ND	0.95
Acenaphthene	ND	0.95
Fluorene	ND	0.095
Phenanthrene	ND	0.047
Anthracene	ND	0.095
Fluoranthrene	ND	0.095
Pyrene	ND	0.047
Benzo(a)anthracene	ND	0.047
Chrysene	ND	0.047
Benzo(b)fluoranthrene	ND	0.095
Benzo(k)fluoranthrene	ND	0.047
Benzo(a)pyrene	ND	0.095
Dibenzo(a,h)anthracene	ND	0.095
Benzo(g,h,i)perylene	ND	0.095
Indeno(1,2,3-c,d)pyrene	ND	0.095

SURROGATE RECOVERY

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

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

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID
990257

m-1

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: Jaquez Monitor Wells

Lab Sample ID: 9905185-4

Sample Matrix: Water
Cleanup: N/A

Date Collected: 5/25/99
Date Extracted: 5/29/99
Date Analyzed: 6/01/99

Sample Volume: 1060 mL
Final Volume: 1 mL
Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	ND	0.47
Acenaphthylene	ND	0.94
1-Methylnaphthalene	ND	0.94
2-Methylnaphthalene	ND	0.94
Acenaphthene	ND	0.94
Fluorene	ND	0.094
Phenanthrene	ND	0.047
Anthracene	ND	0.094
Fluoranthrene	ND	0.094
Pyrene	ND	0.047
Benzo(a)anthracene	ND	0.047
Chrysene	ND	0.047
Benzo(b)fluoranthrene	ND	0.094
Benzo(k)fluoranthrene	ND	0.047
Benzo(a)pyrene	ND	0.094
Dibenzo(a,h)anthracene	ND	0.094
Benzo(g,h,i)perylene	ND	0.094
Indeno(1,2,3-c,d)pyrene	ND	0.094

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	87	35 - 119

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

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID
990258

M-2

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: Jaquez Monitor Wells

Lab Sample ID: 9905185-5

Sample Matrix: Water
Cleanup: N/A

Date Collected: 5/25/99
Date Extracted: 5/29/99
Date Analyzed: 6/01/99

Sample Volume: 1055 mL
Final Volume: 1 mL
Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	ND	0.47
Acenaphthylene	ND	0.95
1-Methylnaphthalene	ND	0.95
2-Methylnaphthalene	ND	0.95
Acenaphthene	ND	0.95
Fluorene	ND	0.095
Phenanthrene	ND	0.047
Anthracene	ND	0.095
Fluoranthrene	ND	0.095
Pyrene	ND	0.047
Benzo(a)anthracene	ND	0.047
Chrysene	ND	0.047
Benzo(b)fluoranthrene	ND	0.095
Benzo(k)fluoranthrene	ND	0.047
Benzo(a)pyrene	ND	0.095
Dibenzo(a,h)anthracene	ND	0.095
Benzo(g,h,i)perylene	ND	0.095
Indeno(1,2,3-c,d)pyrene	ND	0.095

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	88	35 - 119

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

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

990259 m-3

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: Jaquez Monitor Wells

Lab Sample ID: 9905185-6

Sample Matrix: Water
Cleanup: N/A

Date Collected: 5/25/99
Date Extracted: 5/29/99
Date Analyzed: 6/01/99

Sample Volume: 1060 mL
Final Volume: 1 mL
Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	ND	0.47
Acenaphthylene	ND	0.94
1-Methylnaphthalene	ND	0.94
2-Methylnaphthalene	ND	0.94
Acenaphthene	ND	0.94
Fluorene	ND	0.094
Phenanthrene	0.041 J	0.047
Anthracene	ND	0.094
Fluoranthrene	0.049 J	0.094
Pyrene	ND	0.047
Benzo(a)anthracene	ND	0.047
Chrysene	ND	0.047
Benzo(b)fluoranthrene	ND	0.094
Benzo(k)fluoranthrene	ND	0.047
Benzo(a)pyrene	ND	0.094
Dibenzo(a,h)anthracene	ND	0.094
Benzo(g,h,i)perylene	ND	0.094
Indeno(1,2,3-c,d)pyrene	ND	0.094

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	83	35 - 119

ND = Not Detected at or above client requested reporting limit.
J = Estimated value. Below reporting limits.

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID
990260

m -4

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: Jaquez Monitor Wells

Lab Sample ID: 9905185-7

Sample Matrix: Water
Cleanup: N/A

Date Collected: 5/25/99
Date Extracted: 5/29/99
Date Analyzed: 6/01/99

Sample Volume: 1060 mL
Final Volume: 1 mL
Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	5.5	0.47
Acenaphthylene	ND	0.94
1-Methylnaphthalene	2.7	0.94
2-Methylnaphthalene	1.8	0.94
Acenaphthene	ND	0.94
Fluorene	0.40	0.094
Phenanthrene	0.12	0.047
Anthracene	ND	0.094
Fluoranthrene	ND	0.094
Pyrene	ND	0.047
Benzo(a)anthracene	ND	0.047
Chrysene	ND	0.047
Benzo(b)fluoranthrene	ND	0.094
Benzo(k)fluoranthrene	ND	0.047
Benzo(a)pyrene	ND	0.094
Dibenzo(a,h)anthracene	ND	0.094
Benzo(g,h,i)perylene	ND	0.094
Indeno(1,2,3-c,d)pyrene	ND	0.094

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	84	35 - 119

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

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID
990262

M-5

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: Jaquez Monitor Wells

Lab Sample ID: 9905185-9

Sample Matrix: Water
Cleanup: N/A

Date Collected: 5/25/99
Date Extracted: 5/29/99
Date Analyzed: 6/01/99

Sample Volume: 1060 mL
Final Volume: 1 mL
Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	ND	0.47
Acenaphthylene	ND	0.94
1-Methylnaphthalene	ND	0.94
2-Methylnaphthalene	ND	0.94
Acenaphthene	ND	0.94
Fluorene	ND	0.094
Phenanthrene	ND	0.047
Anthracene	ND	0.094
Fluoranthrene	ND	0.094
Pyrene	ND	0.047
Benzo(a)anthracene	ND	0.047
Chrysene	ND	0.047
Benzo(b)fluoranthrene	ND	0.094
Benzo(k)fluoranthrene	ND	0.047
Benzo(a)pyrene	ND	0.094
Dibenzo(a,h)anthracene	ND	0.094
Benzo(g,h,i)perylene	ND	0.094
Indeno(1,2,3-c,d)pyrene	ND	0.094

SURROGATE RECOVERY

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

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

POLYNUCLEAR AROMATIC HYDROCARBONS LABORATORY CONTROL SPIKE

Method 8310

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: Jaquez Monitor Wells

Sample ID: **Blank Spike**

Lab Sample ID: WLCS1, 5/29/99

Date Extracted: 5/29/99
Date Analyzed: 6/01/99

Sample Matrix: Water
Cleanup: N/A

Sample Volume: 1,000 mL
Final Volume: 1 mL

Analyte	Spike Added (ug/L)	LCS Concentration (ug/L)	LCS Percent Recovery	QC Limits % Rec
Acenaphthylene	10.0	6.54	65	36 - 93
Phenanthrene	1.00	0.745	74	45 - 107
Pyrene	1.00	0.733	73	40 - 104
Benzo(k)fluoranthene	0.250	0.219	88	61 - 126
Dibenzo(a,h)anthracene	1.00	0.762	76	55 - 113

Lab Sample ID: WCLSD1, 5/29/99

Analyte	Spike Added (ug/L)	LCSD Concentration (ug/L)	LCSD Percent Recovery	RPD	QC Limits RPD
Acenaphthylene	10.0	6.72	67	3	20
Phenanthrene	1.00	0.749	75	1	20
Pyrene	1.00	0.713	71	3	20
Benzo(k)fluoranthene	0.250	0.222	89	2	20
Dibenzo(a,h)anthracene	1.00	0.726	73	5	20

SURROGATE RECOVERY BS/BSD

Analyte	% Recovery LCS	% Recovery LCSD	% Rec Limits
2-Chloroanthracene	82	80	35 -119

September 14, 1999

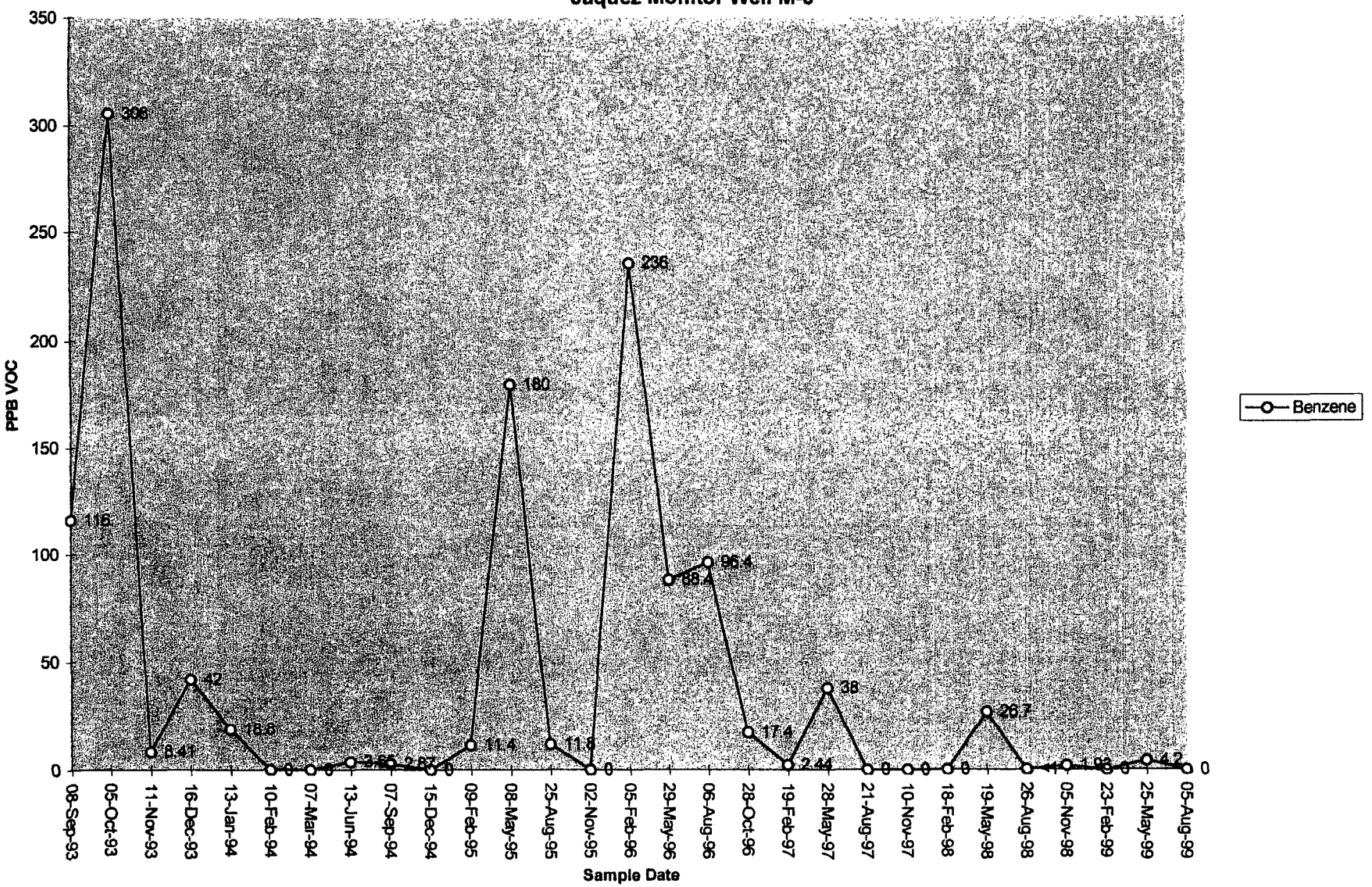
3rd Quarter 1999 REPORT

Jaquez Corn Field
Monitor Well Analytical Results
Lab Sample #'s 990352 to 990354
Sampled August 05, 1999
Sampled by Dennis Bird

Report Distribution:

Scott Pope
Cecil Irby - Philip Environmental
Results File

Attachments


Jaquez Monitor Well M-3
PPB VOC
Sample Date
Benzene
350
300
250
200
150
100
50
0
116
306
8.41
42
18.8
11.4
180
11.8
236
88.4
96.4
17.4
2.44
38
26.7
0
08-Sep-93
05-Oct-93
11-Nov-93
16-Dec-93
13-Jan-94
10-Feb-94
07-Mar-94
13-Jun-94
07-Sep-94
15-Dec-94
09-Feb-95
08-May-95
25-Aug-95
02-Nov-95
05-Feb-96
29-May-96
06-Aug-96
28-Oct-96
19-Feb-97
28-May-97
21-Aug-97
10-Nov-97
18-Feb-98
19-May-98
26-Aug-98
05-Nov-98
23-Feb-99
25-May-99
05-Aug-99

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	990352
MTR CODE | SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE | TIME (Hrs):	08/05/1999	1341
PROJECT:	Monitor Well	
DATE OF BTEX EXT. | ANAL.:	N/A	08/10/1999
TYPE | DESCRIPTION:	M-3	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1.0	PPB				
TOLUENE	1.8	PPB				
ETHYL BENZENE	<1.0	PPB				
TOTAL XYLENES	<3.0	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 101.6 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By: John Fawcett Date: 9/14/99

EL PASO
FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	990352
DATE SAMPLED:	08/05/99
TIME SAMPLED (Hrs):	1341
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	M-3

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as NO_3-N	<0.1	PPM	08/06/99
Nitrite as NO_2-N	<0.1	PPM	08/06/99

Lab Remarks:

Reported By: J.L. ved By: John Landi Date: 9-14-99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-3

Site Name JAQUEZ

Meter Code NA

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) 15.20
Initial Depth to Water (feet) 4.44
Height of Water Column in Well (feet) 10.76
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.1	21.3
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

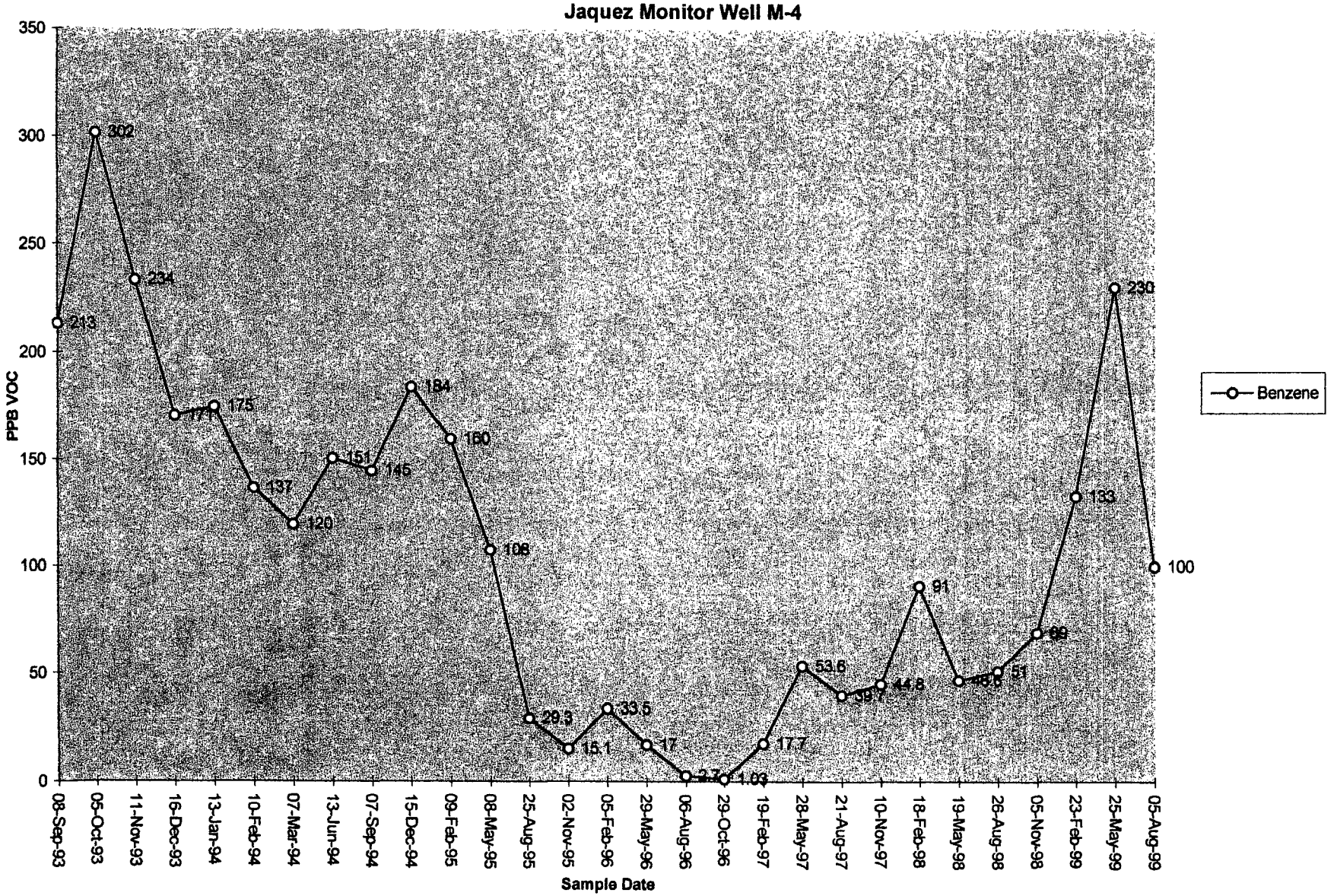
KUTZ SEPARATOR

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	Cumulative	Increment	Cumulative					
8-5-99	1234										21.3	7.39	413		
8-5-99	1239						5.0	5.0			19.6	7.34	430		
8-5-99	1244						5.0	10.0			16.7	7.26	372		
8-5-99	1306						5.0	15.0			16.7	7.19	332		
8-5-99	1312						5.0	20.0			16.1	7.14	319		
8-5-99	1325						5.0	25.0			16.1	7.09	328	2.5	

Comments

Developer's Signature Dennis Bird Date 8-5-99 Reviewer John Fowler Date 8/18/99


Jaquez Monitor Well M-4
PPB VOC
Sample Date
Benzene
350
300
250
200
150
100
50
0
213
302
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171
175
137
120
151
145
184
160
108
29.3
15.1
33.5
17
2.7
1.03
17.7
53.6
39.7
44.8
91
46.5
51
66
133
230
100
08-Sep-93
05-Oct-93
11-Nov-93
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07-Mar-94
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07-Sep-94
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09-Feb-95
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25-Aug-95
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29-May-96
06-Aug-96
29-Oct-96
19-Feb-97
28-May-97
21-Aug-97
10-Nov-97
18-Feb-98
19-May-98
26-Aug-98
05-Nov-98
23-Feb-99
25-May-99
05-Aug-99

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	990353
MTR CODE | SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE | TIME (Hrs):	08/05/1999	1512
PROJECT:	Monitor Well	
)ATE OF BTEX EXT. | ANAL.:	N/A	08/10/1999
TYPE | DESCRIPTION:	M-4	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	100	PPB	2	D		
TOLUENE	<2.0	PPB	2	D		
ETHYL BENZENE	<2.0	PPB	2	D		
TOTAL XYLENES	15.3	PPB	2	D		
TOTAL BTEX	115	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 101.0 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By: John Gardner Date: 9/14/99

EL PASO FIELD SERVICES

Field Services Laboratory
Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	990353
DATE SAMPLED:	08/05/99
TIME SAMPLED (Hrs):	1512
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	M-4

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as NO_3-N	54.9	PPM	08/06/99
Nitrite as NO_2-N	<0.6	PPM	08/06/99

Lab Remarks:

Reported By: J.L. Verified By: John Landis Date: 9-14-99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-4

Site Name JAQUEZ

Meter Code NA

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.30
Initial Depth to Water (feet) 2.76
Height of Water Column in Well (feet) 12.54
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		8.3	24.9
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

KUTZ SEPARATOR

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	Cumulative	Increment	Cumulative					
8-5-99	1413										21.2	7.66	1216		
8-5-99	1420						5.0	5.0			19.7	7.70	1185		
8-5-99	1432						3.0	8.0			17.5		1219		
8-5-99	1443						2.0	10.0			17.4	7.87	1239	4.5	

Comments THE WELL BAILED DRY @ 10.0 GALLONS.

Developer's Signature Dennis Bird Date 8-5-99 Reviewer John Gardner Date 8/18/99

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	990354
MTR CODE | SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE | TIME (Hrs):	08/05/1999	1512
PROJECT:	Monitor Well	
)ATE OF BTEX EXT. | ANAL.:	N/A	08/10/1999
TYPE | DESCRIPTION:	M-4 Field Duplicate	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	101	PPB	2	D		
TOLUENE	<2.0	PPB	2	D		
ETHYL BENZENE	<2.0	PPB	2	D		
TOTAL XYLENES	14.9	PPB	2	D		
TOTAL BTEX	116	PPB				

--BTEX is by EPA Method 8020 --

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

Narrative:

Approved By: _____ Date: 9/14/99

EL PASO FIELD SERVICES

Field Services Laboratory
Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	990354
DATE SAMPLED:	08/05/99
TIME SAMPLED (Hrs):	1512
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	M-4 Field Duplicate

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as NO_3-N	56.9	PPM	08/06/99
Nitrite as NO_2-N	<0.6	PPM	08/06/99

Lab Remarks:

R[illegible]ted By: J.L. [illegible]ed By: John Fawcett Date: 9/14/99

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

Project Number	Project Name	Total No. of Containers	Composite or Grab	Requested Analysis						Contract Laboratory P.O. Number
	JAQUEZ			BTXE	NITRATE AS N					
Samplers: (Signature) Dennis Bird	Date: 8-5-99									
Lab ID / Date / Time / Matrix / Sample Number										Remarks
8-5-99 1341 WATER 990352		2	G	X	X					MONITOR WELL M-3
8-5-99 1512 WATER 990353		2	G	X	X					MONITOR WELL M-4
8-5-99 1512 WATER 990354		2	G	X	X					MONITOR WELL M-4 FIELD DUP

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Dennis Bird	8-5-99 1712				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
				8/6/99 1000	John Kaldon

Requested Turnaround Time:
☐ Routine ☐ Rush _____

Carrier Co.

Bill No.:

Sample Receipt Remarks
COOL & INTACT 40°F

Charge Code

Results & Invoices to:
North Region Laboratory
El Paso Natural Gas Company
P. O. Box 4990
Farmington, New Mexico 87499

505-599-2144 FAX: 505-599-2261

White-Testing Laboratory Yellow-EPNG Lab Pink-Field Sampler

FM-08-0565 (9-91)

December 3, 1999

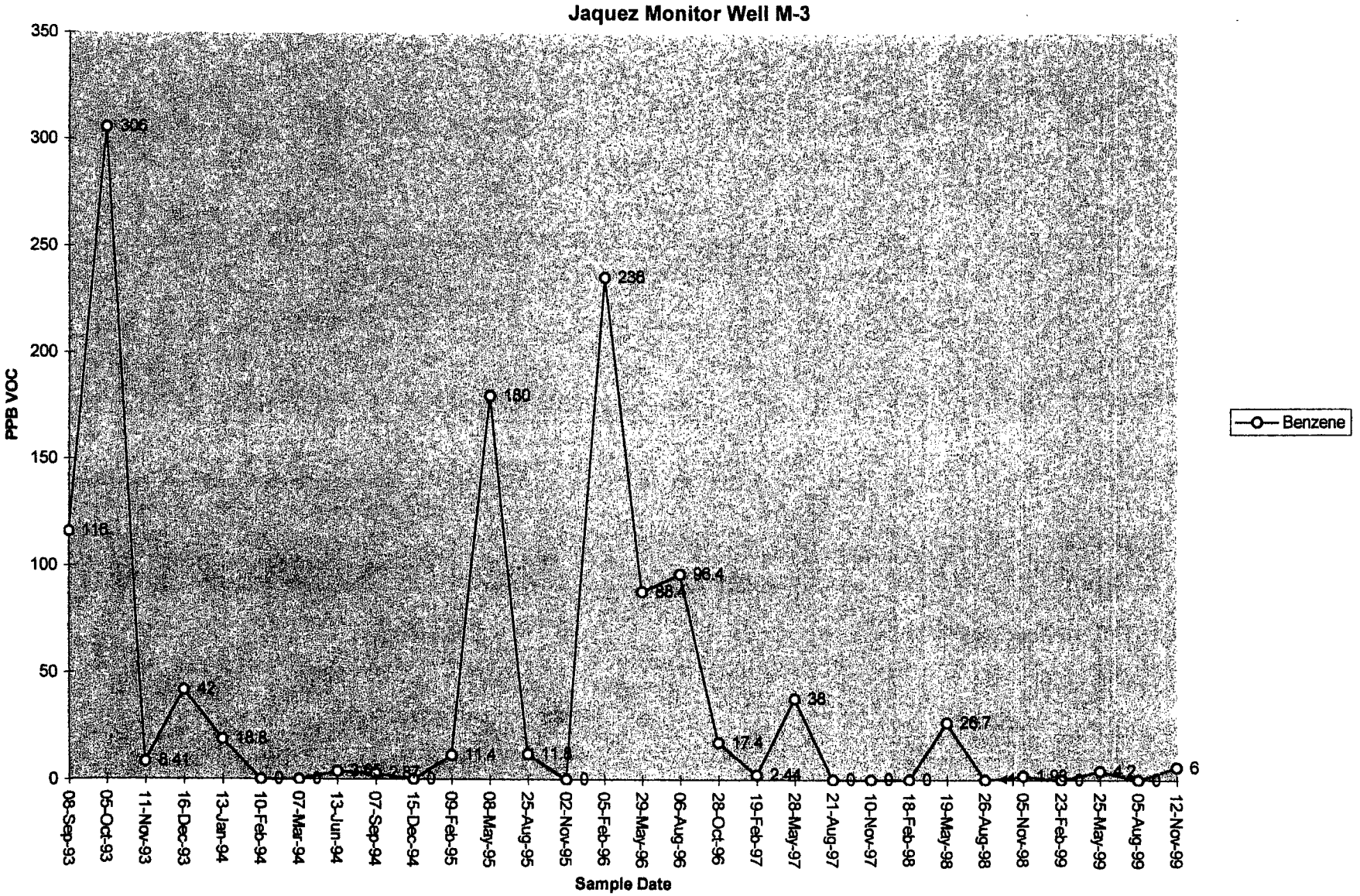
4th Quarter 1999 REPORT

Jaquez Corn Field
Monitor Well Results (MW-3 and 4)
Lab Sample #'s 990454 to 990456
Sampled November 12, 1999
Sampled by Dennis Bird

Report Distribution:

Scott Pope
Cecil Irby - Philip Environmental
Results File

Attachments


Jaquez Monitor Well M-3
PPB VOC
Sample Date
Benzene
350
300
250
200
150
100
50
0
116
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42
18.8
180
11.4
11.5
236
96.4
17.4
2.44
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26.7
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21-Aug-97
10-Nov-97
18-Feb-98
19-May-98
26-Aug-98
05-Nov-98
23-Feb-99
25-May-99
05-Aug-99
12-Nov-99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-3

Site Name JAQUEZ

Meter Code NA

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) 15.20
Initial Depth to Water (feet) 4.74
Height of Water Column in Well (feet) 10.46

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

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

Water Disposal

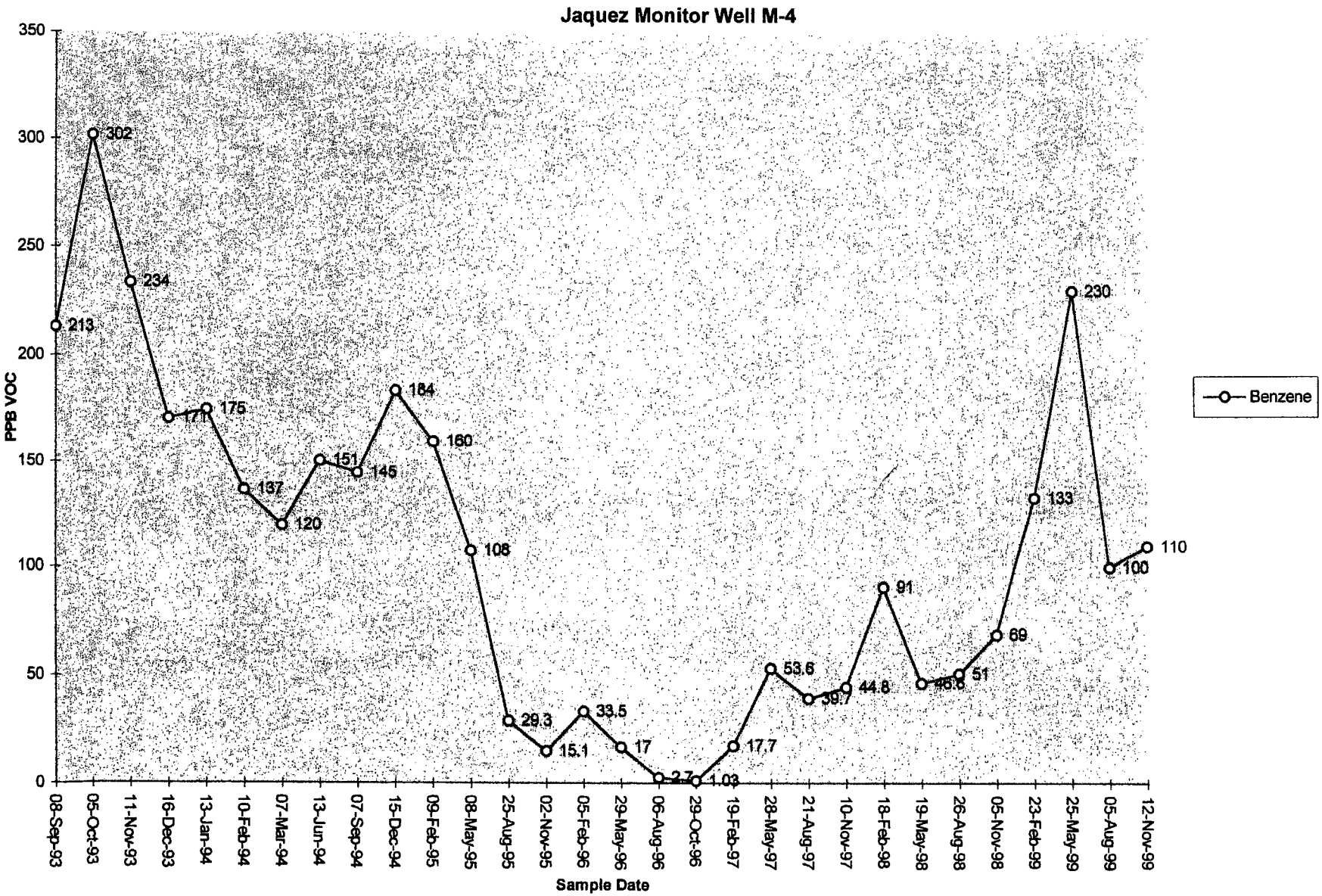
KUTZ SEPARATOR

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	Cumulative	Increment	Cumulative					
11-12-99	0955										14.0	6.68	469		
11-12-99	1000						5.0	5.0			13.4	6.81	469		
11-12-99	1005						5.0	10.0			13.3	7.00	425		
11-12-99	1015						5.0	15.0			13.1	7.12	421		
11-12-99	1021						5.0	20.0			13.3	7.08	416		
11-12-99	1030						5.0	25.0			13.4	7.09	411	2.5	

Comments

Developer's Signature Dennis Bird Date 11-12-99 Reviewer John Landers Date 12/1/99


Jaquez Monitor Well M-4
PPB VOC
Sample Date
Benzene
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300
250
200
150
100
50
0
213
302
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171
175
137
120
151
145
184
160
108
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15.1
33.5
17
2.7
1.03
17.7
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39.7
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13-Jun-94
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09-Feb-95
08-May-95
25-Aug-95
02-Nov-95
05-Feb-96
29-May-96
06-Aug-96
29-Oct-96
19-Feb-97
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21-Aug-97
10-Nov-97
18-Feb-98
19-May-98
26-Aug-98
05-Nov-98
23-Feb-99
25-May-99
05-Aug-99
12-Nov-99

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-4

Site Name JAQUEZ

Meter Code NA

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) 15.30
Initial Depth to Water (feet) 3.21
Height of Water Column in Well (feet) 12.09
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		8.0	24.0
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

KUTZ SEPARATOR

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	Cumulative	Increment	Cumulative					
11-12-99	1118										16.4	7.27	699		
11-12-99	1126						5.0	5.0			17.0	7.59	733		
11-12-99	1138						3.0	8.0			15.8	7.65	710		
11-12-99	1153						2.0	10.0			15.5	7.84	730	4.5	

Comments THE WELL BAILED DRY @ 10.0 GALLONS.

Developer's Signature Dennis Bird Date 11-12-99 Reviewer John Laubin Date 12/1/99

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **911054**
November 30, 1999

EL PASO FIELD SERVICES
770 WEST NAVAJO
FARMINGTON, NM 87401

Project Name JAQUEZ
Project Number (none)

Attention: JOHN LAMBDIN

On 11/16/99 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592 pending), 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.

EPA method 8021 was performed by Pinnacle Laboratories, Inc., Albuquerque, NM.

All other parameters were performed by ESL (OR) Inc., Portland, OR.

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

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

Reviewed & Approved
J. Lambdin 12/2/99

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: EL PASO FIELD SERVICES	PINNACLE ID	: 911054
PROJECT #	: (none)	DATE RECEIVED	: 11/16/99
PROJECT NAME	: JAQUEZ	REPORT DATE	: 11/30/99

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	990454 - mw-3	AQUEOUS	11/12/99
02	990455 - mw-4	AQUEOUS	11/12/99
03	990456 - mw-4 Field Duplicate	AQUEOUS	11/12/99
04	TRIP BLANK	AQUEOUS	11/12/99

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : JAQUEZ

PINNACLE I.D.: 911054

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	990454	AQUEOUS	11/12/99	NA	11/18/99	1
02	990455	AQUEOUS	11/12/99	NA	11/18/99	5
03	990456	AQUEOUS	11/12/99	NA	11/18/99	5

PARAMETER	DET. LIMIT	UNITS	990454	990455	990456
BENZENE	0.5	**UG/L**	**6.0**	**110**	**120**
TOLUENE	0.5	**UG/L**	**2.2**	< 2.5	< 2.5
ETHYLBENZENE	0.5	**UG/L**	**1.7**	< 2.5	< 2.5
TOTAL XYLENES	0.5	**UG/L**	**5.4**	**56**	**63**
SURROGATE:					
BROMOFLUOROBENZENE (%)			91	100	99
SURROGATE LIMITS	(80 - 120)				

MW-3 MW-4 MW-4 Field Duplicate

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : JAQUEZ

PINNACLE I.D.: 911054

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	TRIP BLANK	AQUEOUS	11/12/99	NA	11/18/99	1

PARAMETER	DET. LIMIT	UNITS	TRIP BLANK
BENZENE	0.5	UG/L	< 0.5
TOLUENE	0.5	UG/L	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5

SURROGATE:

BROMOFLUOROBENZENE (%)		93
SURROGATE LIMITS	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 911054
BLANK I. D.	: 111899	DATE EXTRACTED	: NA
CLIENT	: EL PASO FIELD SERVICES	DATE ANALYZED	: 11/18/99
PROJECT #	: (none)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: JAQUEZ		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		102
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED		
MSMSD #	: 111899	PINNACLE I.D.	: 911054
CLIENT	: EL PASO FIELD SERVICES	DATE EXTRACTED	: NA
PROJECT #	: (none)	DATE ANALYZED	: 11/18/99
PROJECT NAME	: JAQUEZ	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	18.5	93	17.7	89	4	(80 - 120)	20
TOLUENE	<0.5	20.0	19.5	98	18.8	94	4	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.2	101	19.5	98	4	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	61.6	103	59.2	99	4	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Environmental Services Laboratory, Inc.

E S L

November 24, 1999 *17400 SW Upper Boones Ferry Road • Suite 270 • Portland, OR 97224 • (503) 670-8520*

Kim McNeill
Pinnacle Laboratories
2709-D Pan American Fwy NE
Albuquerque, NM 87107
TEL: 505-344-3777
FAX (505) 344-4413

RE: 911054/EPFS/Jaquez Order No.: 9911102

Dear Kim McNeill,

Environmental Services Laboratory received 3 samples on 11/17/99 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Nitrate/Nitrite (Nitrogen)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without the written approval from the Laboratory.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Kimberly Hill
Project Manager

Keith Hunter
Technical Review

JAQUEZ - MW-3

Environmental Services Laboratory

Date: *24-Nov-99*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	911054-01
Lab Order:	9911102	**Tag Number:**	
Project:	911054/EPFS/Jaquez	**Collection Date:**	11/12/99
Lab ID:	9911102-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE/NITRITE NITROGEN						Analyst: nmk
Nitrogen, N+N	ND	0.050		mg/L	1	11/23/99

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

JAQUEZ - MW-4

Environmental Services Laboratory

Date: *24-Nov-99*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	911054-02
Lab Order:	9911102	**Tag Number:**	
Project:	911054/EPFS/Jaquez	**Collection Date:**	11/12/99
Lab ID:	9911102-02A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE/NITRITE NITROGEN						Analyst: nmk
Nitrogen, N+N	0.057	0.050		mg/L	1	11/23/99

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Jaquez - MW-4 Field Duplicate.

Environmental Services Laboratory

Date: *24-Nov-99*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	911054-03
Lab Order:	9911102	**Tag Number:**	
Project:	911054/EPFS/Jaquez	**Collection Date:**	11/12/99
Lab ID:	9911102-03A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE/NITRITE NITROGEN						Analyst: nmk
Nitrogen, N+N	0.068	0.050		mg/L	1	11/23/99

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *24-Nov-99*

CLIENT: Pinnacle Laboratories
Work Order: 9911102
Project: 911054/EPFS/Jaquez

QC SUMMARY REPORT
Method Blank

Sample ID: **MBlank** Batch ID: **01 N+N-11/23** Test Code: **Nitrogen** Units: **mg/L** Analysis Date **11/23/99** Prep Date:

Client ID: **9911102** Run ID: **HIT MAN_991123A** SeqNo: **29004**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, N+N	ND	0.05									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Environmental Services Laboratory

Date: *24-Nov-99*

CLIENT: Pinnacle Laboratories
Work Order: 9911102
Project: 911054/EPFS/Jaquez

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS**	Batch ID: **01 N+N-11/23**	Test Code: **Nitrogen**	Units: **mg/L**	Analysis Date **11/23/99**	Prep Date:
Client ID:	**9911102**	Run ID: **HIT MAN_991123A**		SeqNo: **29007**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, N+N	.328	0.05	0.3	0	109.3%	85	115	0			

Sample ID: **LCSD**	Batch ID: **01 N+N-11/23**	Test Code: **Nitrogen**	Units: **mg/L**	Analysis Date **11/23/99**	Prep Date:
Client ID:	**9911102**	Run ID: **HIT MAN_991123A**		SeqNo: **29009**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, N+N	.29	0.05	0.3	0	96.7%	85	115	0			

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Pinnacle Laboratories, Inc. | **Interlab Chain of Custody** | Date: 11/16 | Page: 1 of 1

Network Project Manager: Kimberly D. McNeill

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL		TOX	TOC	Gen Chemistry: Total NO2/NO3		Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8080)	8270 BY GC/MS	PNA (8310)	8240 (TCLP 1311) ZHE	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
911054-01	11/12	1045	AQ									X																
-02		1230										X																
-03	↓	1230	↓									X																

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:	
PROJECT #:	911054	Total Number of Containers		PENSACOLA - STL-FL	
PROJ. NAME:	EPFS	Chain of Custody Seals		PORTLAND - ESL-OR	X
QC LEVEL:	(STD.) IV	Received Intact?		STL - CT	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		STL- NEW JERSEY	
TAT:	(STANDARD) RUSH!!	LAB NUMBER:	9911102	N. CREEK	
				BARRINGER	
				SEQUOIA	

DUE DATE:	11/26
RUSH SURCHARGE:	—
CLIENT DISCOUNT:	—
SPECIAL QUALIFICATION REQUIRED:	YES (NO)

COMMENTS:

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Francine Tunno Time: MDD	Signature: Time:
Printed Name: Francine Tunno Date: 11/16/99	Printed Name: Date:
Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2**
Signature: Time: 10A	Signature: Time:
Printed Name: Date: 11/17/99	Printed Name: Date:
Company	Company

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 11-12-99 PAGE: 1 OF 1

PLI Accession #: 911054

SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: JOHN LAMBDIN

COMPANY: EL PASO FIELD SERVICES
ADDRESS: 770 WEST NAVAJO
FARMINGTON NM
PHONE: (505) 599-2144
FAX: (505) 599-2261

BILL TO: SAME AS ABOVE
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject		(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐		8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	NO2/NO3	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
990454	11-12-99	1045	WATER	01						X																X							3
990455	11-12-99	1230	WATER	02						X																X							3
990456	11-12-99	1230	WATER	03						X																X							3
TRIP BLANK	11-12-99		WATER	04						X																							1

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT INFORMATION

PROJ. NO.:
PROJ. NAME: JAQUEZ
P.O. NO.:
SHIPPED VIA: FED-X

SAMPLE RECEIPT

NO. CONTAINERS	10
CUSTODY SEALS	Y / N / (NA)
RECEIVED INTACT	YES
BLUE ICE/ICE	5°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

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

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

RELINQUISHED BY: 1.
Signature: Dennis Bird Time: 1438
Printed Name: DENNIS BIRD Date: 11-12-99
Company: EL PASO FIELD SERVICE
See reverse side (Force Majeure)

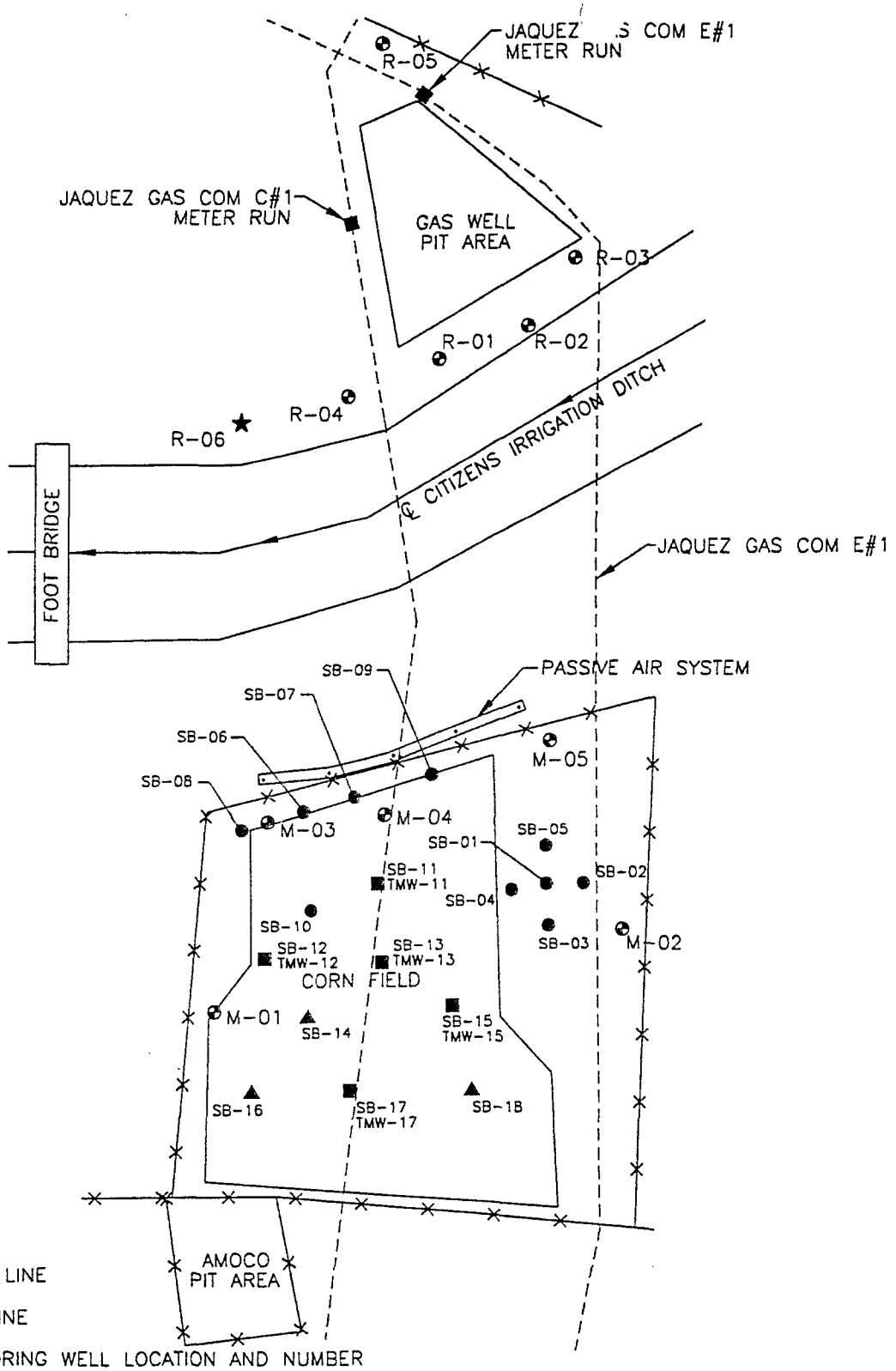
RELINQUISHED BY: 2.
Signature: Time:
Printed Name: Date:
Company:

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

RECEIVED BY: (LAB) 2.
Signature: Francine Twino Time: 0950
Printed Name: Francine Twino Date: 11/16/99
Pinnacle Laboratories Inc.

Appendix D – Soil Investigations LAB Reports For The Current Period

JUNE 30, 1999 SOIL INVESTIGATION LABORATORY RESULTS



LEGEND

FENCE LINE	
PIPE LINE	
M-01	MONITORING WELL LOCATION AND NUMBER
SB-01	EXISTING SOIL BORING LOCATION
SB-14	PROPOSED SOIL BORING LOCATION
SB-11	PROPOSED SOIL BORING AND GROUNDWATER LOCATIONS
R-06	PROPOSED MONITORING WELL LOCATION

0 50
FEET

PHILIP SERVICES CORP

TITLE:

PROPOSED LOCATIONS FOR
SOIL AND GROUNDWATER INVESTIGATION
AND MONITORING WELL INSTALLATION

DWN:	DES.:
TMM	CI
CHKD:	APPD:
SP	
DATE:	REV.:
8/11/99	1

PROJECT NO.: 17444
EL PASO FIELD
SERVICE COMPANY

FIGURE 1

COL. 174448-003

Tabel 1

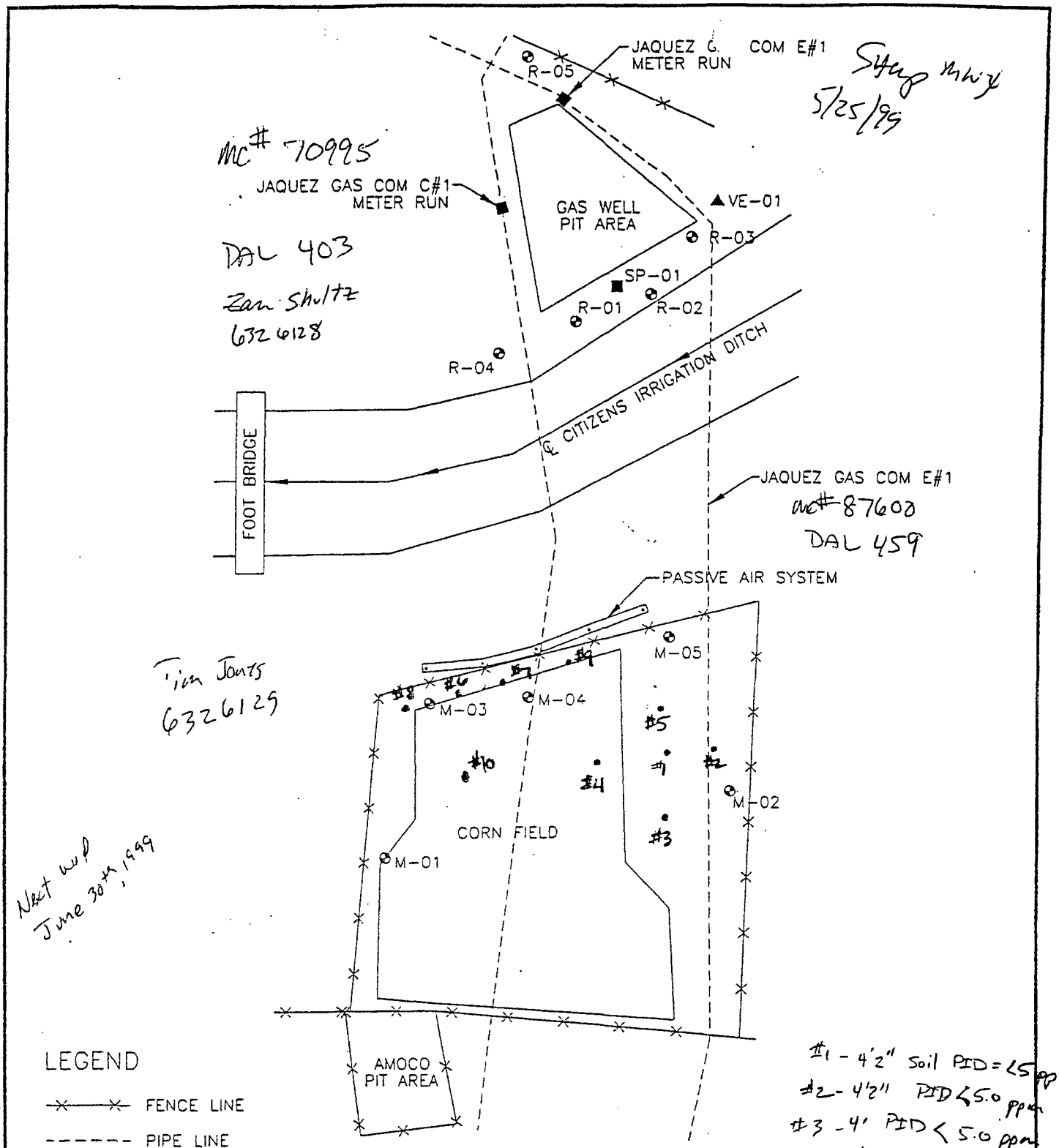
Jacquez Cornfield Results Summary

SAMPLE ID	DATE	TIME	Sample Location Map Point	Sample Depth	Sample Matrix	Sample Color	Field PID (PPM)	TPH MG/KG	Benzene Soil - MG/KG Water - PPB	Total BTEX Soil - MG/KG Water - PPB
990293	6/30/99	850	#1	4' - 2"	Soil	Brown	<5.0	<20	<0.025	<0.1
990294	6/30/99	910	#2	4' - 2"	Soil	Brown	<5.0	<20	<0.025	<0.1
990295	6/30/99	930	#3	4'	Soil	Brown	<5.0	<20	<0.025	<0.1
990296	6/30/99	945	#4	4'	Soil	Brown	<5.0	<20	<0.025	<0.1
990297	6/30/99	1000	#6	4'	Soil	Gray	2346	6850	28	262
990298	6/30/99	1015	#8	4'	Soil	Brown	<5.0	<20	<0.025	<0.1
990299	6/30/99	1025	#9	4'	Soil	Gray	2387	1443	2.6	46.5
990300	6/30/99	1040	#5	4'	Soil	Brown	<5.0	<20	<0.025	<0.1
990301	6/30/99	1050	#5	4'	Water	Clear	NA	NA	<0.5	<2.0
990302	6/30/99	1140	#10	7' - 4"	Soil	Black	Not Run	<20	<0.025	<0.1
990303	6/30/99	1145	#10	7' - 4"	Water	Clear	NA	NA	1100	3060
990304	6/30/99	1010	#7	4'	Soil	Brown	<5.0	<20	<0.025	<0.1

Attachment 1
Laboratory Report

Jacquez Cornfield Results Summary

SAMPLE ID	DATE	TIME	Sample Location Map Point	Sample Depth	Sample Matrix	Sample Color	Field PID (PPM)	TPH MG/KG	Benzene Soil - MG/KG Water - PPB	Total BTEX Soil - MG/KG Water - PPB
990293	6/30/99	850	#1	4' - 2""	Soil	Brown	<5.0	<20	<0.025	<0.1
990294	6/30/99	910	#2	4' - 2""	Soil	Brown	<5.0	<20	<0.025	<0.1
990295	6/30/99	930	#3	4'	Soil	Brown	<5.0	<20	<0.025	<0.1
990296	6/30/99	945	#4	4'	Soil	Brown	<5.0	<20	<0.025	<0.1
990297	6/30/99	1000	#6	4'	Soil	Gray	2346	6850	28	262
990298	6/30/99	1015	#8	4'	Soil	Brown	<5.0	<20	<0.025	<0.1
990299	6/30/99	1025	#9	4'	Soil	Gray	2387	1443	2.6	46.5
990300	6/30/99	1040	#5	4'	Soil	Brown	<5.0	<20	<0.025	<0.1
990301	6/30/99	1050	#5	4'	Water	Clear	NA	NA	<0.5	<2.0
990302	6/30/99	1140	#10	7' - 4""	Soil	Black	Not Run	<20	<0.025	<0.1
990303	6/30/99	1145	#10	7' - 4""	Water	Clear	NA	NA	1100	3060
990304	6/30/99	1010	#7	4'	Soil	Brown	<5.0	<20	<0.025	<0.1



PHILIP SERVICES CORP

TITLE:

PROPOSED LOCATIONS FOR VAPOR EXTRACTION AND GROUNDWATER SPARGE POINTS

DWN:	DES.:	PROJECT NO.: 17444
TMM	CI	EL PASO FIELD SERVICE COMPANY
CHKD:	APPD:	
SP		
DATE:	REV.:	FIGURE 1
6/9/99	0	

COL: 17444B-002

ANALYSIS REQUEST NUMBERS

SAMPLE NUMBER	Logged by (Initials)	Date of Collection	Time of Collection	Location	Sample Point	Primary Description	Matrix	LAB #1	Date of Results	Lab #2	Date of Results	
990271	JAL	6/8/99	1202	MC#	Ramenta et al #1 PC-006	MW-2	Water	PINN				
990272	JAL	6/8/99	1300	MC#	Ramenta et al #1 PC-007	MW-3						
990273	JAL	6/8/99	1335	MC#	Charley PAH #2 PC-008	MW-1						
990274	JAL	6/8/99	1410	MC#	Charley PAH #2 PC009	MW-2						
990275	JAL	6/8/99	1440	MC#	Charley PAH #2 PC010	MW-3						
990276	JAL	6/8/99	1441	MC#	Trip Blank							
990277	JAL	6/8/99	1442	MC#	Trip Blank #2		Water	PINN				
990278	OPB	6-11-99	1148	MC# 93388	HORTON #1E	MW-1	WATER	EPES				
990279	OPB	6-11-99	1148	MC# 93388	HORTON #1E	MW-1	WATER	EPES				
990280	OPB	6-11-99	1540	MC# 89894	HANNAND #4A	MW-1	WATER	EPES				
990281	OPB	6-11-99	1542		TRIP BLANK		WATER	PINN				
990282	OPB	6-14-99	1033	MC# 75155	RAMENTA ET AL #1	MW-1	WATER	EPES				
990283	OPB	6-14-99	1203	MC# 71816	JENNA PAH #1	MW-1	WATER	EPES				
990284	OPB	6-14-99	1445	MC# 60087	K-31 LINE DRIP	MW-1	WATER	EPES				
990285	OPB	6-14-99	1447		TRIP BLANK		WATER					
990286	OPB	6-14-99	1314	CHACO PLANT	CONTROL STORAGE		WATER	UWS				
990287	OPB	6-15-99	1213	CHACO PLANT	MONITOR WELL	MW-9	WATER	PINN				
990288	OPB	6-15-99	1350	CHACO PLANT	MONITOR WELL	MW-10	WATER					
990289	OPB	6-15-99	1350	CHACO PLANT	MONITOR WELL FIELD DUP	MW-10	WATER					
990290	OPB	6-15-99	1548	MC# 73220	FOGELSON 4-1 COM #4	MW-1	WATER					
990291	OPB	6-15-99	1550		TRIP BLANK		WATER					
990292	OPB	6-15-99	0830	BLANCO PLANT	TOTAL DISCHARGE		WATER	EPES				
990293	JAL	6-30-99	0850	JACQUEZ CF	HA #1 Brown	4'-2"	Soil	PINN				<5
990294	JAL	6-30-99	0910		HA #2	4'-2"	Soil					<5
990295	JAL	6-30-99	0930		HA #3	4'	Soil					<5
990296	JAL	6-30-99	0945		HA #4 Brown	4'	Soil					<5
990297	JAL	6-30-99	1000	JACQUEZ CF	HA #6 Gray	4'	Soil	PINN				2346

ANALYSIS REQUEST NUMBERS

SAMPLE NUMBER	Logged by (Initials)	Date of Collection	Time of Collection	Location	Sample Point	Primary Description	Matrix	LAB #1	Date of Results	Lab #2	Date of Results	Naftex
~~90297~~	~~JAL~~	~~6-30-99~~	1010	JACQUEZ CF	~~HA #7~~ Brown	4'	Soil	PINN				<5
90298	JAL	"	1015	"	HA #8 Brown	4'	Soil	"				<5
90299	JAL	"	1025	"	HA #9 Gray	4'	Soil	"				2387
90300	JAL	"	1040	"	HA #5 Brown	4'	Soil	"				<5
90301	JAL	"	1050	"	HA #5 GW	4'	Water	"				-
90302	JAL	"	1140	"	HA #10 Black	7'-4"	Soil	"				-
90303	JAL	6-30-99	1145	JACQUEZ CF	HA #10 GW	7'-4"	Water	PINN				-
90304	JAL	6-30-99	1010	JACQUEZ CF	HA #7 Brown	4'	Soil	PINN				<5
90305	JAL	7-1-99	0840	CHACO Plant	LAKE FELDER		water	CORE				
90306	DPB	7-9-99	1405	CHACO PLANT	20" DISCHARGE		WATER	EPFS				
90307	DPB	7-13-99	1030	CHACO PLANT	MONITOR WELL	MW-2	WATER	EPFS				
90308	"	"	1157	"	MONITOR WELL	MW-3	WATER	EPFS				
90309	"	"	1255	"	MONITOR WELL	MW-4	WATER	EPFS				
90310	"	"	1423	"	MONITOR WELL	MW-5	WATER	EPFS				
90311	"	"	1423	"	MONITOR WELL	MW-5	WATER	EPFS				
90312	"	"	1546	"	MONITOR WELL	MW-6	WATER	EPFS				
90313	DPB	7-13-99	1702	CHACO PLANT	MONITOR WELL	MW-7	WATER	EPFS				
90314	JAL	7/13/99	?	South Carlsbad Turbine	Contactor Out	Rich	Glycol	EPFS				
90315	"	"	?	"	Lean Glycol Dehy	"	"	"				
90316	"	"	?	"	Before Charcoal Filter	"	"	"				
90317	"	"	?	"	Out of Charcoal Filter	"	"	"				
90318	JAL	7/13/99	?	South Carlsbad Turbine	New Glycol From Tank	"	Glycol	EPFS				
90319	JAL	7/15/99	1410	Chaco Plant Dehy	C-1 Oil Residue	Mobil 797 Lube Oil, Filter Residue	Deposit	EPFS				
90320	JAL	7/15/99		Potter Canyon								

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number 907004
July 13, 1999

EL PASO FIELD SERVICES
770 WEST NAVAJO
FARMINGTON, NM 87401

Project Name JACQUEZ CF
Project Number (none)

Attention: JOHN LAMBDIN

On 7/1/99 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592), received a request to analyze **aqueous and non-aq** 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.

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

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: mt

Enclosure

Reviewed & Accepted
7/19/99

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: EL PASO FIELD SERVICES	PINNACLE ID	: 907004
PROJECT #	: (none)	DATE RECEIVED	: 7/1/99
PROJECT NAME	: JACQUEZ CF	REPORT DATE	: 7/13/99

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	990293	NON-AQ	6/30/99
02	990294	NON-AQ	6/30/99
03	990295	NON-AQ	6/30/99
04	990296	NON-AQ	6/30/99
05	990297	NON-AQ	6/30/99
06	990298	NON-AQ	6/30/99
07	990299	NON-AQ	6/30/99
08	990300	NON-AQ	6/30/99
09	990301	AQUEOUS	6/30/99
10	990302	NON-AQ	6/30/99
11	990303	AQUEOUS	6/30/99
12	990304	NON-AQ	6/30/99

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

PINNACLE I.D.: 907004

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	990293	NON-AQ	6/30/99	7/6/99	7/7/99	1
02	990294	NON-AQ	6/30/99	7/6/99	7/7/99	1
03	990295	NON-AQ	6/30/99	7/6/99	7/7/99	1

PARAMETER	DET. LIMIT	UNITS	990293	990294	990295
BENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOTAL XYLENES	0.025	MG/KG	< 0.025	< 0.025	< 0.025
SURROGATE:					
BROMOFLUOROBENZENE (%)			92	95	94
SURROGATE LIMITS	(65 - 120)				

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

PINNACLE I.D.: 907004

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	990296	NON-AQ	6/30/99	7/6/99	7/7/99	1
05	990297	NON-AQ	6/30/99	7/6/99	7/7/99	100
06	990298	NON-AQ	6/30/99	7/6/99	7/7/99	1

PARAMETER	DET. LIMIT	UNITS	990296	990297	990298
BENZENE	0.025	MG/KG	< 0.025	28	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	10	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	24	< 0.025
TOTAL XYLENES	0.025	MG/KG	< 0.025	200	< 0.025

SURROGATE:				
BROMOFLUOROBENZENE (%)		94	79	88
SURROGATE LIMITS	(65 - 120)			

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

PINNACLE I.D.: 907004

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	990299	NON-AQ	6/30/99	7/6/99	7/7/99	50
08	990300	NON-AQ	6/30/99	7/6/99	7/7/99	1
10	990302	NON-AQ	6/30/99	7/6/99	7/7/99	1

PARAMETER	DET. LIMIT	UNITS	990299	990300	990302
BENZENE	0.025	MG/KG	2.6	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	13	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	3.9	< 0.025	< 0.025
TOTAL XYLENES	0.025	MG/KG	27	< 0.025	< 0.025

SURROGATE:				
BROMOFLUOROBENZENE (%)		85	88	87
SURROGATE LIMITS	(65 - 120)			

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : EL PASO FIELD SERVICES PINNACLE I.D.: 907004
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
12	990304	NON-AQ	6/30/99	7/6/99	7/7/99	1

PARAMETER	DET. LIMIT	UNITS	990304
BENZENE	0.025	MG/KG	< 0.025
TOLUENE	0.025	MG/KG	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025
TOTAL XYLENES	0.025	MG/KG	< 0.025

SURROGATE:
BROMOFLUOROBENZENE (%) 89
SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 907004
BLANK I. D.	: 070699	DATE EXTRACTED	: 7/6/99
CLIENT	: EL PASO FIELD SERVICES	DATE ANALYZED	: 7/7/99
PROJECT #	: (none)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: JACQUEZ CF		

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.025

SURROGATE:
BROMOFLUOROBENZENE (%) 93
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED		
MSMSD #	: 907004-01	PINNACLE I.D.	: 907004
CLIENT	: EL PASO FIELD SERVICES	DATE EXRACTED	: 7/6/99
PROJECT #	: (none)	DATE ANALYZED	: 7/7/99
PROJECT NAME	: JACQUEZ CF	SAMPLE MATRIX	: NON-AQ
		UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.02	102	0.99	99	3	(68 - 120)	20
TOLUENE	<0.025	1.00	0.99	99	1.02	102	3	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.03	103	1.04	104	1	(49 - 127)	20
TOTAL XYLENES	<0.025	3.00	2.89	96	2.95	98	2	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

PINNACLE I.D.: 907004

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
09	990301	AQUEOUS	6/30/99	NA	7/5/99	1
11	990303	AQUEOUS	6/30/99	NA	7/5/99	10

PARAMETER	DET. LIMIT	UNITS	990301	990303
BENZENE	0.5	**UG/L**	< 0.5	**1100**
TOLUENE	0.5	**UG/L**	< 0.5	**910**
ETHYLBENZENE	0.5	**UG/L**	< 0.5	**110**
TOTAL XYLENES	0.5	**UG/L**	< 0.5	**940**
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5	< 25
SURROGATE:				
BROMOFLUOROBENZENE (%)			87	87
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 907004
BLANK I. D.	: 070599	DATE EXTRACTED	: N/A
CLIENT	: EL PASO FIELD SERVICES	DATE ANALYZED	: 7/5/99
PROJECT #	: (none)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: JACQUEZ CF		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		85
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED		
MSMSD #	: 907004-09	PINNACLE I.D.	: 907004
CLIENT	: EL PASO FIELD SERVICES	DATE EXTRACTED	: N/A
PROJECT #	: (none)	DATE ANALYZED	: 7/5/99
PROJECT NAME	: JACQUEZ CF	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	19.2	96	20.3	102	6	(80 - 120)	20
TOLUENE	<0.5	20.0	19.5	98	19.9	100	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.8	99	21.0	105	6	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	56.1	94	58.9	98	5	(80 - 120)	20

CHEM ST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES PINNACLE I.D.: 907004
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	990293	NON-AQ	6/30/99	7/6/99	7/7/99	1
02	990294	NON-AQ	6/30/99	7/6/99	7/7/99	1
03	990295	NON-AQ	6/30/99	7/6/99	7/7/99	1

PARAMETER	DET. LIMIT	UNITS	990293	990294	990295
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	< 5.0	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0	< 5.0	< 5.0
CALCULATED SUM:					
SURROGATE:					
O-TERPHENYL (%)			85	83	85
SURROGATE LIMITS	(66 - 151)				

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
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Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES PINNACLE I.D.: 907004
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	990296	NON-AQ	6/30/99	7/6/99	7/7/99	1
05	990297	NON-AQ	6/30/99	7/8/99	7/9/99	50
06	990298	NON-AQ	6/30/99	7/6/99	7/8/99	1

PARAMETER	DET. LIMIT	UNITS	990296	990297	990298
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	5600	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	< 5.0	1000	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0	250	< 5.0
CALCULATED SUM:				6850	
SURROGATE:					
O-TERPHENYL (%)			83	N/A *	90
SURROGATE LIMITS	(66 - 151)				

CHEMIST NOTES:
* = SURROGATE RECOVERY NOT OBTAINABLE DUE TO NECESSARY SAMPLE DILUTION.

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES PINNACLE I.D.: 907004
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	990299	NON-AQ	6/30/99	7/8/99	7/9/99	10
08	990300	NON-AQ	6/30/99	7/6/99	7/8/99	1
10	990302	NON-AQ	6/30/99	7/6/99	7/8/99	1

PARAMETER	DET. LIMIT	UNITS	990299	990300	990302
FUEL HYDROCARBONS, C6-C10	10	**MG/KG**	**1100**	< 10	< 10
FUEL HYDROCARBONS, C10-C22	5.0	**MG/KG**	**280**	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	**MG/KG**	**63**	< 5.0	< 5.0
CALCULATED SUM:			1443		
SURROGATE:					
O-TERPHENYL (%)			63 *	84	80
SURROGATE LIMITS	(66 - 151)				

CHEMIST NOTES:
* - SURROGATE RECOVERY LOW DUE TO SAMPLE MATRIX INTERFERENCE.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES PINNACLE I.D.: 907004
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
12	990304	NON-AQ	6/30/99	7/6/99	7/8/99	1

PARAMETER	DET. LIMIT	UNITS	990304
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0
CALCULATED SUM:			
SURROGATE:			
O-TERPHENYL (%)			75
SURROGATE LIMITS	(66 - 151)		

CHEMIST NOTES:

PINNACLE LABORATORIES

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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)		
BLANK I.D.	: 070699	PINNACLE I.D.	: 907004
CLIENT	: EL PASO FIELD SERVICES	DATE EXTRACTED	: 7/6/99
PROJECT #	: (none)	DATE ANALYZED	: 7/7/99
PROJECT NAME	: JACQUEZ CF	SAMPLE MATRIX	: NON-AQ

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 5.0
FUEL HYDROCARBONS, C22-C36	MG/KG	< 5.0

SURROGATE:		
O-TERPHENYL (%)		83
SURROGATE LIMITS	(80 - 151)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)		
BLANK I.D.	: 070899	PINNACLE I.D.	: 907004
CLIENT	: EL PASO FIELD SERVICES	DATE EXTRACTED	: 7/8/99
PROJECT #	: (none)	DATE ANALYZED	: 7/9/99
PROJECT NAME	: JACQUEZ CF	SAMPLE MATRIX	: NON-AQ

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/KG	< 10
HYDROCARBON RANGE		< 5.0
HYDROCARBONS QUANTITATED USING		< 5.0

SURROGATE:		
O-TERPHENYL (%)		88
SURROGATE LIMITS	(80 - 151)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)		
MSMSD #	: 907004-01	PINNACLE I.D.	: 907004
CLIENT	: EL PASO FIELD SERVICES	DATE EXTRACTED	: 7/6/99
PROJECT #	: (none)	DATE ANALYZED	: 7/7/99
PROJECT NAME	: JACQUEZ CF	SAMPLE MATRIX	: NON-AQ
		UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<5.0	100	107	107	111	111	4	(56 - 148)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

American Environmental Network (NM), Inc.

CHAIN OF CUSTODY

DATE: 6/30/99 PAGE: 1 OF 2

AEN(NM) Accession #: 907004

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: John Lambdin

COMPANY: El Paso Field Services

ADDRESS: 770 W. Navajo
Farmington, NM

PHONE: (505) 599-2144

FAX: (505) 599-2261

BILL TO: (Same as Above)

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline)	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
990293	6-30-99	0850	Soil	01		X			X																						1
990294		0910	Soil	02		X			X																						1
990295		0930	Soil	03		X			X																						1
990296		0945	Soil	04		X			X																						1
990297		1000	Soil	05		X			X																						1
990298		1015	Soil	06		X			X																						1
990299		1025	Soil	07		X			X																						1
990300		1040	Soil	08		X			X																						1
990301		1050	Water	09					X																						2
990302	6-30-99	1140	Soil	10		X			X																						1

PROJECT INFORMATION

PROJ. NO.: NA

PROJ. NAME: JACQUEZ CF

P.O. NO.: NA

SHIPPED VIA: Fed-X

SAMPLE RECEIPT

NO. CONTAINERS	11
CUSTODY SEALS	Y/N/NA
RECEIVED INTACT	Yes
BLUE ICE/ICE	ICE

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) [ ] 24hr [ ] 48hr [ ] 72hr [ ] 1 WEEK (NORMAL) [X]

CERTIFICATION REQUIRED: [ ] NM [ ] SDWA [ ] OTHER

METHANOL PRESERVATION [ ]

COMMENTS: FIXED FEE [ ]

On Ice

RELINQUISHED BY: 1.

Signature: John Lambdin Time: 1430

Printed Name: John Lambdin Date: 6/30/99

Company: El Paso Field Services

RECEIVED BY: 1.

Signature: Time:

Printed Name: Date:

Company:

RELINQUISHED BY: 2.

Signature: Time:

Printed Name: Date:

Company:

RECEIVED BY: (LAB) 2.

Signature: Francine Tonno Time: 1240

Printed Name: Francine Tonno Date: 6/1/99

American Environmental Network (NM), Inc.

American Environmental Network (NM), Inc.

CHAIN OF CUSTODY

DATE: 6/30/99 PAGE: 2 OF 2

AEN(NM) Accession #: 907004

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: John Lambdin

COMPANY: El Paso Field Services

ADDRESS: 720 West NAVAJO
FARMINGTON, NM

PHONE: (505) 599-2144

FAX: (505) 599-2261

BILL TO: (SAME AS Above)

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline)	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
990303	6-30-99	1145	Water						X	X																				2
990304	6-30-99	1010	Soil			X			X																						1
~~990~~																														

PROJECT INFORMATION	
PROJ. NO.:	NA
PROJ. NAME:	JACQUEZ CF
P.O. NO.:	NA
SHIPPED VIA:	Fed-X

SAMPLE RECEIPT	
NO. CONTAINERS	3
CUSTODY SEALS	Y/N/NA
RECEIVED INTACT	Yes
BLUE ICE/ICE	Ice

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

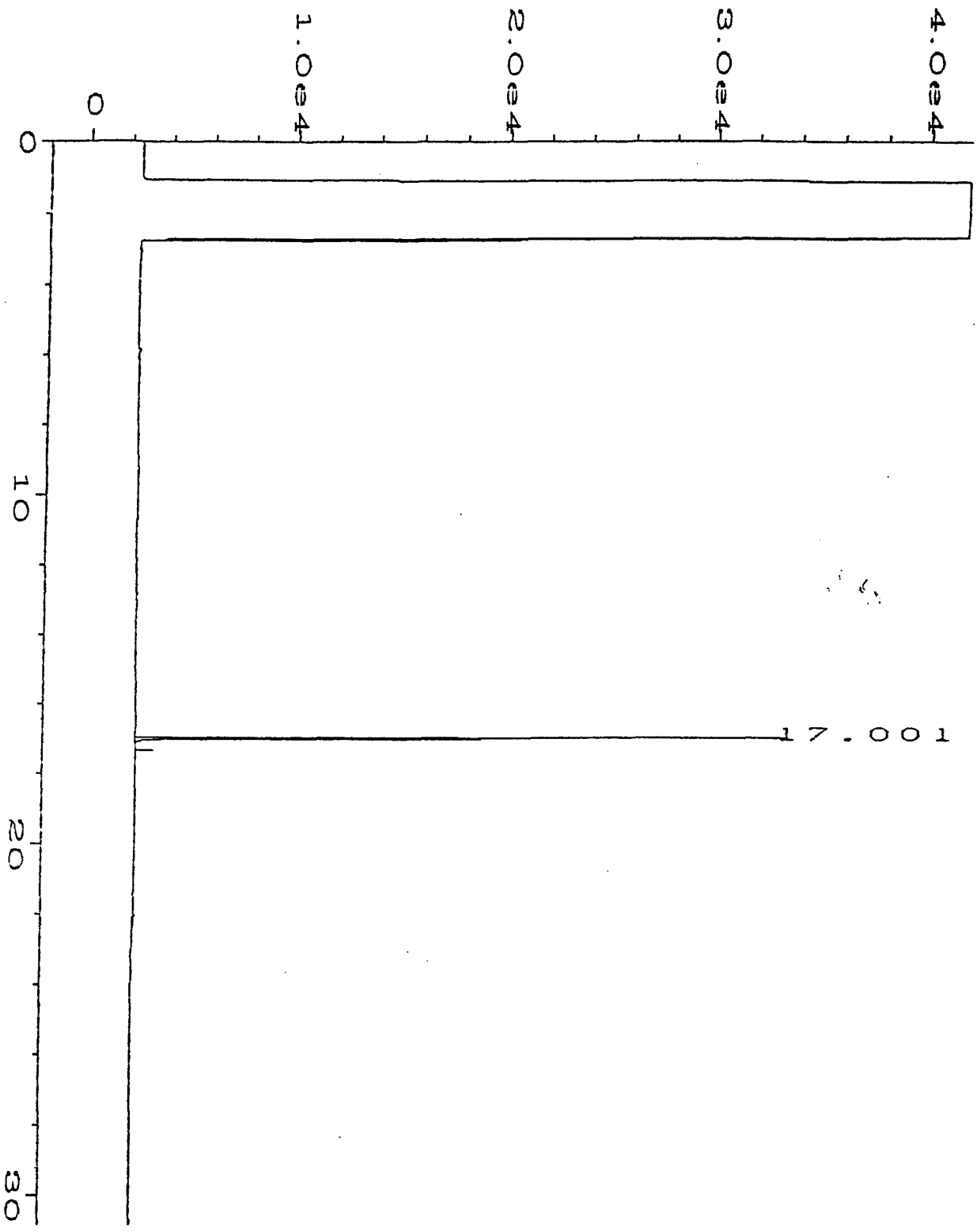
CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

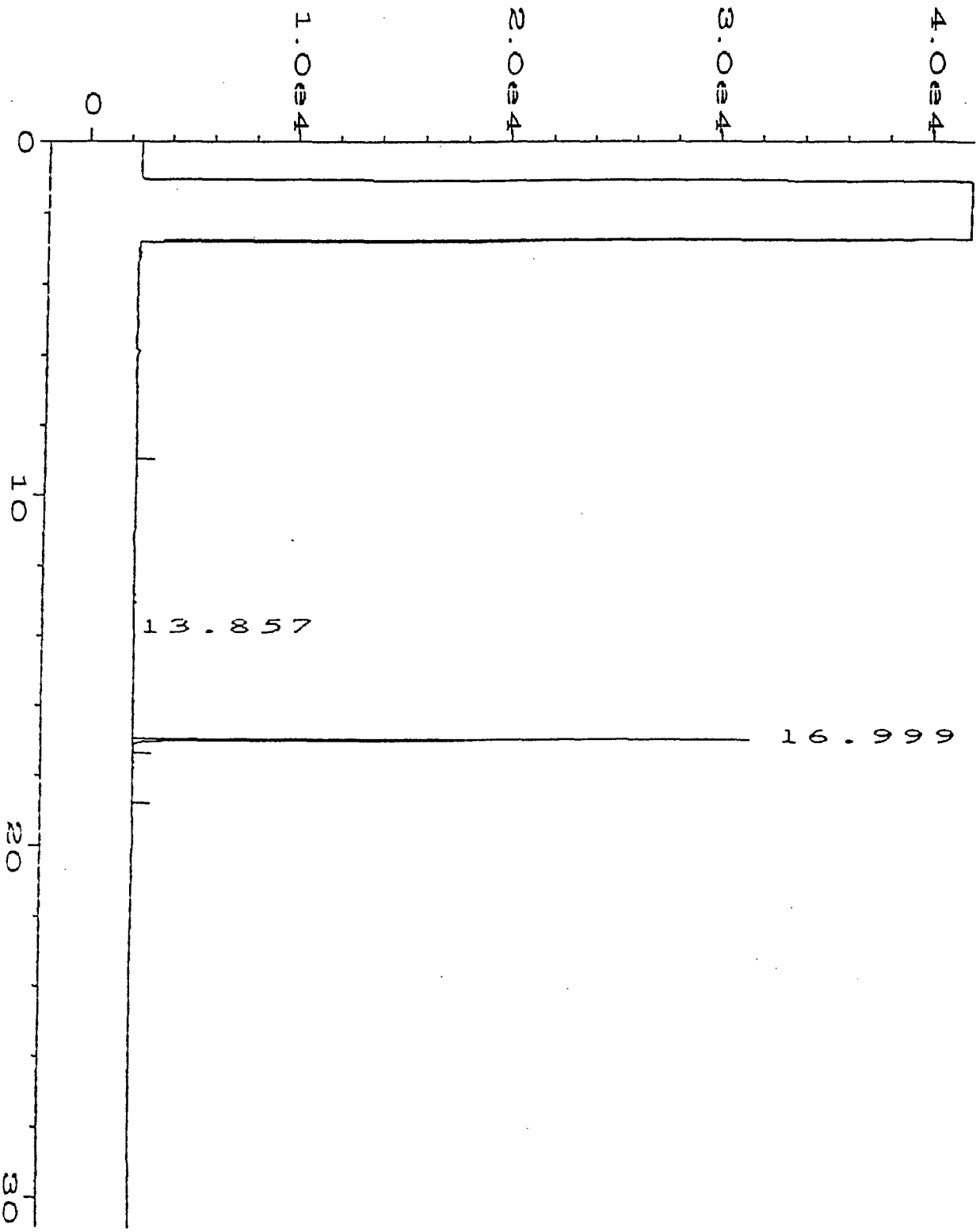
On Ice

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: John Lambdin Time: 1430	Signature: Time:
Printed Name: John Lambdin Date: 6/30/99	Printed Name: Date:
Company: El Paso Field Services	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Time: 1240
Printed Name: Date:	Printed Name: Date: 7/1/99
Company:	American Environmental Network (NM), Inc.



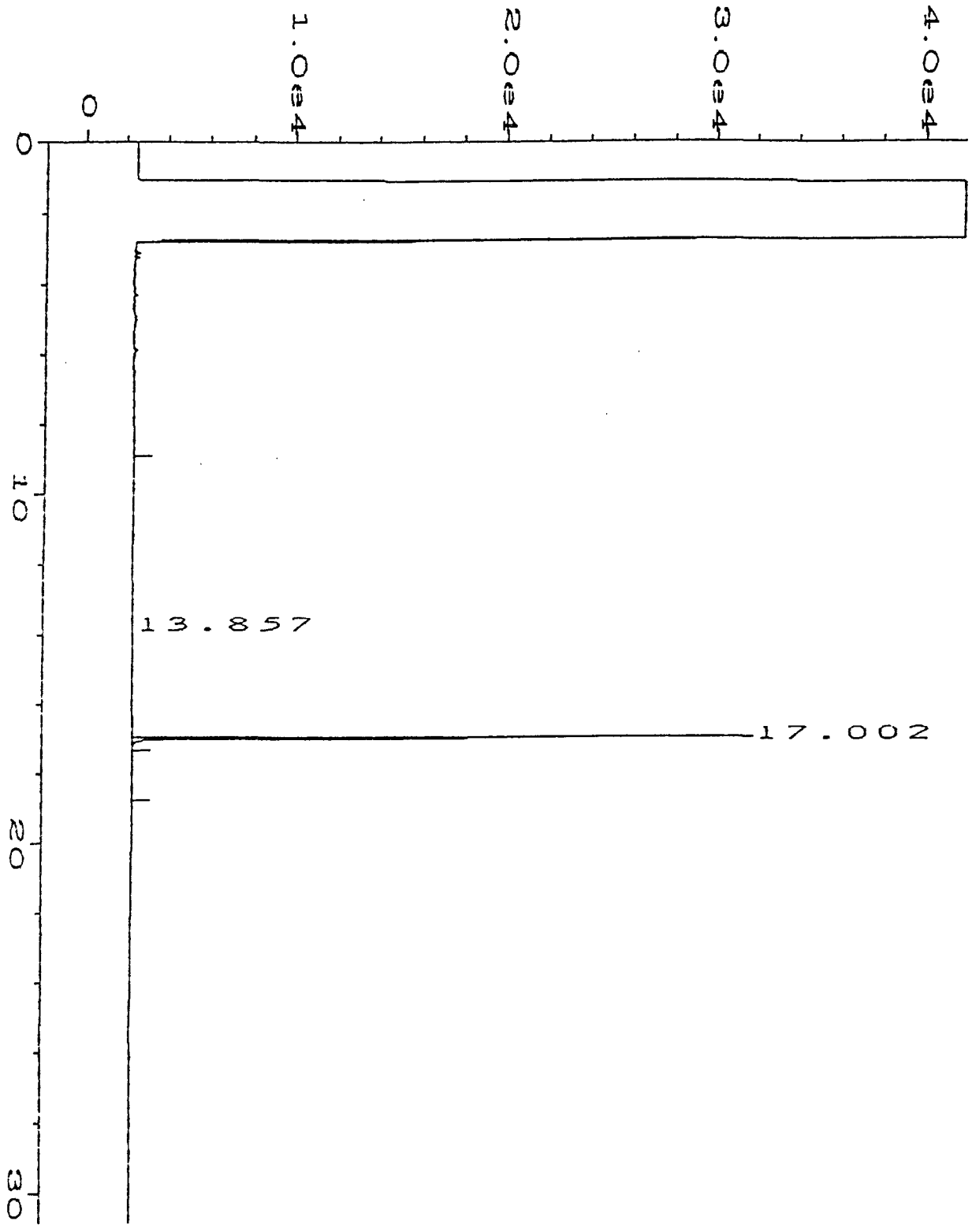
Data File Name : C:\HPCHEM\2\DATA\07JUL99\012R0101.D
Operator : Pinnacle - rg & cff
Instrument : FID1
Sample Name : 907004-01
Run Time Bar Code:
Acquired on : 07 Jul 99 05:41 PM
Report Created on: 08 Jul 99 01:31 PM
Last Recalib on : 11 JAN 93 08:58 AM
Multiplier : 1

Page Number : 1
Vial Number : 12
Injection Number : 1
Sequence Line : 1
Instrument Method: HX03169S.MTH
Analysis Method : HX031699.MTH
Sample Amount : 0
ISTD Amount :



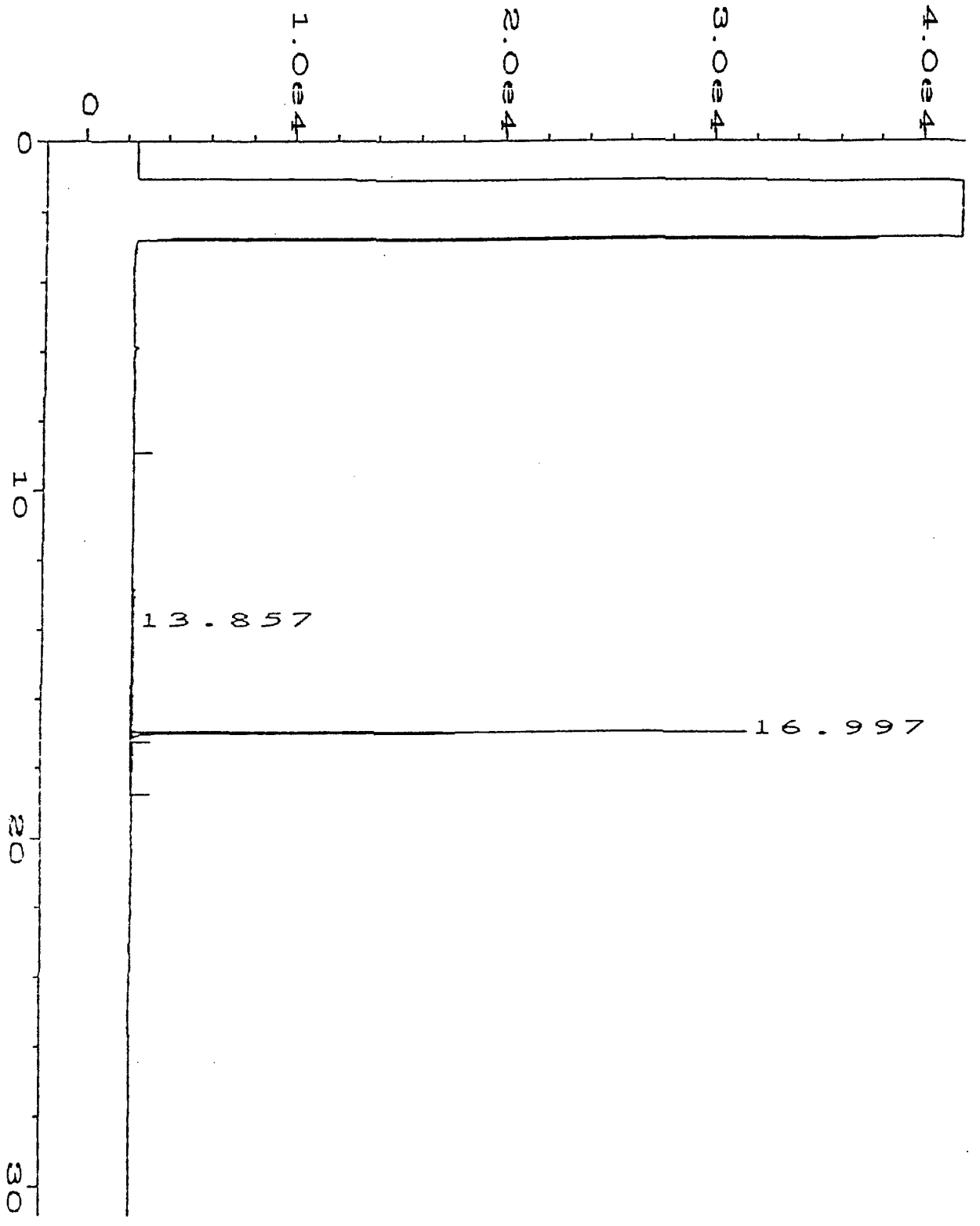
Data File Name : C:\HPCHEM\2\DATA\07JUL99\016R0101.D
Operator : Pinnacle - rg & cff
Instrument : FID1
Sample Name : 907004-02
Run Time Bar Code:
Acquired on : 07 Jul 99 09:07 PM
Report Created on: 08 Jul 99 01:39 PM
Last Recalib on : 11 JAN 93 08:58 AM
Multiplier : 1

Page Number : 1
Vial Number : 16
Injection Number : 1
Sequence Line : 1
Instrument Method: HX03169S.MTH
Analysis Method : HX031699.MTH
Sample Amount : 0
ISTD Amount :

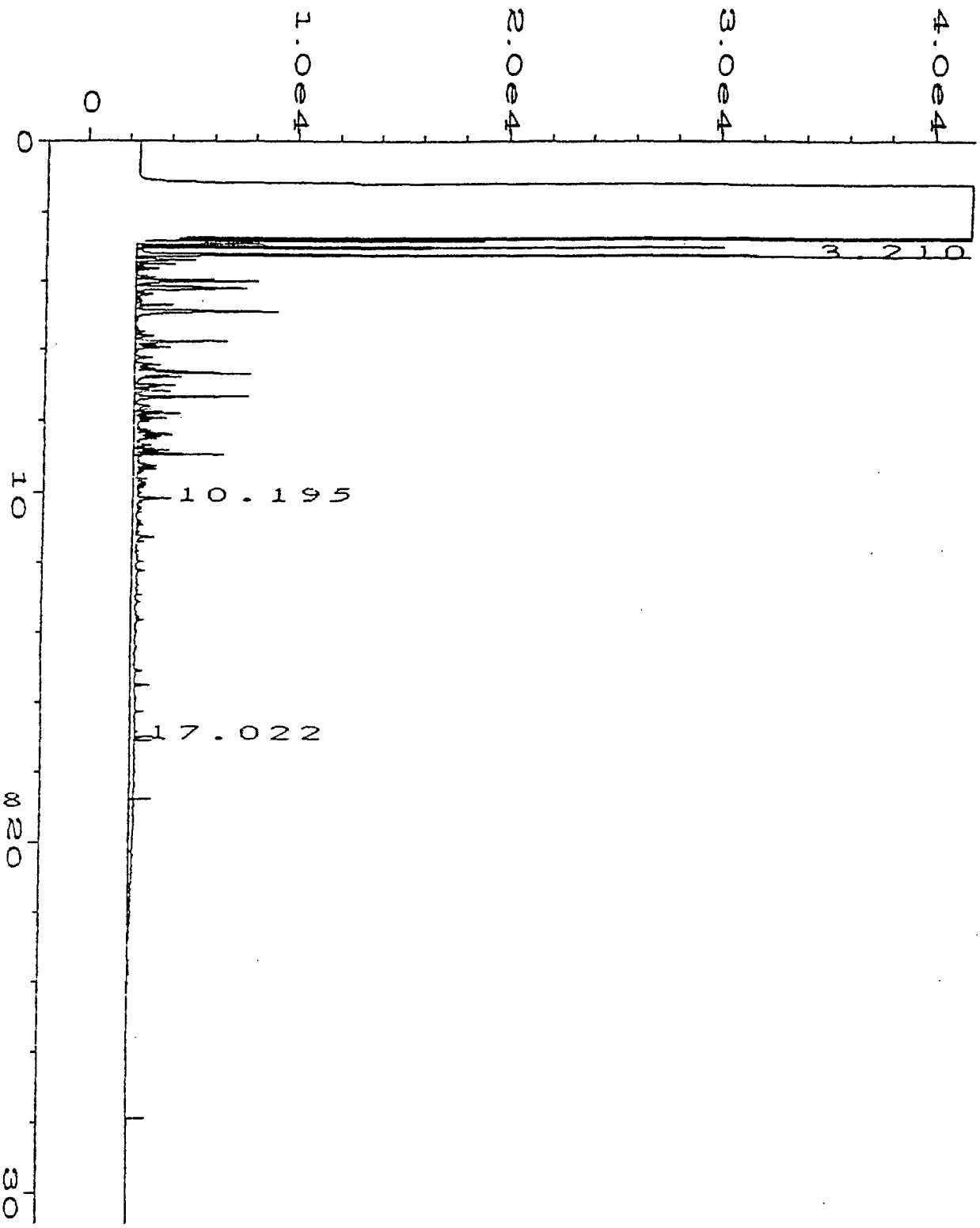


Data File Name : C:\HPCHEM\2\DATA\07JUL99\017R0101.D
Operator : Pinnacle - rg & cff
Instrument : FID1
Sample Name : 907004-03
Run Time Bar Code:
Acquired on : 07 Jul 99 09:57 PM
Report Created on: 08 Jul 99 01:40 PM
Last Recalib on : 11 JAN 93 08:58 AM
Multiplier : 1

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 1
Instrument Method: HX03169S.MTH
Analysis Method : HX031699.MTH
Sample Amount : 0
ISTD Amount :



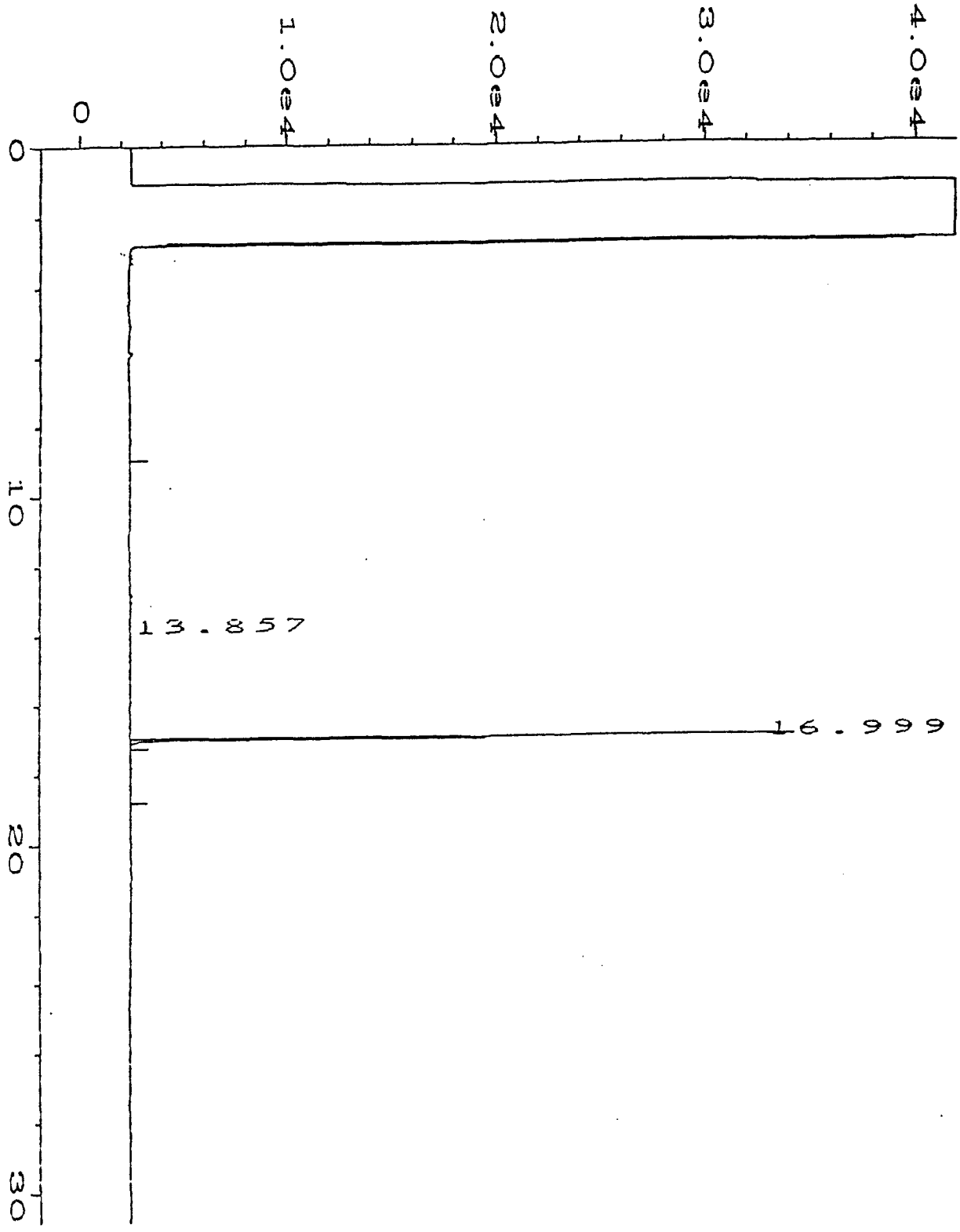
Data File Name	: C:\HPCHEM\2\DATA\07JUL99\018R0101.D		
Operator	: Pinnacle - rg & cff	Page Number	: 1
Instrument	: FID1	Vial Number	: 18
Sample Name	: 907004-04	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 07 Jul 99 10:47 PM	Instrument Method	: HX03169S.MTH
Report Created on	: 08 Jul 99 01:41 PM	Analysis Method	: HX031699.MTH
Last Recalib on	: 11 JAN 93 08:58 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:



user modified

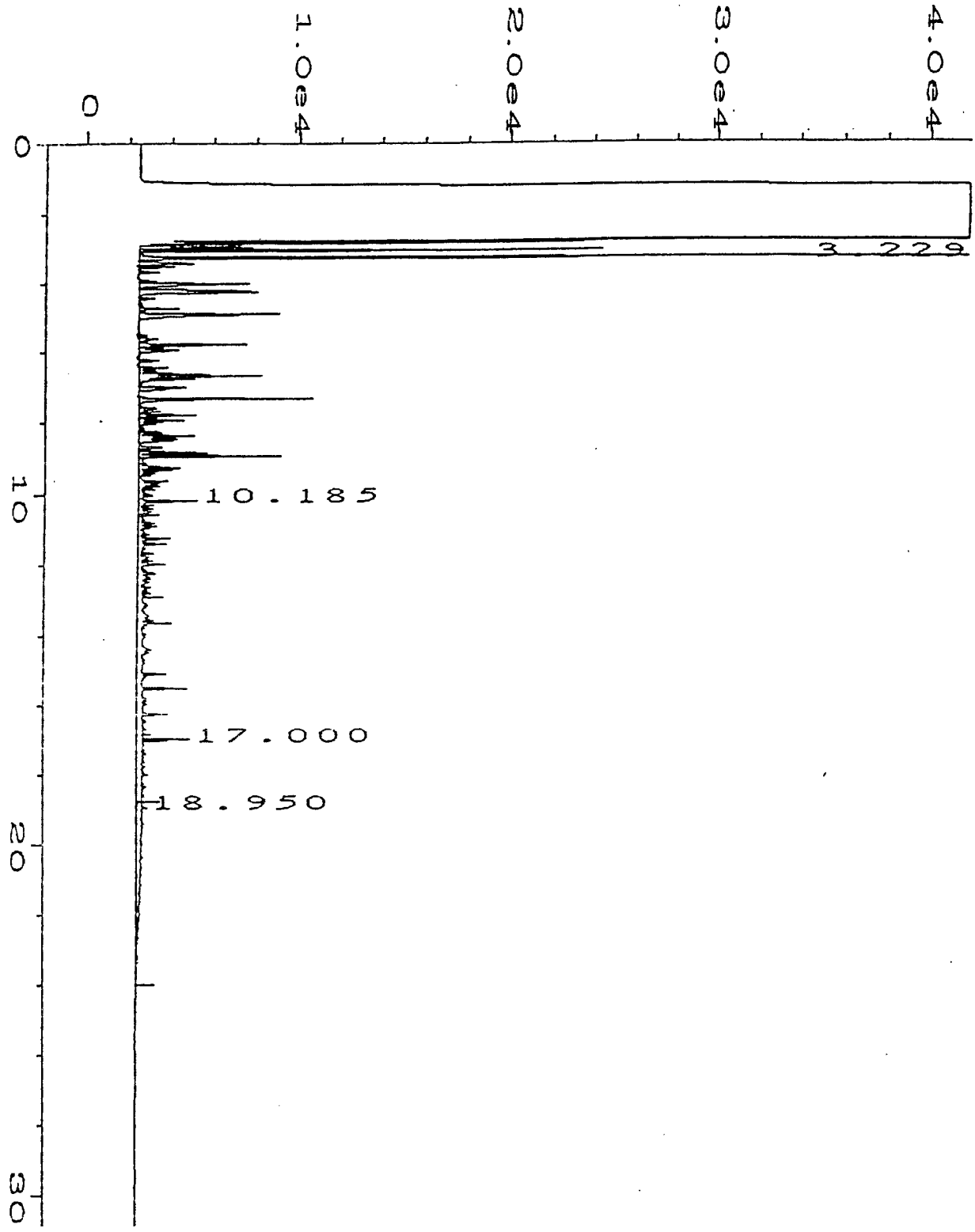
Data File Name : C:\HPCHEM\2\DATA\09JUL99\006R0101.D
Operator : Pinnacle - rg & cff
Instrument : FID1
Sample Name : 907004-05*50
Run Time Bar Code:
Acquired on : 09 Jul 99 04:08 PM
Report Created on: 12 Jul 99 09:01 AM
Last Recalib on : 11 JAN 93 08:58 AM
Multiplier : 1

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 1
Instrument Method: HX03169S.MTH
Analysis Method : HX03169S.MTH
Sample Amount : 0
ISTD Amount :



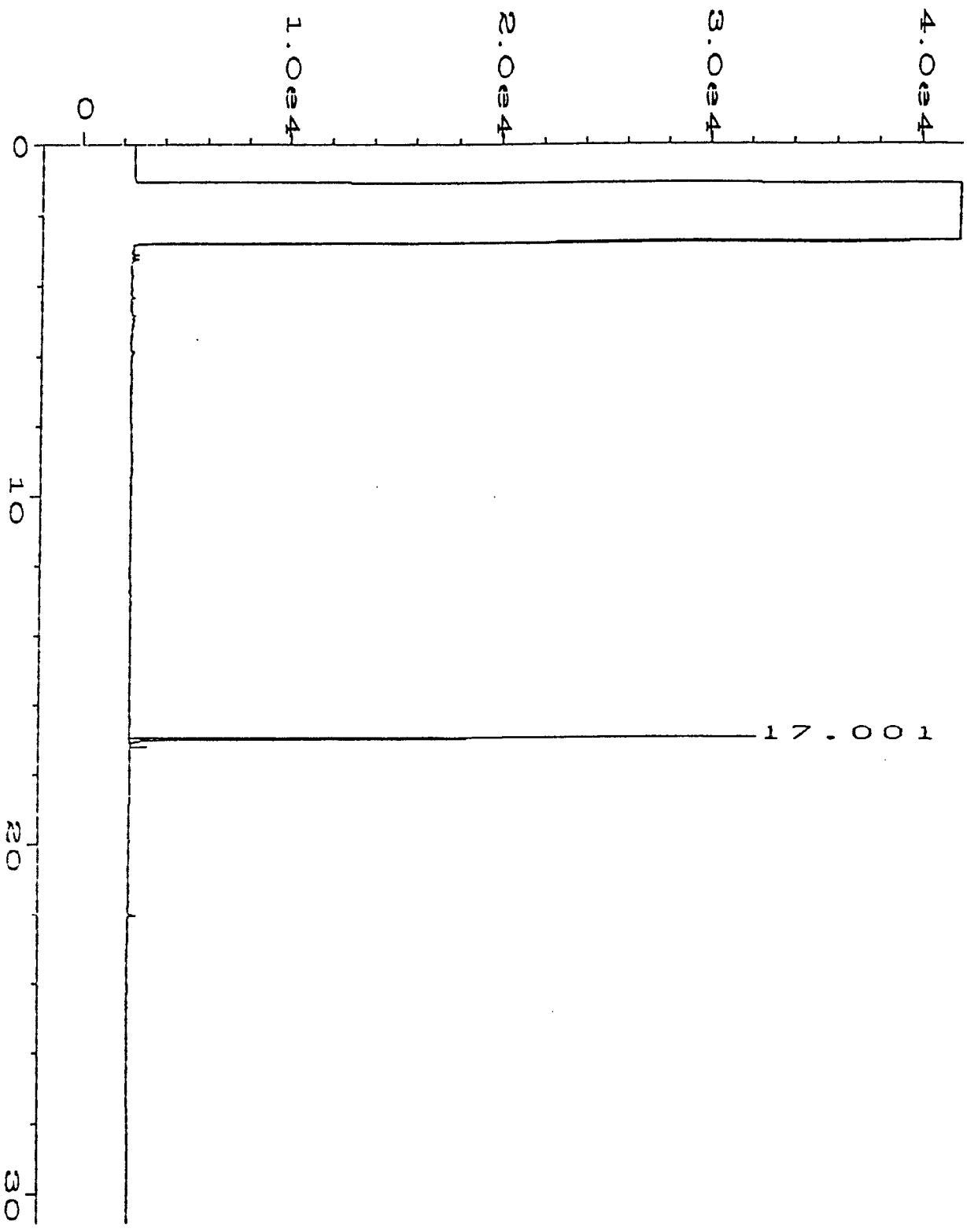
Data File Name : C:\HPCHEM\2\DATA\07JUL99\020R0101.D
Operator : Pinnacle - rg & cff
Instrument : FID1
Sample Name : 907004-06
Run Time Bar Code:
Acquired on : 08 Jul 99 00:25 AM
Report Created on: 08 Jul 99 01:42 PM
Last Recalib on : 11 JAN 93 08:58 AM
Multiplier : 1

Page Number : 1
Vial Number : 20
Injection Number : 1
Sequence Line : 1
Instrument Method: HX03169S.MTH
Analysis Method : HX031699.MTH
Sample Amount : 0
ISTD Amount :

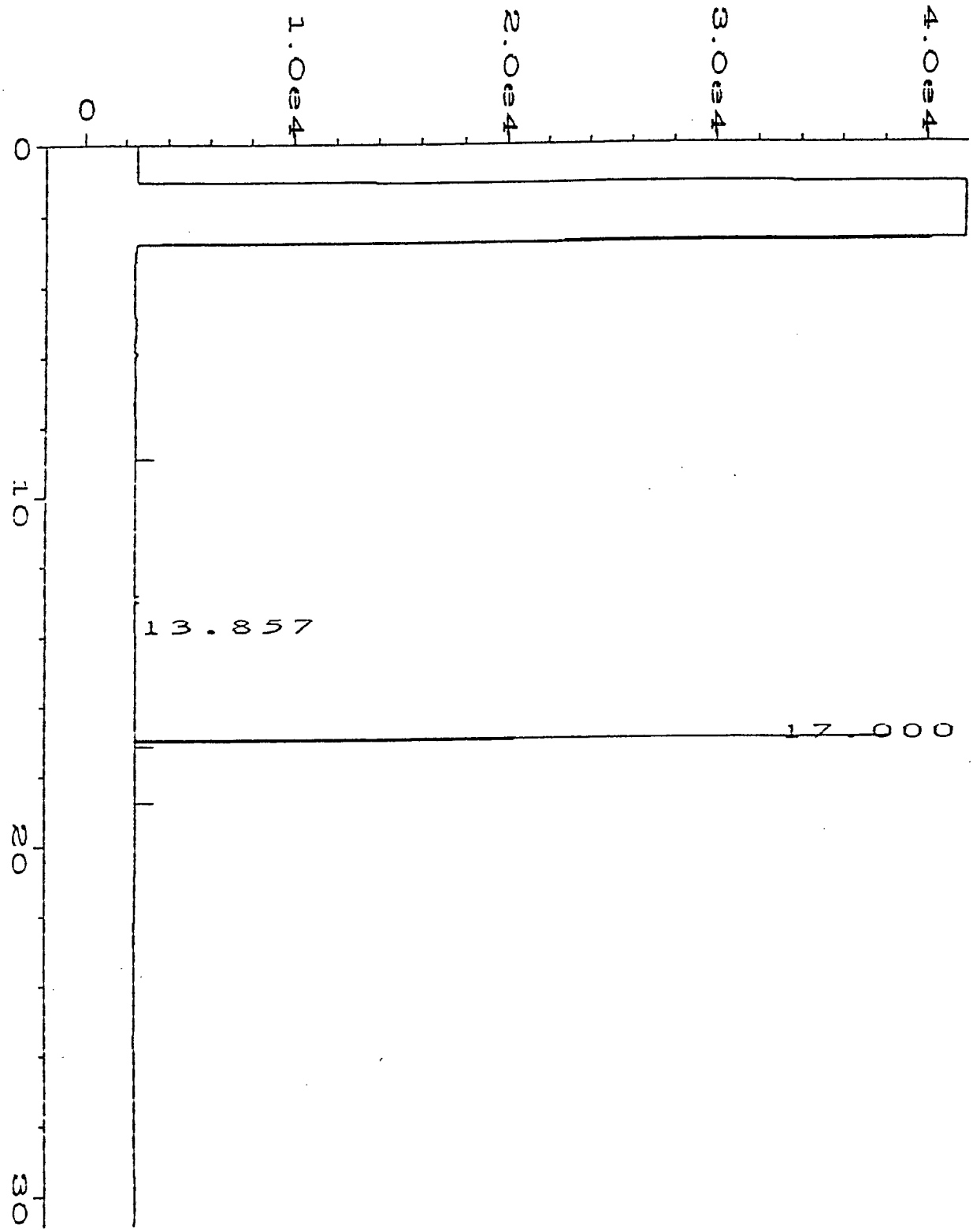


ata File Name : C:\HPCHEM\2\DATA\09JUL99\008R0101.D
Operator : Pinnacle - rg & cff
nstrument : FID1
ample Name : 907004-07*10
Run Time Bar Code: cff
Acquired on : 09 Jul 99 05:49 PM
eport Created on: 12 Jul 99 08:59 AM
ast Recalib on : 11 JAN 93 08:58 AM
Multiplier : 1

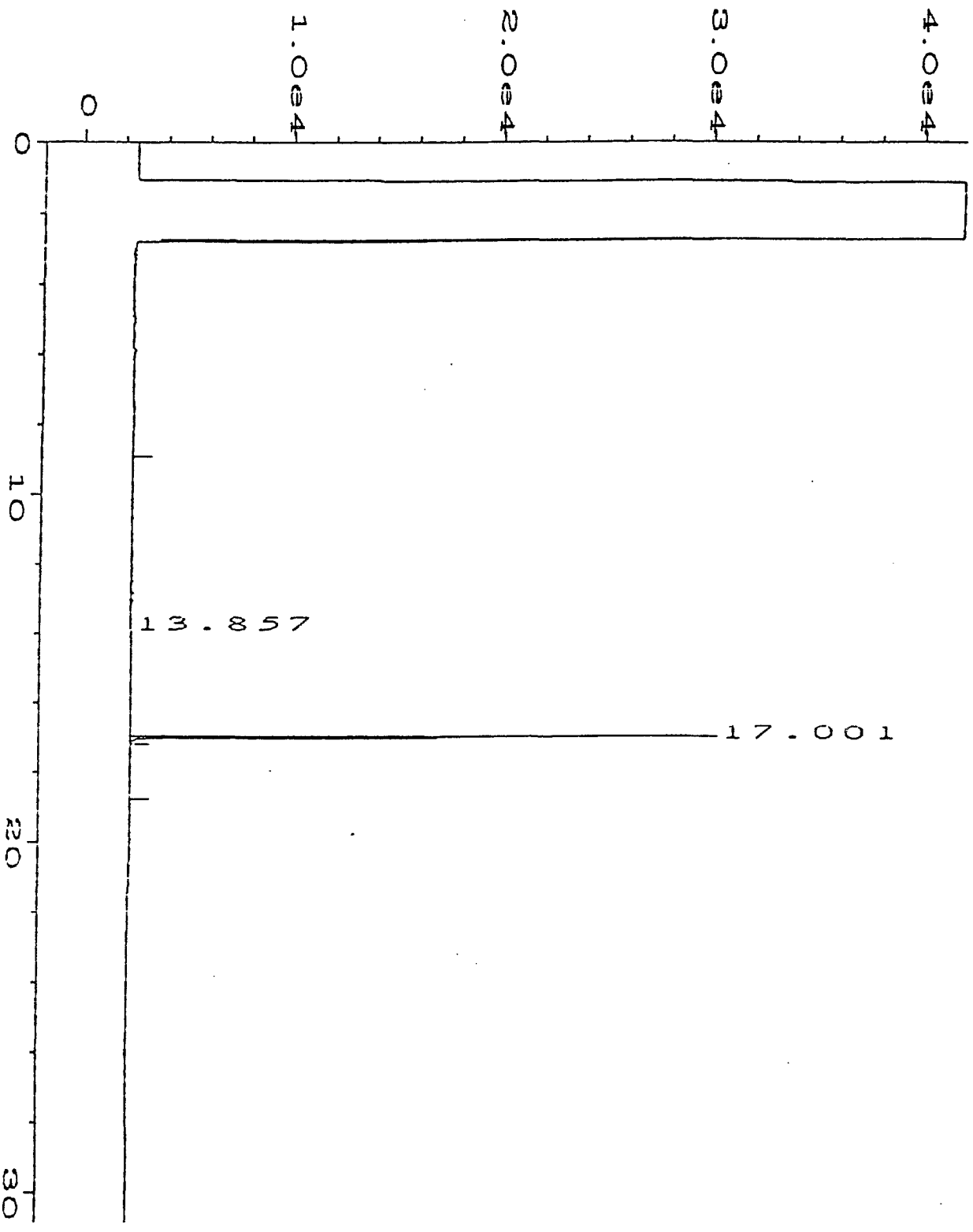
Page Number : 1
Vial Number : 8
Injection Number : 1
Sequence Line : 1
Instrument Method: HX03169S.MTH
Analysis Method : HX03169S.MTH
Sample Amount : 0
ISTD Amount :



ata File Name	: C:\HPCHEM\2\DATA\07JUL99\021R0101.D		
Operator	: Pinnacle - rg & cff	Page Number	: 1
Instrument	: FID1	Vial Number	: 21
mple Name	: 907004-08	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 08 Jul 99 01:14 AM	Instrument Method	: HX03169S.MTH
eport Created on	: 08 Jul 99 01:43 PM	Analysis Method	: HX031699.MTH
Last Recalib on	: 11 JAN 93 08:58 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

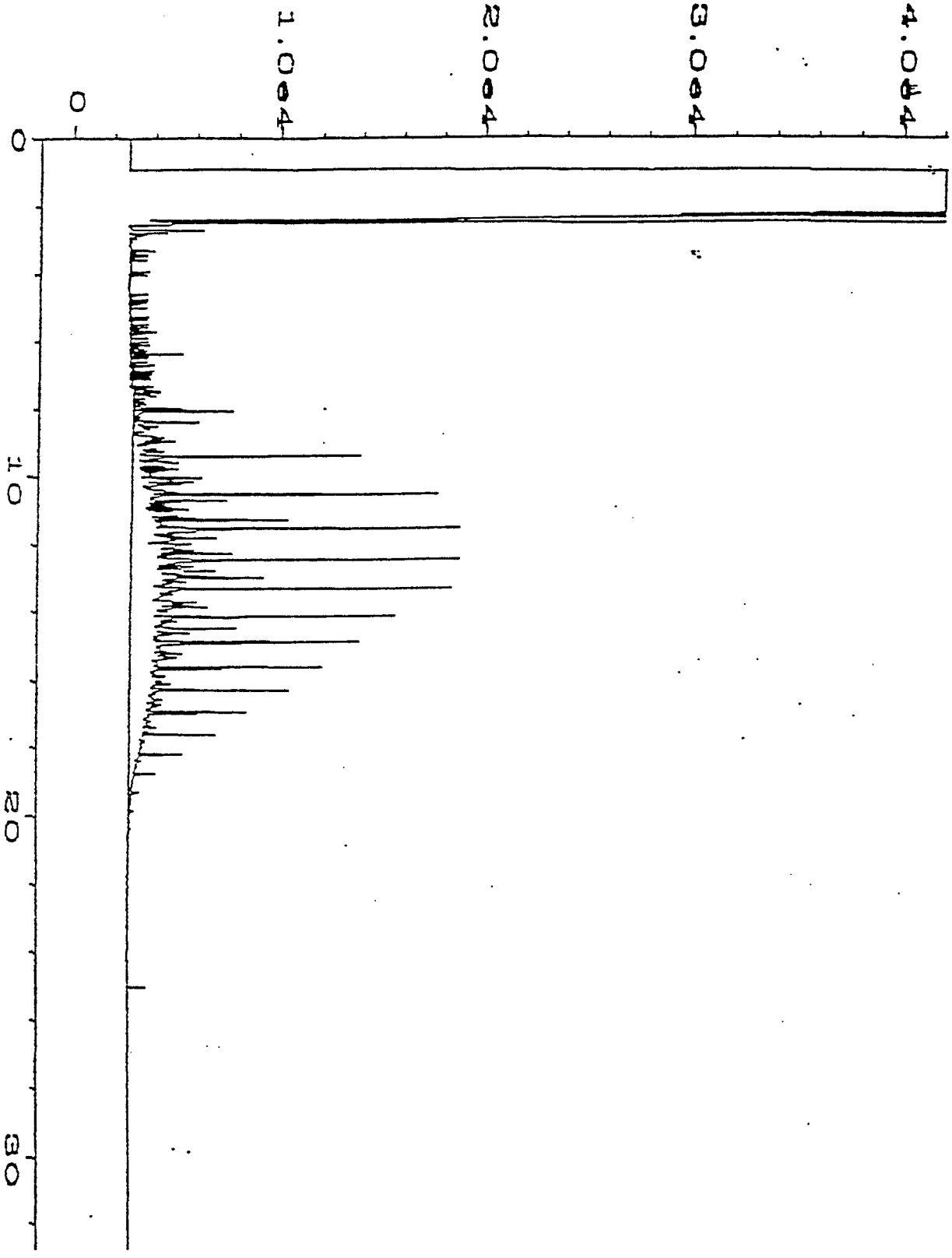


Data File Name	: C:\HPCHEM\2\DATA\07JUL99\022R0101.D		
Operator	: Pinnacle - rg & cff	Page Number	: 1
Instrument	: FID1	Vial Number	: 22
Sample Name	: 907004-10	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 08 Jul 99 02:04 AM	Instrument Method	: HX03169S.MTH
Report Created on	: 08 Jul 99 01:44 PM	Analysis Method	: HX031699.MTH
Last Recalib on	: 11 JAN 93 08:58 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:



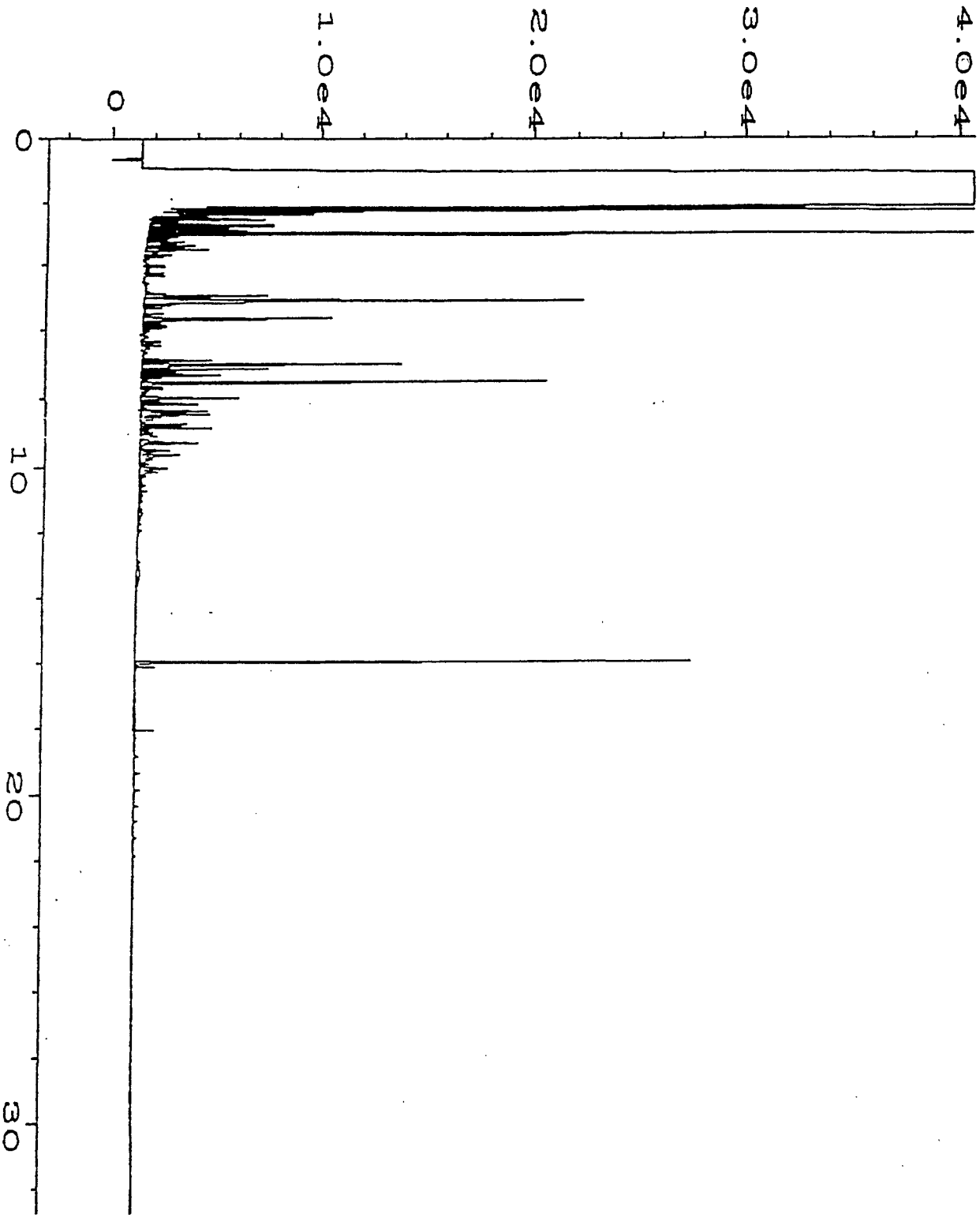
Data File Name : C:\HPCHEM\2\DATA\07JUL99\023R0101.D
Operator : Pinnacle - rg & cff
Instrument : FID1
Sample Name : 907004-12
Run Time Bar Code:
Acquired on : 08 Jul 99 02:53 AM
Report Created on: 08 Jul 99 01:45 PM
Last Recalib on : 11 JAN 93 08:58 AM
Multiplier : 1

Page Number : 1
Vial Number : 23
Injection Number : 1
Sequence Line : 1
Instrument Method: HX03169S.MTH
Analysis Method : HX031699.MTH
Sample Amount : 0
ISTD Amount :



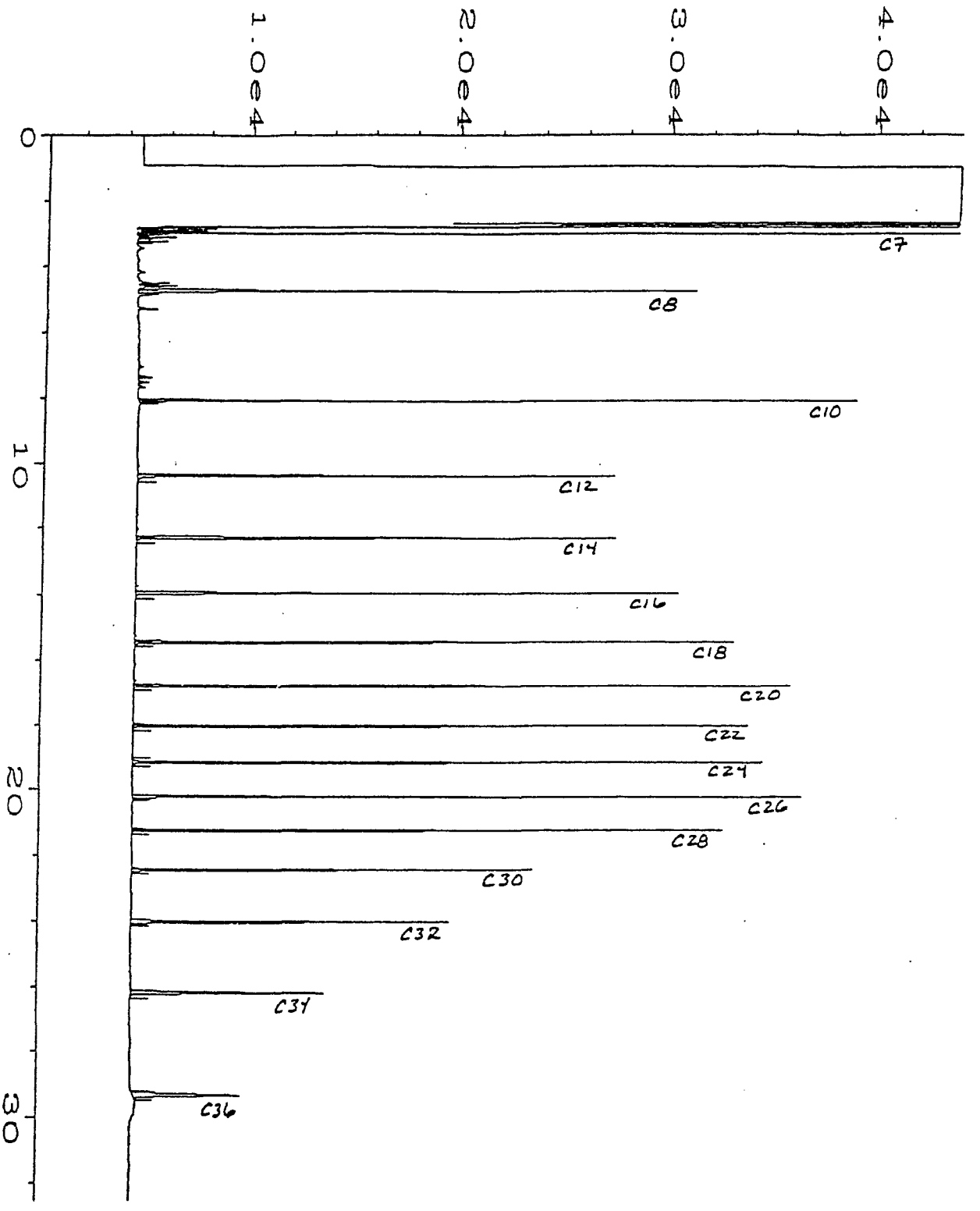
Data File Name : C:\HPCHEM\1\DATA\16SEPT97\011F0101.D
Operator : AEN NM GC #1 FID DI
Instrument : INSTRUMEN
Sample Name : DSL GC3-103-15
Run Time Bar Code:
Acquired on : 16 Sep 97 08:50 PM

Page Number : 1
Vial Number : 11
Injection Number : 1
Sequence Line : 1
Instrument Method: SDF0820.MTH
Analysis Method : SDF0820.MTH



File Name : C:\HPCHEM\2\DATA\12FEB99\002F0101.D
rator : Pinnacle - mb & cff
trument : FID1
le Name : gas gc3-141-23
Time Bar Code:
uired on : 12 Feb 99 10:38 AM
rt Created on: 12 Feb 99 11:45 AM

Page Number : 1
Vial Number : 2
Injection Number : 1
Sequence Line : 1
Instrument Method: RT061698.MTH
Analysis Method : RT061698.MTH

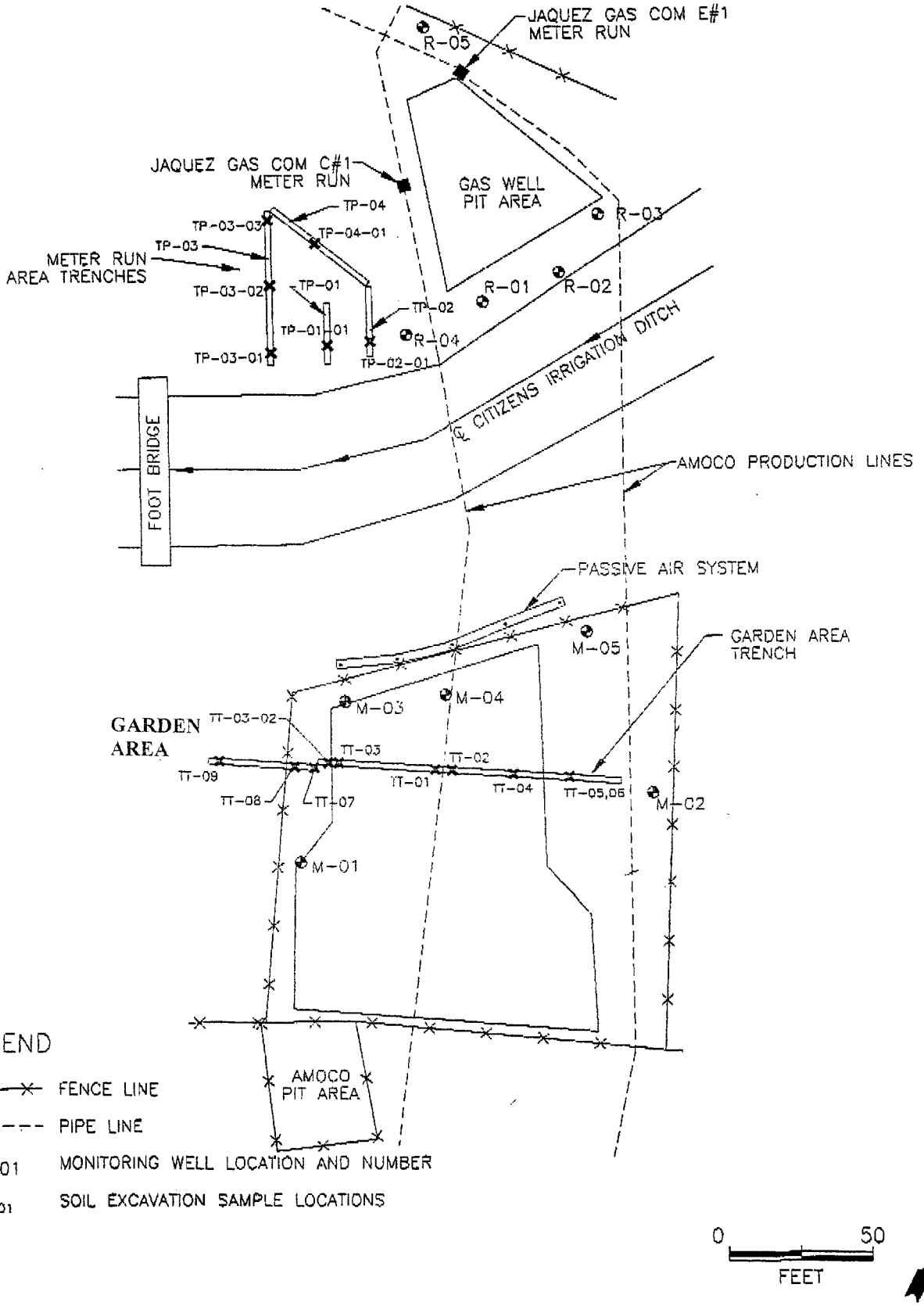


user modified

ata File Name : B:\11APR96\004F0101.D
perator : DJ
strument : GC#1 5890
ple Name : RET TIME STAND
Time Bar Code:
quired on : 11 Apr 96 10:17 AM
port Created on: 03 Dec 98 02:11 PM

Page Number : 1
Vial Number : 4
Injection Number : 1
Sequence Line : 1
Instrument Method: SDF0311.MTH
Analysis Method : RT061698.MTH

NOVEMBER 24, 1999 SOIL INVESTIGATION LABORATORY RESULTS



PHILIP SERVICES CORP	TITLE: RECENT SOIL INVESTIGATION/ SOIL SAMPLE LOCATIONS	DWN: TMM / DES.: CI; CHKD: SP / APPD:; DATE: 1/11/00 / REV.: 2	PROJECT NO.: 17444 EL PASO FIELD SERVICE COMPANY; FIGURE 1

CO/. 17448-006

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

PROJECT NUMBER: # 24324

PROJECT NAME: Pit Closure Project

SAMPLERS: (Signature) [signature]

DATE: 11/24/99

CONTRACT LABORATORY P. O. NUMBER:

REQUESTED ANALYSIS: TPH 8015 (~~EPA 418.1~~); BTEX EPA 8020; LAB PID

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH 8015 (~~EPA 418.1~~)	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
990461	11/24/99	12:50	Soil	TT-01	1		✓	✓					Feild PID 0.3 ppm
990462	11/24/99	13:15	Soil	TT-02	1		✓	✓					PID
990463	11/24/99	13:25	Soil	TT-03	1		✓	✓					PID 423 ppm / 3.5' Deep 35' W. of Pipe
990464	11/24/99	13:45	Soil	TT-04	1		✓	✓					PID / 2.4' Deep 30' E. of Pipe 31.5' W. of Trench
990465	11/24/99	14:00	Soil	TT-05	1		✓	✓					PID 0.4 ppm / 3' Deep 48' E. of Pipe 13.4 W. of Trench
990466	11/24/99	14:10	Soil	TT-06	1		✓	✓					PID 0.1 ppm / 1' Deep 48' E. of Pipe 13.4 W. of Trench end

↑ Added by J. Farley 12/6/99

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
[signature]	11/24 1600	Refrigerator	Refrigerator	11-29-99 0952	Dennis Bird

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)
				11-29-99 1010	[signature]

REQUESTED TURNAROUND TIME: ☑ ROUTINE ☐ RUSH

SAMPLE RECEIPT REMARKS: Cool & Intact

CARRIER CO.

BILL NO.:

CHARGE CODE

RESULTS & INVOICES TO:

FIELD SERVICES LABORATORY
EL PASO NATURAL GAS COMPANY
P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499
505-599-2144 FAX: 505-599-2261

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **911084**
December 03, 1999

EL PASO FIELD SERVICES
770 WEST NAVAJO
FARMINGTON, NM 87401

Project Name JACQUEZ CF
Project Number (none)

Attention: JOHN LAMBDIN

On 11/30/99 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592 pending), received a request to analyze **non-aq** 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.

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

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

ON 12/6/99 a request was made to re-analyze 990463 for M8015.
J. Fowler 12/7/99

Reviewed & Accepted
J Fowler 12/7/99

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: EL PASO FIELD SERVICES	PINNACLE ID	: 911084
PROJECT #	: (none)	DATE RECEIVED	: 11/30/99
PROJECT NAME	: JACQUEZ CF	REPORT DATE	: 12/3/99

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	990461 - TT-01	NON-AQ	11/24/99
02	990462 - TT-02	NON-AQ	11/24/99
03	990463 - TT-03	NON-AQ	11/24/99
04	990464 - TT-04	NON-AQ	11/24/99
05	990465 - TT-05	NON-AQ	11/24/99
06	990466 - TT-06	NON-AQ	11/24/99

Field ID's

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

PINNACLE I.D.: 911084

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	990461	NON-AQ	11/24/99	11/30/99	11/30/99	1
02	990462	NON-AQ	11/24/99	11/30/99	11/30/99	1
03	990463	NON-AQ	11/24/99	11/30/99	11/30/99	1

PARAMETER	DET. LIMIT	UNITS	990461	990462	990463
BENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOTAL XYLENES	0.025	MG/KG	< 0.025	< 0.025	< 0.025
SURROGATE:					
BROMOFLUOROBENZENE (%)			92	93	88
SURROGATE LIMITS	(65 - 120)				
	FIELD ID ——>		TT-01	TT-02	TT-03

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : EL PASO FIELD SERVICES PINNACLE I.D.: 911084
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	990464	NON-AQ	11/24/99	11/30/99	11/30/99	1
05	990465	NON-AQ	11/24/99	11/30/99	12/1/99	1
06	990466	NON-AQ	11/24/99	11/30/99	12/1/99	1

PARAMETER	DET. LIMIT	UNITS	990464	990465	990466
BENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOTAL XYLENES	0.025	MG/KG	< 0.025	< 0.025	< 0.025
SURROGATE:					
BROMOFLUOROBENZENE (%)			99	88	88
SURROGATE LIMITS	(65 - 120)				
	FIELD ID →		TT-04	TT-05	TT-06

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 911084
BLANK I. D.	: 113099	DATE EXTRACTED	: 11/30/99
CLIENT	: EL PASO FIELD SERVICES	DATE ANALYZED	: 11/30/99
PROJECT #	: (none)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: JACQUEZ CF		

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.025
SURROGATE:		
BROMOFLUOROBENZENE (%)		98
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED		
MSMSD #	: 911084-05	PINNACLE I.D.	: 911084
CLIENT	: EL PASO FIELD SERVICES	DATE EXRACTED	: 11/30/99
PROJECT #	: (none)	DATE ANALYZED	: 12/1/99
PROJECT NAME	: JACQUEZ CF	SAMPLE MATRIX	: NON-AQ
		UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1	0.81	81	0.83	83	2	(68 - 120)	20
TOLUENE	<0.025	1	0.82	82	0.83	83	1	(64 - 120)	20
ETHYLBENZENE	<0.025	1	0.82	82	0.85	85	4	(49 - 127)	20
TOTAL XYLENES	<0.025	3	2.50	83	2.60	87	4	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES PINNACLE I.D.: 911084
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	990461	NON-AQ	11/24/99	12/1/99	12/2/99	1
02	990462	NON-AQ	11/24/99	12/1/99	12/1/99	1
03	990463	NON-AQ	11/24/99	12/1/99	12/1/99	1

PARAMETER	DET. LIMIT	UNITS	990461	990462	990463
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	< 5.0	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0	< 5.0	< 5.0
CALCULATED SUM:					
SURROGATE:					
O-TERPHENYL (%)			116	112	112
SURROGATE LIMITS	(66 - 151)				

Field ID's —> TT-01 TT-02 TT-03

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES PINNACLE I.D.: 911084
PROJECT # : (none)
PROJECT NAME : JACQUEZ CF

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	990464	NON-AQ	11/24/99	12/1/99	12/1/99	1
05	990465	NON-AQ	11/24/99	12/1/99	12/1/99	1
06	990466	NON-AQ	11/24/99	12/1/99	12/1/99	1

PARAMETER	DET. LIMIT	UNITS	990464	990465	990466
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	< 5.0	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0	< 5.0	< 5.0
CALCULATED SUM:					
SURROGATE:					
O-TERPHENYL (%)			111	91	88
SURROGATE LIMITS	(66 - 151)				

Field ID's → TT-04 TT-05 TT-06

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)		
BLANK I.D.	: 120199	PINNACLE I.D.	: 911084
CLIENT	: EL PASO FIELD SERVICES	DATE EXTRACTED	: 12/1/99
PROJECT #	: (none)	DATE ANALYZED	: 12/1/99
PROJECT NAME	: JACQUEZ CF	SAMPLE MATRIX	: NON-AQ

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 5.0
FUEL HYDROCARBONS, C22-C36	MG/KG	< 5.0
SURROGATE:		
O-TERPHENYL (%)		101
SURROGATE LIMITS	(80 - 151)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)		
MSMSD #	: 911084-06	PINNACLE I.D.	: 911084
CLIENT	: EL PASO FIELD SERVICES	DATE EXTRACTED	: 12/1/99
PROJECT #	: (none)	DATE ANALYZED	: 12/1/99
PROJECT NAME	: JACQUEZ CF	SAMPLE MATRIX	: NON-AQ
		UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<5.0	200	207	104	203	102	2	(56 - 148)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 11/29/99 PAGE: 1 OF 1

PLI Accession #: 991084

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: John Lambdin

COMPANY: El Paso Field Services
ADDRESS: 770 West NAVAJO
FARMINGTON, NM 87401
PHONE: (505) 599-2144
FAX: (505) 599-2261
BILL TO: (same as above)
COMPANY:
ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
990461	11/24/99	1250	Soil	01		X			X																					2
990462	"	1315	"	02		X			X																					2
990463	"	1325	"	03		X			X																					2
990464	"	1345	"	04		X			X																					2
990465	"	1400	"	05		X			X																					2
990466	11/24/99	1410	Soil	06		X			X																					2

ANALYSIS REQUEST

PROJECT INFORMATION	
PROJ. NO.:	NA
PROJ. NAME:	JACQUEZ CF
P.O. NO.:	NA
SHIPPED VIA:	Fed-X

SAMPLE RECEIPT	
NO. CONTAINERS	6
CUSTODY SEALS	Y / N / (NA)
RECEIVED INTACT	Yes
BLUE ICE	3°

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

RELINQUISHED BY: 1	RELINQUISHED BY: 2
Signature: John Lambdin Time: 1345	Signature: Time:
Printed Name: John Lambdin Date: 11/29/99	Printed Name: Date:
Company: El Paso Field Services (See reverse side for Force Majeure)	Company:
RECEIVED BY: 1	**RECEIVED BY: (LAB) 2**
Signature: Time:	Signature: Time: 0915
Printed Name: Date:	Printed Name: Francine Tonvio Date: 11/30/99
Company:	Pinnacle Laboratories Inc.

Quantitation Report

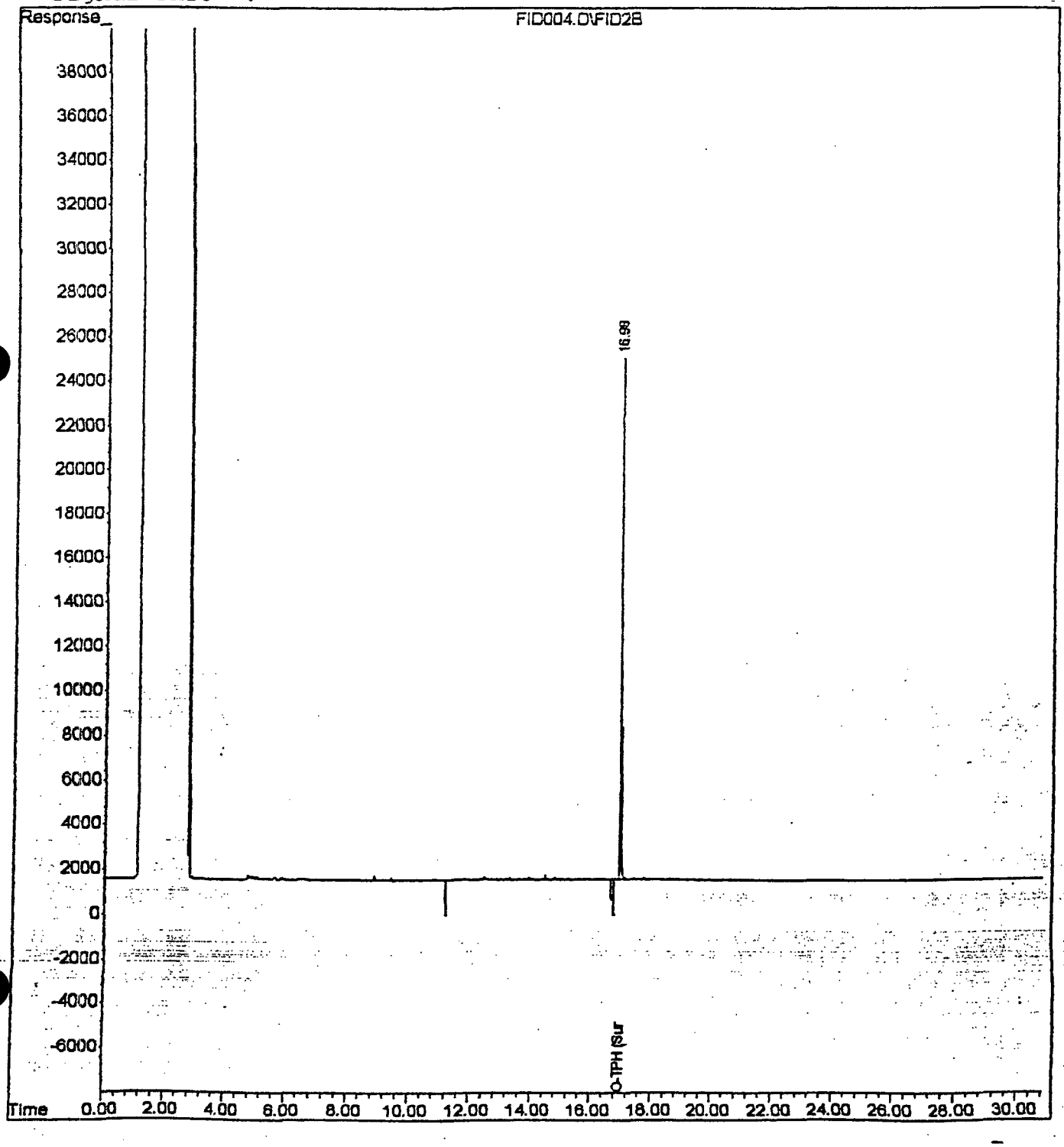
Data File : C:\HPCHEM\2\DATA\120299\FID004.D
Acq On : 2 Dec 1999 13:01
Sample : 911084-01
Misc :
IntFile : EVENTS.E

Vial: 4
Operator: CFF/DHH
Inst : FID-1
Multiplr: 1.00

Quant Time: Dec 2 13:35 1999 Quant Results File: NM102799.RES

Quant Method : C:\HPCHEM\2\METHODS\NM102799.M (Chemstation Integrator)
Title : NM 8015
Last Update : Wed Nov 10 11:29:39 1999
Response via : Multiple Level Calibration
DataAcq Meth : NM102799.M

Volume Inj. : 2ul
Signal Phase :
Signal Info :



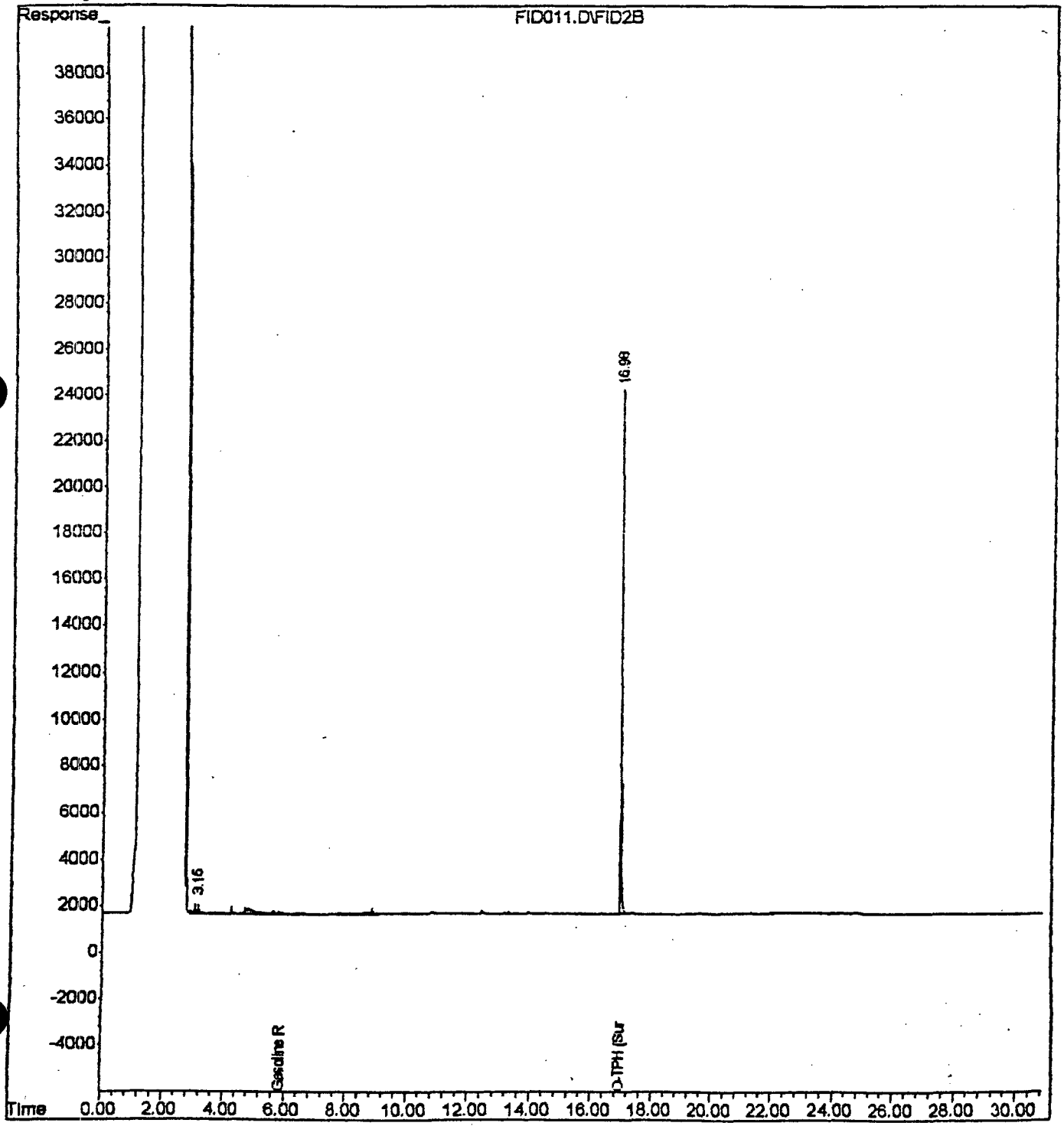
Data File : C:\HPCHEM\2\DATA\120199\FID011.D
Acq On : 1 Dec 1999 16:38
Sample : 911084-02
Misc :
IntFile : EVENTS.E

Vial: 11
Operator: CFF
Inst : FID-1
Multiplr: 1.00

Quant Time: Dec 2 8:45 1999 Quant Results File: NM102799.RES

Quant Method : C:\HPCHEM\2\METHODS\NM102799.M (Chemstation Integrator)
Title : NM 8015
Last Update : Wed Nov 10 11:29:39 1999
Response via : Multiple Level Calibration
DataAcq Meth : NM102799.M

Volume Inj. : 2ul
Signal Phase :
Signal Info :



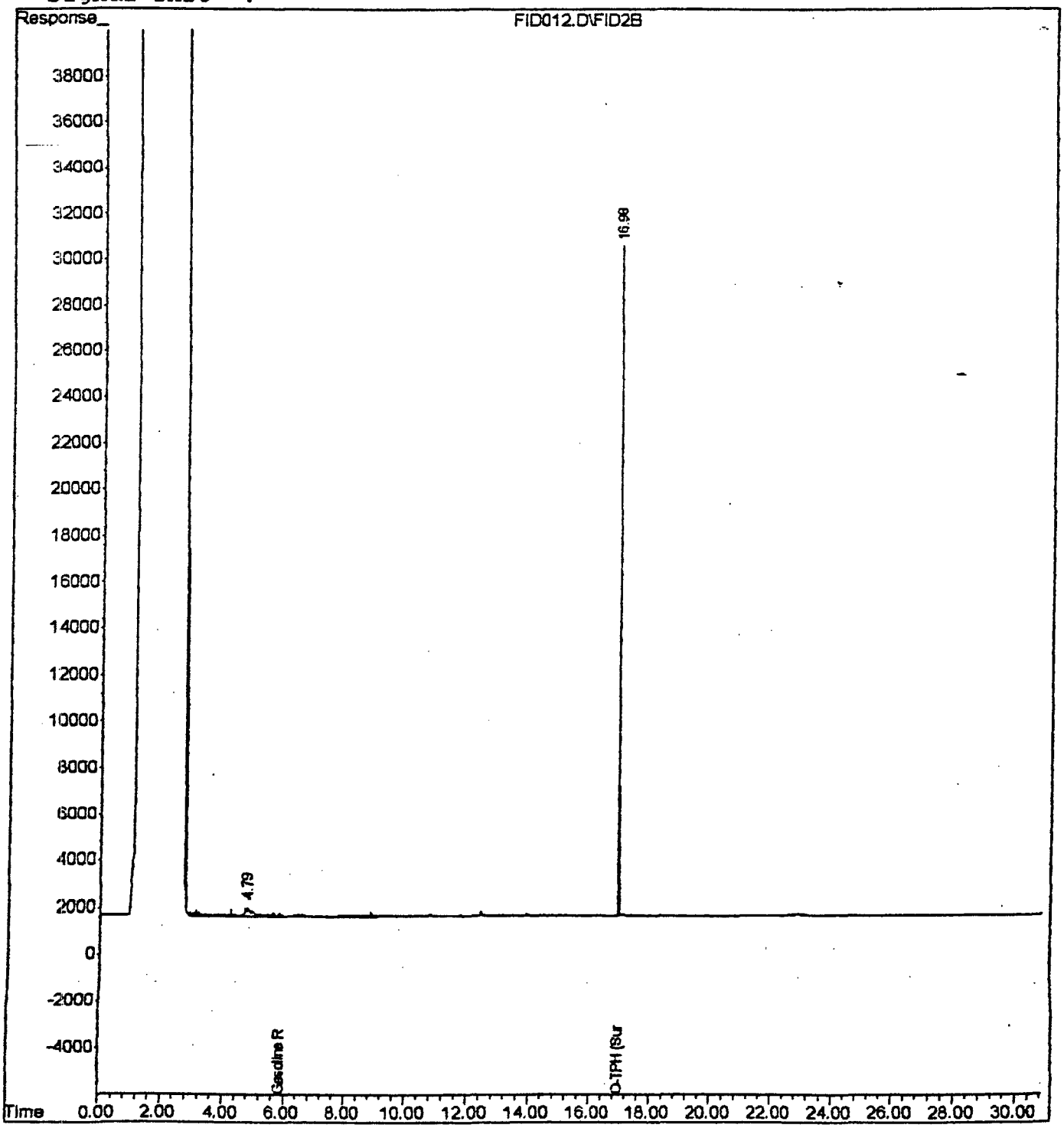
Data File : C:\HPCHEM\2\DATA\120199\FID012.D
Acq On : 1 Dec 1999 17:27
Sample : 911084-03
Misc :
IntFile : EVENTS.E

Vial: 12
Operator: CFF
Inst : FID-1
Multiplr: 1.00

Quant Time: Dec 2 8:46 1999 Quant Results File: NM102799.RES

Quant Method : C:\HPCHEM\2\METHODS\NM102799.M (Chemstation Integrator)
Title : NM 8015
Last Update : Wed Nov 10 11:29:39 1999
Response via : Multiple Level Calibration
DataAcq Meth : NM102799.M

Volume Inj. : 2ul
Signal Phase :
Signal Info :



Quantitation Report

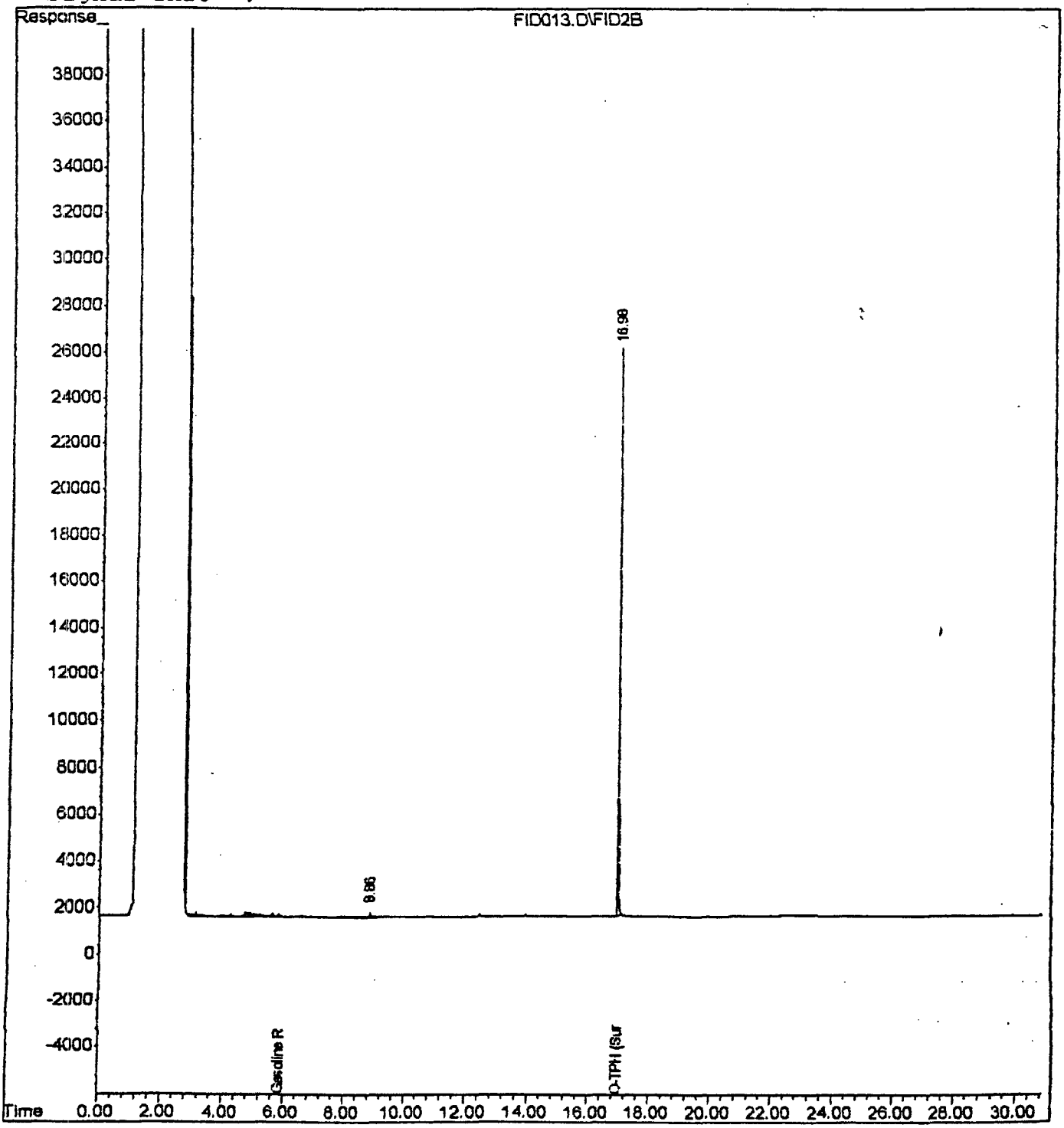
Data File : C:\HPCHEM\2\DATA\120199\FID013.D
Acq On : 1 Dec 1999 18:15
Sample : 911084-04
Misc :
IntFile : EVENTS.E

Vial: 13
Operator: CFF
Inst : FID-1
Multiplr: 1.00

Quant Time: Dec 2 8:47 1999 Quant Results File: NM102799.RES

Quant Method : C:\HPCHEM\2\METHODS\NM102799.M (Chemstation Integrator)
Title : NM 8015
Last Update : Wed Nov 10 11:29:39 1999
Response via : Multiple Level Calibration
DataAcq Meth : NM102799.M

Volume Inj. : 2ul
Signal Phase :
Signal Info :



Quantitation Report

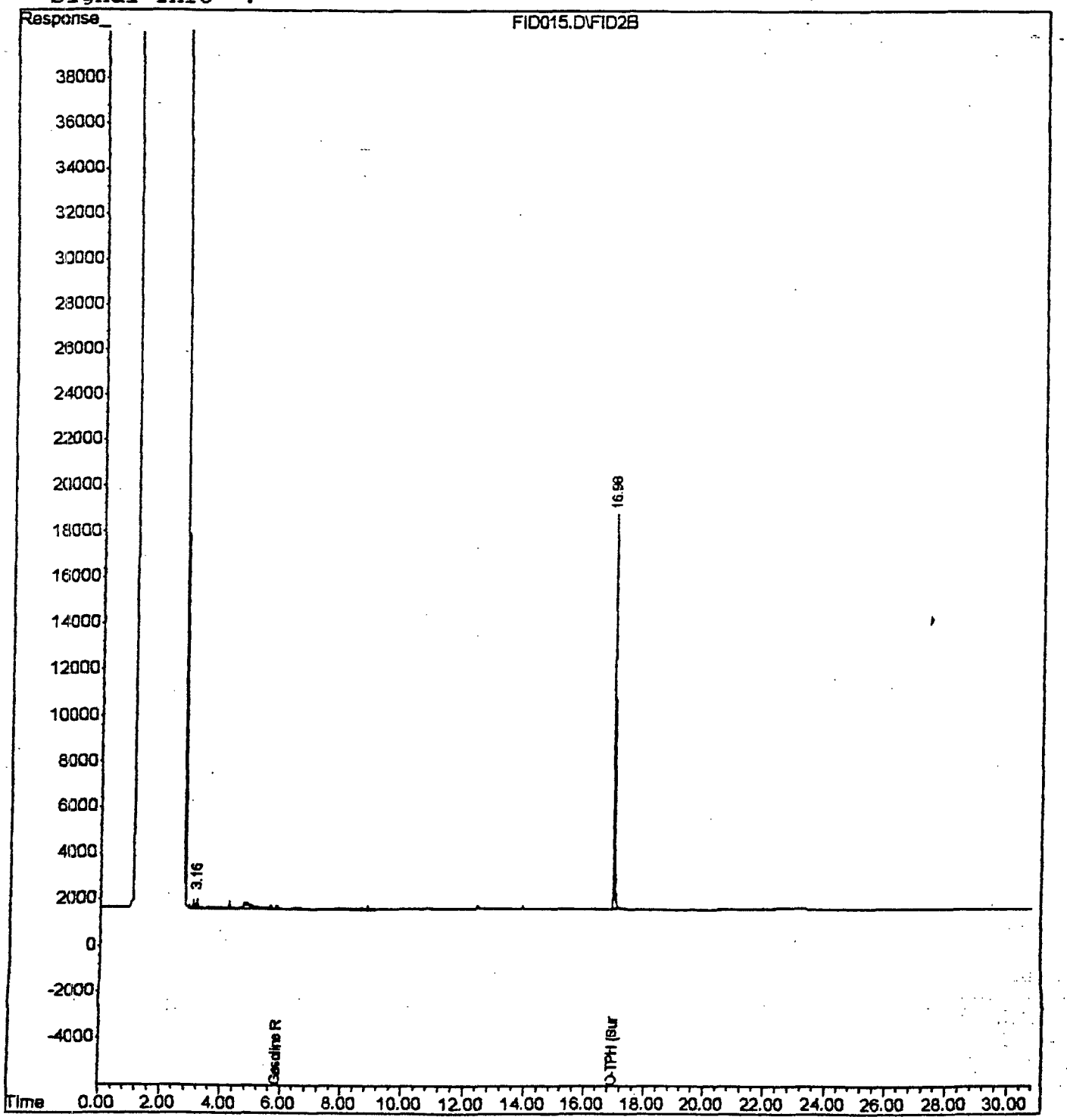
Data File : C:\HPCHEM\2\DATA\120199\FID015.D
Acq On : 1 Dec 1999 19:53
Sample : 911084-05
Misc :
IntFile : EVENTS.E

Vial: 15
Operator: CFF
Inst : FID-1
Multiplr: 1.00

Quant Time: Dec 2 8:49 1999 Quant Results File: NM102799.RES

Quant Method : C:\HPCHEM\2\METHODS\NM102799.M (Chemstation Integrator)
Title : NM 8015
Last Update : Wed Nov 10 11:29:39 1999
Response via : Multiple Level Calibration
DataAcq Meth : NM102799.M

Volume Inj. : 2ul
Signal Phase :
Signal Info :



Quantitation Report

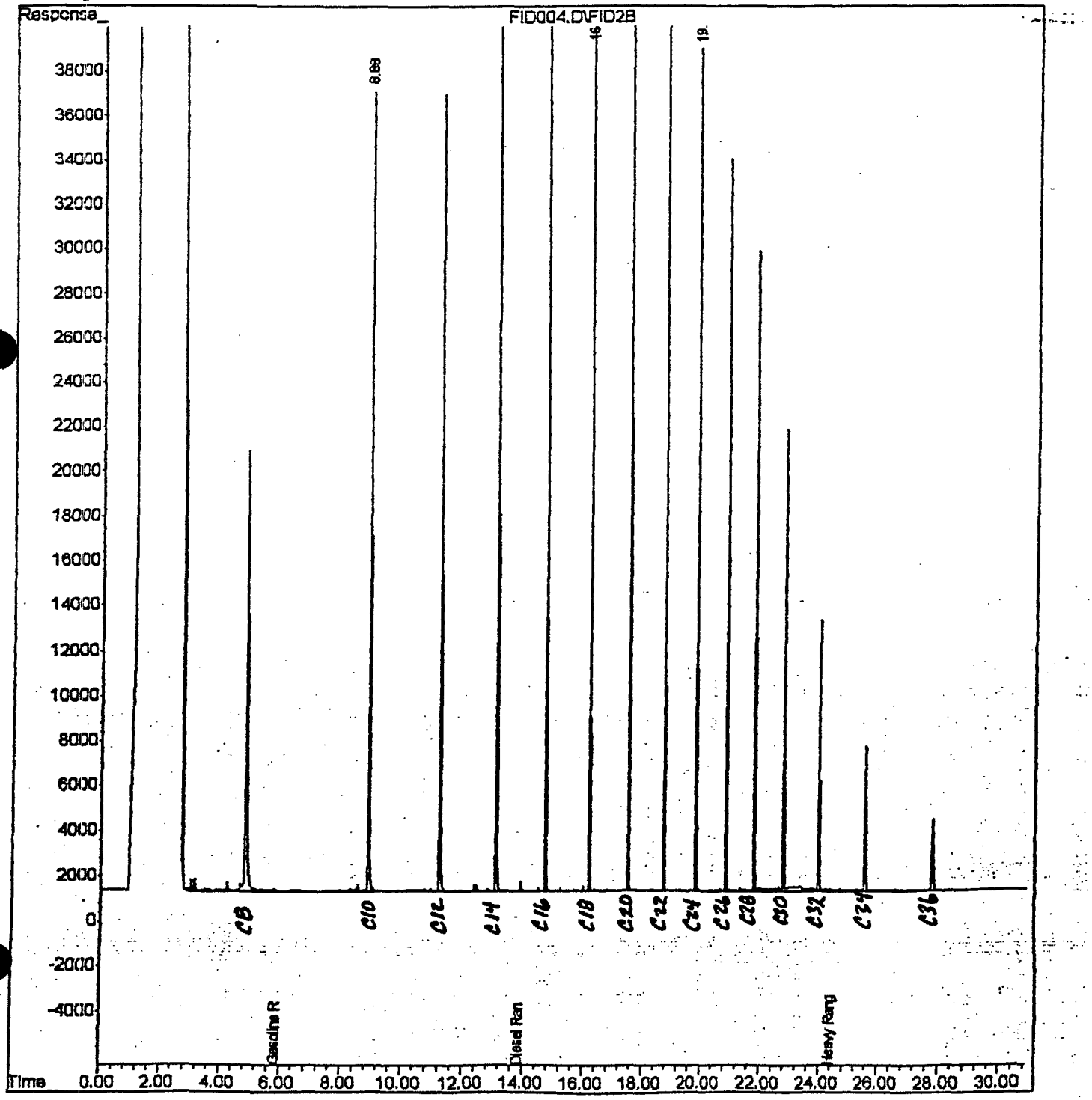
Data File : C:\HPCHEM\2\DATA\110899\FID004.D
Acq On : 8 Nov 1999 13:29
Sample : rt std gc4-14-06
Misc :
IntFile : EVENTS.E

Vial: 4
Operator: CFF
Inst : FID-1
Multiplr: 1.00

Quant Time: Nov 12 13:54 1999 Quant Results File: NM102799.RES

Quant Method : C:\HPCHEM\2\METHODS\NM102799.M (Chemstation Integrator)
Title : NM 8015
Last Update : Wed Nov 10 11:29:39 1999
Response via : Multiple Level Calibration
DataAcq Meth : NM102799.M

Volume Inj. : 2ul
Signal Phase :
Signal Info :



Quantitation Report

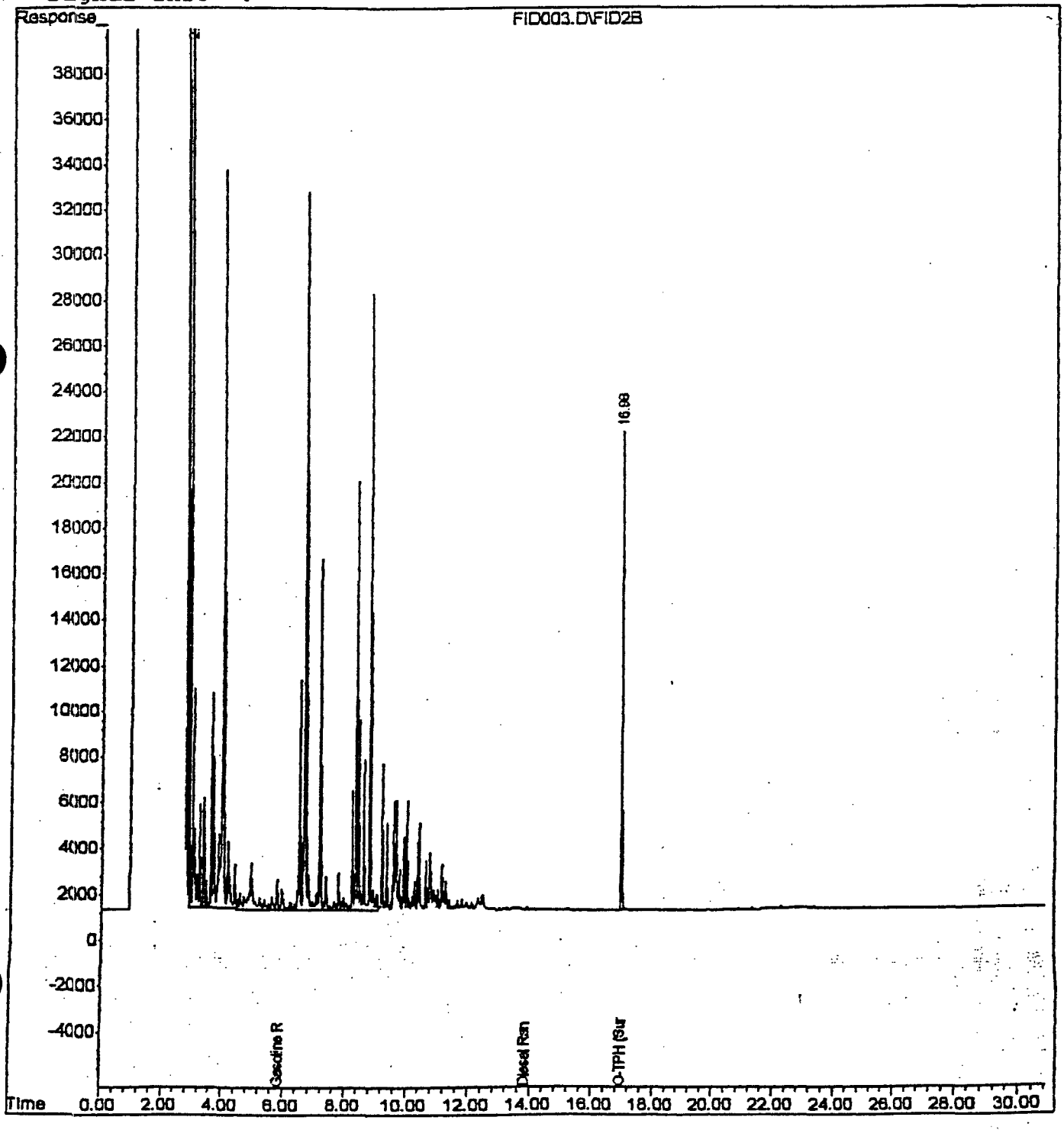
Data File : C:\HPCHEM\2\DATA\111299\FID003.D
Acq On : 12 Nov 1999 11:21
Sample : gasoline
Misc : at 200ug/mL
IntFile : EVENTS.E

Vial: 3
Operator: CFF
Inst : FID-1
Multiplr: 1.00

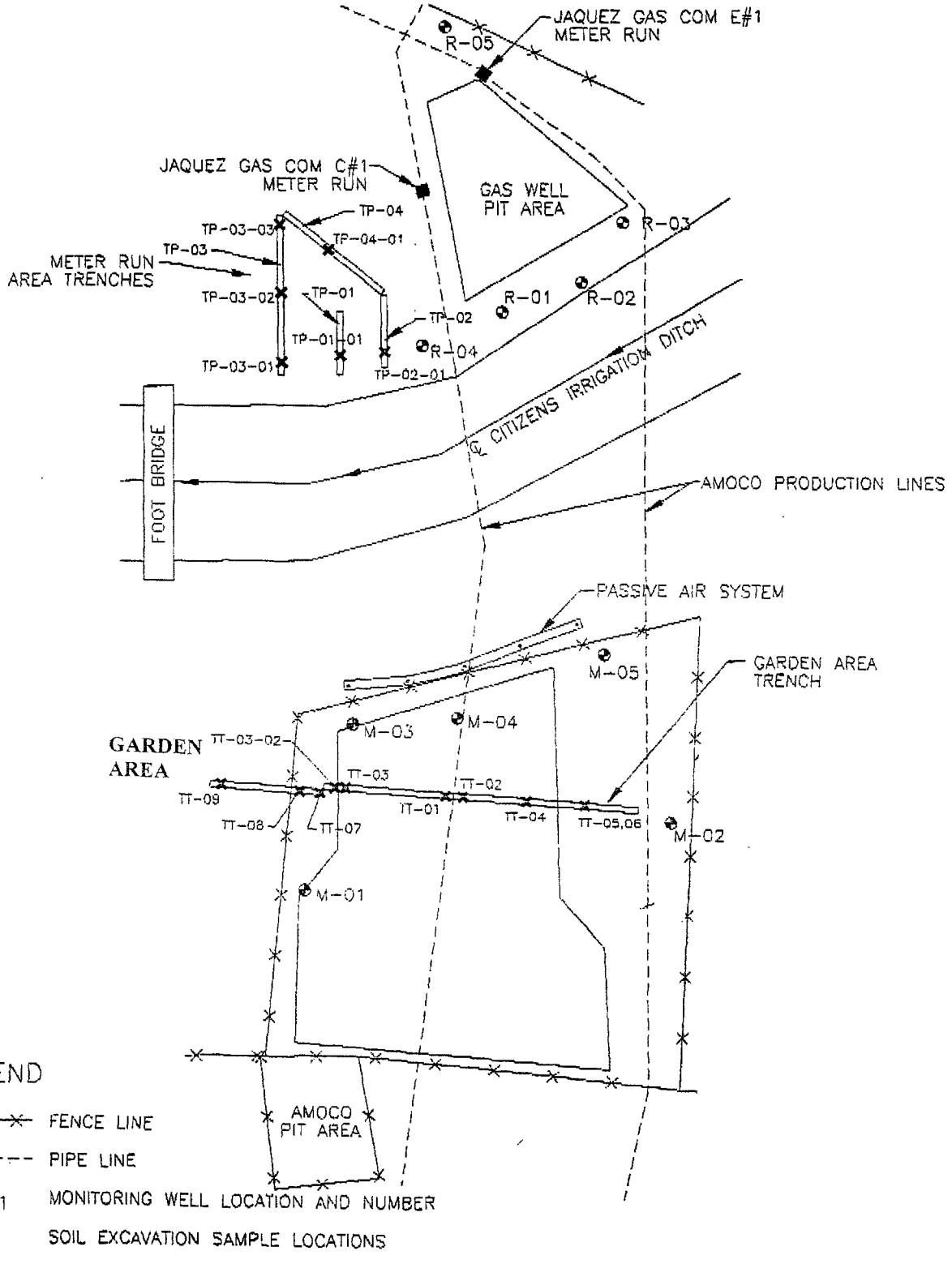
Quant Time: Nov 12 13:07 1999 Quant Results File: NM102799.RES

Quant Method : C:\HPCHEM\2\METHODS\NM102799.M (Chemstation Integrator)
Title : NM 8015
Last Update : Wed Nov 10 11:29:39 1999
Response via : Multiple Level Calibration
DataAcq Meth : NM102799.M

Volume Inj. : 2ul
Signal Phase :
Signal Info :



DECEMBER 22, 1999 SOIL INVESTIGATION LABORATORY RESULTS



PHILIP SERVICES CORP

TITLE:

RECENT SOIL INVESTIGATION/
SOIL SAMPLE LOCATIONS

DWN: TMM	DES.: CI	PROJECT NO.: 17444
CHKD: SP	APPD:	EL PASO FIELD SERVICE COMPANY
DATE: 1/11/00	REV.: 2	FIGURE 1

CO.: 17444B-006

PHILIP ENVIRONMENTAL
4000 Monroe Road
Farmington, NM 87401
(505) 326-2262 Phone
(505) 326-2388 FAX

Chain of Custody Record

COC Serial No. C 2448

Project Name El Paso Jaquez

Project Number Phase . Task

Samplers A. Weirto / M. Stahle

Laboratory Name

Location

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	TPH (8015) DRO	BTEX (8021)	Comments
TP-01	12/22/99	1011	soil	1	✓	✓	912072-01
TP-02	12/22/99	1048	soil	1	✓	✓	-02
TP03	12/22	1235	soil	1	✓	✓	-03
TP03-01	12/22/99	1135	soil	1	✓	✓	-04
TP03-02	12/22/99	1156	soil	1	✓	✓	-05
TP04	12/22/99	1625	soil	1	✓	✓	-06
TT03-02	12/22/99	1435	soil	1	✓	✓	-07
TT-07	12/22/99	1410	soil	1	✓	✓	-08
TT-08	12/22/99	1408	soil	1	✓	✓	-09
TT-09	12/22/99	1518	soil	1	✓	✓	-10

Relinquished by:

Signature	Date	Time
[signature]	12/22/99	

Received By:

Signature	Date	Time
[signature]	12/27/99	15:30

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☐ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

Carrier: Airbill No.

Shipping and Lab Notes:

Forward Results to Cecil Irby w/ Philip.
Please Bill El Paso directly (Atten. Scott Pope)
on ice
Temp = 3.4

PE-176 4/95

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL PINNACLE I.D.: 912072
PROJECT # : (none)
PROJECT NAME : EL PASO JAQUEZ

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	TP-01	NON-AQ	12/22/99	12/28/99	12/28/99	1
02	TP-02	NON-AQ	12/22/99	12/28/99	12/28/99	1
03	TP03	NON-AQ	12/22/99	12/28/99	12/28/99	1

PARAMETER	DET. LIMIT	UNITS	TP-01	TP-02	TP03
BENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOTAL XYLENES	0.025	MG/KG	< 0.025	< 0.025	< 0.025
SURROGATE:					
BROMOFLUOROBENZENE (%)			95	95	95
SURROGATE LIMITS	(65 - 120)				

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL PINNACLE I.D.: 912072
PROJECT # : (none)
PROJECT NAME : EL PASO JAQUEZ

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	TP03-01	NON-AQ	12/22/99	12/28/99	12/28/99	1
05	TP03-02	NON-AQ	12/22/99	12/28/99	12/28/99	1
06	TP04	NON-AQ	12/22/99	12/28/99	12/28/99	1

PARAMETER	DET. LIMIT	UNITS	TP03-01	TP03-02	TP04
BENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOTAL XYLENES	0.025	MG/KG	< 0.025	< 0.025	< 0.025
SURROGATE:					
BROMOFLUOROBENZENE (%)			93	88	92
SURROGATE LIMITS	(65 - 120)				

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL PINNACLE I.D.: 912072
PROJECT # : (none)
PROJECT NAME : EL PASO JAQUEZ

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	TT03-02	NON-AQ	12/22/99	12/28/99	12/28/99	1
08	TT-07	NON-AQ	12/22/99	12/28/99	12/28/99	1
09	TT-08	NON-AQ	12/22/99	12/28/99	12/28/99	1

PARAMETER	DET. LIMIT	UNITS	TT03-02	TT-07	TT-08
BENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOLUENE	0.025	**MG/KG**	**0.45**	< 0.025	< 0.025
ETHYLBENZENE	0.025	**MG/KG**	**0.41**	< 0.025	< 0.025
TOTAL XYLENES	0.025	**MG/KG**	**2.9**	< 0.025	< 0.025
SURROGATE:					
BROMOFLUOROBENZENE (%)			99	90	95
SURROGATE LIMITS	(65 - 120)				

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 912072
PROJECT # : (none)
PROJECT NAME : EL PASO JAQUEZ

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	TT-09	NON-AQ	12/22/99	12/28/99	12/28/99	1

PARAMETER	DET. LIMIT	UNITS	TT-09
BENZENE	0.025	MG/KG	< 0.025
TOLUENE	0.025	MG/KG	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025
TOTAL XYLENES	0.025	MG/KG	< 0.025

SURROGATE:
BROMOFLUOROBENZENE (%) 95
SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : PHILIP ENVIRONMENTAL PINNACLE I.D.: 912072
PROJECT # : (none)
PROJECT NAME : EL PASO JAQUEZ

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	TP-01	NON-AQ	12/22/99	12/28/99	12/29/99	1
02	TP-02	NON-AQ	12/22/99	12/28/99	12/29/99	1
03	TP03	NON-AQ	12/22/99	12/28/99	12/29/99	1

PARAMETER	DET. LIMIT	UNITS	TP-01	TP-02	TP03
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	< 5.0	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0	< 5.0	< 5.0
CALCULATED SUM:					
SURROGATE:					
O-TERPHENYL (%)			103	108	107
SURROGATE LIMITS	(66 - 151)				

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : PHILIP ENVIRONMENTAL PINNACLE I.D.: 912072
PROJECT # : (none)
PROJECT NAME : EL PASO JAQUEZ

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	TP03-01	NON-AQ	12/22/99	12/28/99	12/29/99	1
05	TP03-02	NON-AQ	12/22/99	12/28/99	12/29/99	1
03	TP04	NON-AQ	12/22/99	12/28/99	12/29/99	1

PARAMETER	DET. LIMIT	UNITS	TP03-01	TP03-02	TP04
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	< 5.0	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0	< 5.0	< 5.0
CALCULATED SUM:					
SURROGATE:					
O-TERPHENYL (%)			106	99	103
SURROGATE LIMITS	(66 - 151)				

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : PHILIP ENVIRONMENTAL PINNACLE I.D.: 912072
PROJECT # : (none)
PROJECT NAME : EL PASO JAQUEZ

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	TT03-02	NON-AQ	12/22/99	12/28/99	12/30/99	5
08	TT-07	NON-AQ	12/22/99	12/28/99	12/29/99	1
09	TT-08	NON-AQ	12/22/99	12/28/99	12/29/99	1

PARAMETER	DET. LIMIT	UNITS	TT03-02	TT-07	TT-08
FUEL HYDROCARBONS, C6-C10	10	**MG/KG**	**1000**	< 10	< 10
FUEL HYDROCARBONS, C10-C22	5.0	**MG/KG**	**920**	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	**MG/KG**	**260**	< 5.0	< 5.0
CALCULATED SUM:			**2180**		
SURROGATE:					
O-TERPHENYL (%)			94	108	108
SURROGATE LIMITS	(66 - 151)				

CHEMIST NOTES:

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : PHILIP ENVIRONMENTAL PINNACLE I.D.: 912072
PROJECT # : (none)
PROJECT NAME : EL PASO JAQUEZ

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	TT-09	NON-AQ	12/22/99	12/28/99	12/29/99	1

PARAMETER	DET. LIMIT	UNITS	TT-09
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0
CALCULATED SUM:			
SURROGATE:			
-TERPHENYL (%)			112
SURROGATE LIMITS	(66 - 151)		

CHEMIST NOTES:

1999
Geologic Logs And Well Completion Diagrams

1999
Geologic Logs And Well Completion Diagrams

RECORD OF SUBSURFACE EXPLORAT

Borehole # 2
Well # [redacted] SP-1
Page 1 of 2

Philip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
[redacted]) 326-2262 FAX (506) 326-2388

Project Name EPFS JAQUEZ SVE
Project Number 62800019 Phase 2
Project Location JAQUEZ GAS COM E #1

Elevation
Borehole Location
GWL Depth
Logged By C. CULLICOTT
Drilled By K. PADILLA & D. PADILLA
Date/Time Started 8/12/99 9:45 am
Date/Time Completed 8/12/99 @ 12:45pm

Well Logged By C. CULLICOTT
Personnel On-Site K. PADILLA & D. PADILLA
Contractors On-Site Ø
Client Personnel On-Site Ø

Drilling Method AUGER
Air Monitoring Method PID

Depth (Feet)		Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ	BH	S	Drilling Conditions & Blow Counts
0										
5	(1)	5-6½		(1) DAMP SAND / CLEAN. TAN, POORLY SORTED WITH OVERALL COARSENING WITH DEPTH IN SPLIT SPOON					32.0	(1) 5 BLOWS
10	(2)	10-12		(2) HYDROCARBON STAINED CLAY W/ VARYING AMOUNTS OF SAND & SILT. DARKER STAIN WITH DEPTH — BLACK @ BOTTOM OF SPLIT SPOON. STIFF, MOIST					98.0	
15	(3)	15-16½								
20	(4)	20-22		(3) SATURATED POORLY SORTED SAND WITH STRONG HC ODOR					150	
25	(5)	25-26½		(4) SATURATED COARSE SAND W/ PERVASIVE BLACK HC STAIN.					46	
	(6)	26-27½		(5) NO RECOVERY						
30				(6) SATURATED COARSE SAND. GRAY HC STAIN & ODOR @ TOP OF SPLIT SPOON, CLEAN SAND @ BOTTOM.						
35						Ø	Ø	245		
40										

Comments: INFLUX OF SATURATED SAND INTO AUGER. KELLY SPENT A WHILE TRYING TO FLUSH IT OUT WITH NO LUCK SO WILL REDRILL. BOREHOLE PID READING TAKEN DURING AUGER PULL. SUNNY, WARM.

Geologist Signature Cathy Cullicott

MONITORING WELL INSTALLATION RECORD

Phillip Environmental Services Corp.
[redacted] Monroe Road
[redacted]ton, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # 2
Well # SP-1
Page 2 of 2

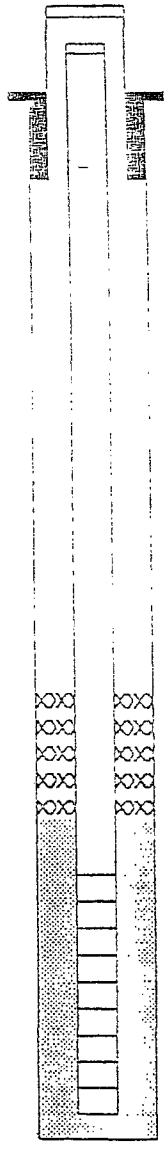
Project Name EPFS JAQUEZ SUE
Project Number 62800019 Phase 2
Project Location JAQUEZ GAS Com E #1

Elevation
Well Location
GWL Depth
Installed By R. PADILLA & D. PADILLA
Date/Time Started 8/12/99 9:45am
Date/Time Completed 8/12/99 12:45pm

On-Site Geologist C. CULLICOTT
Personnel On-Site E. PADILLA & D. PADILLA
Contractors On-Site Ø
Client Personnel On-Site Ø

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout		GS
Bottom of Grout	Cement	9 1/2'
Top of Well Riser	2"	+5'
Bottom of Well Riser	2"	21'
Top of Well Screen	2"	21'
Bottom of Well Screen	2"	26'
Top of Peltonite Seal	Chips Pellet	9 1/2'
Bottom of Peltonite Seal	Pellets	17'
Top of Gravel Pack	clean sand	17'
Bottom of Gravel Pack	natural sed.	26'
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		
Total Depth of Borehole		~26'



Top of Protective Casing
Top of Riser
Ground Surface
Top of Seal 9 1/2'
Top of Gravel Pack 17'
Top of Screen 21'
Bottom of Screen 26'
Bottom of Borehole 26'

Comments: INFLOW OF SEDIMENT INTO AUGER STEM OCCURRED TWICE. DEPTH OF SEDIMENT ~16'. KELLY & DANNY PUT 30' OF PIPE INTO AUGER & SHOVED IT DOWN TO APPROXIMATELY 26'. ONCE AUGER WAS LIFTED THE SEDIMENT SETTLED TO ~19'. PUT IN 2' OF CLEAN SAND. THEN HOLEPLUG. THERE WAS STANDING WATER IN THE WELL & THEY POURED IN CEMENT POWDER TO ~1'

Geologist Signature Catherine Cullicott

RECORD OF SUBSURFACE EXPLORATI

Borehole # 7
Well # MP-7
Page 1 of 2

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

Project Name EPFS JAQUEZ SVE
Project Number 62800019 Phase 2
Project Location JAQUEZ GAS COM E #1

Elevation
Borehole Location
GWL Depth
Logged By C. CULLICOTT
Drilled By K. PADILLA & D. PADILLA
Date/Time Started 8/12/99 8:30am
Date/Time Completed 8/12/99 9:45am

Well Logged By C. CULLICOTT
Personnel On-Site K. PADILLA & D. PADILLA
Contractors On-Site Ø
Client Personnel On-Site Ø

Drilling Method AUGER
Air Monitoring Method PID

Depth (Feet)		Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ	BH	S	Drilling Conditions & Blow Counts
0	1	0-18"		SURFACE DAMP SAND, POORLY SORTED. INCREASING %O CLAY WITH DEPTH TO 1'. LOOSE SAND @ 1', ~~for~~ 1", then tight clay for 2". THEN FINE SAND w/CLAY TO 18"	SM				0.0	① 9 blows
	2	18-3½'								
	3	3½-5'							0.0	② 19 BLOWS
5	~~4~~	~~3½-4~~							0.0	③ 10 BLOWS
	4	5-7'		② POOR RECOVERY. 1" thick stiff clay @ ~2', BELOW THAT LOOSE DRY POORLY SORTED SAND					0.0	④ 9 blows
	5	7-8½'		③ GOOD RECOVERY. MOIST, POORLY SORTED SAND ~~3½~~ 4', then 1" STIFF CLAYEY SAND, THEN LOOSE, POORLY SORTED SAND, 8", then SAME w/MORE CLAY TO 5'						
10				④ AS ABOVE TO 7', @ 7' SEDIMENT IS NEARLY SATURATED						
15										
20										
25				⑤ POOR RECOVERY. BOTTOM OF SPLIT SPOON IS SATURATED, STIFF SANDY CLAY, GRAY. NO VISIBLE HC STAIN IN THIS HOLE.						
30				TD 9'						
35										
40										

Comments: SUNNY W/A FEW CLOUDS. SITE IS ADJACENT TO IRRIGATION DITCH.

Geologist Signature Cathy Cullicott

MONITORING WELL INSTALLATION RECORD

Phillip Environmental Services Corp.
[redacted] Monroe Road
[redacted]ton, New Mexico 87401
(5061 326-2262 FAX (5061 326-2388

Borehole # 1
Well # MP-1
Page 2 of 2

Project Name EPFS JAQUEZ SVE

Project Number 628000 19 Phase 1
Project Location JAQUEZ

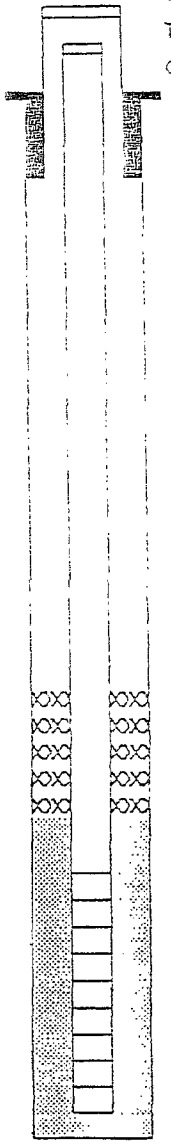
Elevation
Well Location
GWL Depth
Installed By K. PADILLA & D. PADILLA

On-Site Geologist C. CULLICOTT
Personnel On-Site K. PADILLA, D. PADILLA
Contractors On-Site 0
Client Personnel On-Site 0

Date/Time Started 8/12/99 8:30am
Date/Time Completed 8/12/99 9:45am

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout		
Bottom of Grout		
Top of Well Riser	1"	~+2'
Bottom of Well Riser	1"	5'
Top of Well Screen	1"	5'
Bottom of Well Screen	1"	8'
Top of Peltonite Seal	Pellets	2'
Bottom of Peltonite Seal	Pellets	4'
Top of Gravel Pack	COLORADO	4'
Bottom of Gravel Pack	SILICA SAND	9'
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		
Total Depth of Borehole		9'



Comments:

Geologist Signature Cathy Cullicott

RECORD OF SUBSURFACE EXPLORAT...

Borehole # 3
Well # MP 2
Page 1 of 2

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

EPFS

Project Name JAQUEZ SVE
Project Number 62800019 Phase 1
Project Location JAQUEZ GAS COM E #1

Elevation
Borehole Location
GWL Depth
Logged By C. CULLICOTT
Drilled By E. PADILLA & D. PADILLA
Date/Time Started 8/12/99 1:05 pm
Date/Time Completed 8/12/99 2:25 pm

Well Logged By C. CULLICOTT
Personnel On-Site E. PADILLA & D. PADILLA
Contractors On-Site Ø
Client Personnel On-Site Ø

Drilling Method AUGER
Air Monitoring Method PID

Depth (Feet)		Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ	BH	S	Drilling Conditions & Blow Counts
0				POORLY SORTED SAND, DAMP, BROWN. @4' - cobble?						
5				5-7' SAND w/higher % fines @7 to 9 gray stained clayey sand; cohesive, damp SAME TO 11' HC ODOR + STAIN						
10				TD 11'						
15										
20										
25										
30										
35										
40										

D

Comments:

Geologist Signature Cathy Cullicott

MONITORING WELL INSTALLATION RECORD

Phillip Environmental Services Corp.
[redacted] Monroe Road
[redacted]ington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # 3
Well # MP-2
Page 2 of 2

Project Name EPFS JAQUES SVE

Project Number 62800019 Phase 1
Project Location ~~EPFS~~ GAS COM E #1
JAQUEZ

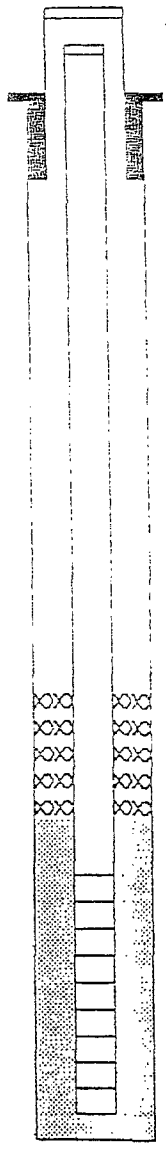
Elevation
Well Location JAQUEZ
GWL Depth
Installed By K. PADILLA & D. PADILLA

On-Site Geologist C. CULLICOTT
Personnel On-Site K. PADILLA & D. PADILLA
Contractors On-Site Ø
Client Personnel On-Site Ø

Date/Time Started 8/12/99 1:05pm
Date/Time Completed 8/12/99 2:25pm

Depths in Reference to Ground Surface

Item	Material		Depth	
Top of Protective Casing				
Bottom of Protective Casing				
Top of Permanent Borehole Casing				
Bottom of Permanent Borehole Casing				
Top of Concrete				
Bottom of Concrete				
Top of Grout				
Bottom of Grout				
Top of Well Riser	1"	D	42	S +3
Bottom of Well Riser	1"	D	9'	S 5'
Top of Well Screen	1"	D	9'	S 5'
Bottom of Well Screen	1"	D	10'	S 6'
Top of Peltonite Seal		D	6'	S 6'
Bottom of Peltonite Seal		D	8'	S 4'
Top of Gravel Pack		D	8'	S 4'
Bottom of Gravel Pack		D	11'	S 6'
Top of Natural Cave-In				
Bottom of Natural Cave-In				
Top of Groundwater				
Total Depth of Borehole				



Top of Protective Casing
Top of Riser
Ground Surface

Top of Seal D 6' S 2'
Top of Gravel Pack D 8' S 4'
Top of Screen D 9' S 5'
Bottom of Screen D 10' BGS S - 6'
Bottom of Borehole D 11' BGS

Comments:

Geologist Signature Cathy Cullicott

RECORD OF SUBSURFACE EXPLORAT...

Borehole # 1
Well # MP 3
Page 1 of 2

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

Project Name EPES JAQUEZ
Project Number Phase 1
Project Location JAQUEZ GAS Com E #1

Elevation
Borehole Location JAQUEZ
GWL Depth
Logged By C. CULLICOTT
Drilled By F. PADILLA & D. PADILLA
Date/Time Started 8/11/99 9:10 am
Date/Time Completed 8/11/99 10:30 am

Well Logged By C. CULLICOTT
Personnel On-Site K. PADILLA, D. PADILLA, C. IRE
Contractors On-Site Ø
Client Personnel On-Site Ø

Drilling Method AUGER
Air Monitoring Method PID

Depth (Feet)		Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ	BH	S	Drilling Conditions & Blow Counts
0	1	Grab		SURFACE: SAND						
				0-18" CLEAN SAND, DAMP,						
	2	18"- 2½'		TAN, ANGULAR						
				@18" a 1" thick clay seam,			①		1.2 ppm	
5	3	2½-4½		Gray, w/ fine roots			②		0.8 ppm	
	4	4½-6'		Then sand → loose, medium			③		0.8 ppm	
	5	6-8'		sand → 2'.			④		NS	
10	6	8-10'		@ 2½' 3" of GRAY SILTY CLAY,						
TD				then LOOSE, MEDIUM SAND.			⑤		1.0 ppm	
				CLEAN, to 2½'						
				2½-4½ CLEAN SAND,			⑥		1.35 ppm	
15				MEDIUM, w/ minor silt/clay						
				4½-6' INCREASING %						
				CLAY, GRAY, STILL CLEAN.						
				FINER SAND, MORE						
				COHERENT TO 6½'						
20				@6½' MOIST SANDY						
				CLAY, GRAY TO 7'.						
				7-8' BACK INTO SAND,						
				GRAY TO BROWN CLAYEY						
25				SAND, COHERENT, DAMP						
				TO 9½' then INTO HC						
				STAINED SAND. GRAY						
				STAIN INTO BLACK @ 10',						
30				FINE SAND, SMALLER %						
				CLAY THAN ABOVE.						
				WET, BUT NOT SATURATED-						
				TOP OF "SMEAR ZONE"						
35				TD 11'						
40										

Comments:

Geologist Signature Cathy Cullicott

MONITORING WELL INSTALLATION RECORD

Tuttle Environmental Services Corp.
[redacted] Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # 1
Well # MP-3
Page 2 of 2

Project Name EPFS JAQUEZ SVE
Project Number 62800019 Phase 1
Project Location JAQUEZ GAS COM E #1

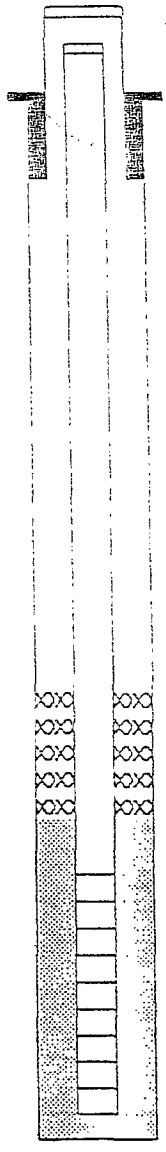
Elevation
Well Location JAQUEZ
GWL Depth
Installed By K. PADILLA & D. PADILLA

Date/Time Started 8/11/99 9:10 am
Date/Time Completed 8/11/99 10:20 am

On-Site Geologist C. IRBY & C. CULLICOTT
Personnel On-Site K. PADILLA & D. PADILLA
Contractors On-Site Ø
Client Personnel On-Site Ø

Depths in Reference to Ground Surface

Item	Material		Depth	
Top of Protective Casing				
Bottom of Protective Casing				
Top of Permanent Borehole Casing				
Bottom of Permanent Borehole Casing				
Top of Concrete				
Bottom of Concrete				
Top of Grout				
Bottom of Grout				
Top of Well Riser	1"	D	+2	S 3'
Bottom of Well Riser	1"	D	9'	S 5'
Top of Well Screen	1"	D	9'	S 5'
Bottom of Well Screen	1"	D	10'	S 6'
Top of Peltonite Seal		D	6'	S 6-5
Bottom of Peltonite Seal		D	8'	S 4'
Top of Gravel Pack		D	8'	S 4'
Bottom of Gravel Pack		D	11'	S 6'
Top of Natural Cave-In				
Bottom of Natural Cave-In				
Top of Groundwater				
Total Depth of Borehole				



Top of Protective Casing
Top of Riser
Ground Surface

Top of Seal D 6' S 2'
Top of Gravel Pack D 8' S - 4'
Top of Screen D - 9' S - 5'
Bottom of Screen D - 10' BGS S - 6'
Bottom of Borehole 11' BGS

Comments:

Geologist Signature Cathy Cullicott

RECORD OF SUBSURFACE EXPLORATION

Borehole # 4
Well # VE-1
Page 1 of 2

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

Project Name EPFS JAQUEZ SVE
Project Number 62800019 Phase 2
Project Location JAQUEZ GAS COM E #1

Elevation
Borehole Location
GWL Depth
Logged By C. CULLICOTT
Drilled By R. Padilla & D. PADILLA
Date/Time Started 8/12/99 2:25pm
Date/Time Completed 8/12/99 3:45pm

Well Logged By C. CULLICOTT
Personnel On-Site R. PADILLA & D. PADILLA
Contractors On-Site Ø
Client Personnel On-Site Ø

Drilling Method AUGER
Air Monitoring Method PID

Depth (Feet)		Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ	BH	S	Drilling Conditions & Blow Counts
0	1	0-18"		POORLY SORTED SAND W/ 1" CLAY SEAM @ ~9". FROM THERE, LOOSE, COARSER POORLY SORTED SAND TO 18"						(1) 11 BLOWS
	(2)	18"-3½'		(2) LOOSE SAND TO 24", then 5" THICK clay seam, STIFF, W/ SAND & SILT.						(2) 20 BLOWS
5	(3)	3½-5'		BELOW, LOOSE, POORLY SORTED, MEDIUM SAND TO 3½'. TAN						(3)
	(4)	5-6½'		(3) AS ABOVE TO 5'						(4) 5 BLOWS
	(5)	6½-8½'		(4) AS ABOVE TO 6', then coarser & better sorted, NO 6½'						(5) 8 BLOWS
	(6)	8½-10'		(5) 6½-7' STIFF CLAYEY SAND, DAMP. 7-8½' POORLY SORTED SAND, DAMP						
10				(6) POORLY SORTED SAND, COARSENS WITH DEPTH. WETTER WITH DEPTH						
15				TD 11'						
20				NO CONTAMINATION DETECTED VISUALLY						
25										
30										
35										
40										

Comments:

Geologist Signature Cathy Cullicott

MONITORING WELL INSTALLATION RECORD

Borehole # 4
Well # VE-1
Page 2 of 2

Phillip Environmental Services Corp.
[redacted] Morroc Road
[redacted]ton, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS JAQUEZ SVE
Project Number 62800019 Phase 2
Project Location JAQUEZ GAS COM E #1

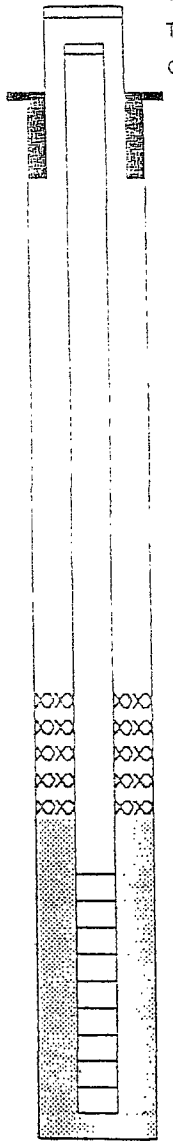
Elevation
Well Location
GWL Depth
Installed By K. PADILLA, D. PADILLA

On-Site Geologist C. CULLICOTT
Personnel On-Site K. PADILLA, D. PADILLA
Contractors On-Site Ø
Client Personnel On-Site Ø

Date/Time Started 8/12/99 2:25pm
Date/Time Completed 8/12/99 3:45pm

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout		GS
Bottom of Grout		3'
Top of Well Riser	2"	+
Bottom of Well Riser	2"	6'
Top of Well Screen	2"	6'
Bottom of Well Screen	2"	11'
Top of Peltonite Seal	BENTONITE	3'
Bottom of Peltonite Seal	CHIPS	5'
Top of Gravel Pack	20 SAND	5'
Bottom of Gravel Pack	"	11'
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		
Total Depth of Borehole		11'



Top of Protective Casing
Top of Riser
Ground Surface

HOLE PLUG LAST 1 1/2' TO GS

Top of Seal 3'
Top of Gravel Pack 5'
Top of Screen 6'
Bottom of Screen 11'
Bottom of Borehole 11'

Comments:

Geologist Signature Cathy Cullicott