3R - 194

REPORTS

DATE:
APRIL 2001

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

Annual Report for Soil and Groundwater Remediation

April 2001

Prepared For

EL PASO FIELD SERVICES
FARMINGTON, NEW MEXICO

Project 62800411

RECEIVED
APR 02 2001
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION



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

TABLE OF CONTENTS

1. INTRODUCTION 1

2. 2000 ACTIVITIES 4

2.1 INSTALLATION OF GROUNDWATER MONITORING WELLS 4
2.2 2000 SAMPLING ACTIVITIES 5
2.3 AIR SPARGE AND SOIL VAPOR EXTRACTION SYSTEM 6
2.4 SOIL INVESTIGATION 7

3. CONCLUSIONS 7

4. RECOMMENDATIONS 16

LIST OF TABLES

TABLE 1 – PRODUCT RECOVERY DATA
TABLE 2 – SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

LIST OF FIGURES

FIGURE 1 – SITE MAP
FIGURE 2 – 2000 FIRST QUARTER GROUNDWATER ELEVATION MAP
FIGURE 3 – 2000 SECOND QUARTER GROUNDWATER ELEVATION MAP
FIGURE 4 – 2000 THIRD QUARTER GROUNDWATER ELEVATION MAP
FIGURE 5 – 2000 FOURTH QUARTER GROUNDWATER ELEVATION MAP
FIGURE 6 – 2001 FIRST QUARTER GROUNDWATER ELEVATION MAP

LIST OF APPENDICES

APPENDIX A - GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS
APPENDIX B - PRODUCT THICKNESS VS. TIME FOR R-1 AND R-2
APPENDIX C - GROUNDWATER ELEVATIONS VS. TIME / BTEX CONCENTRATIONS
APPENDIX D - 2000 GROUNDWATER ANALYTICAL DATA
APPENDIX E - 2000 SOIL INVESTIGATIONS ANALYTICAL DATA
APPENDIX F - MISCELLANEOUS SAMPLING DATA
APPENDIX G - 2000 AIR ANALYTICAL DATA
APPENDIX H - AIR EMISSION CALCULATIONS FROM SOIL VAPOR EXTRACTION SYSTEM

1. INTRODUCTION

At the request of El Paso Field Services Company (EPFS), PSC 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, 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, ethyl benzene, 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 - EPFS 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 - EPFS installed a belt skimmer in R-2 to remove phase-separated hydrocarbons.
- February 1997 - EPFS installed a belt skimmer in R-1 to remove phase-separated hydrocarbons.
- November 1997 - EPFS 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 - EPFS 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 - EPFS 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.
- May 2000 - New Mexico Air Quality Board advises on air permit requirements and notice of intent requirements for the remediation system effluent.
- June 2000 – EPFS collects a series of air samples from the effluent of the soil vapor extraction system for calculating the total estimated emissions.
- June 2000 – EPFS samples surface water from Citizens Ditch both upgradient and downgradient of the Jaquez Com E #1 and Com C #1 site.
- June 2000 – EPFS excavated approximately 204 cubic yards of soil from the northwest corner of the garden area then backfilled the excavation with aggregate rock topped with a mixture of clean soil and livestock manure.
- June 2000 – EPFS injected 70 gallons of urea nitrate mixed with 600 gallons of potable water into the passive air system south of Citizens Ditch.
- July 2000 – EPFS installs two temporary groundwater monitoring wells in the garden area south of Citizens Ditch.
- August 2000 – EPFS samples seep that had developed at the toe of the ditch embankment on the north side of the former cornfield.
- October 2000 – EPFS begins an evaluation of the remediation system to ensure optimum performance and effectiveness.
- December 2000 – EPFS concludes the evaluation of the air sparge and soil vapor extraction system and incorporates functional changes to effect the most aggressive results.



2. 2000 ACTIVITIES

In 2000, activities included the following:

- Monitor well installations;
- Groundwater sampling of each monitor well north and south of Citizens Ditch was conducted in January, March, April, May, June, August, and November;
- Additional groundwater samples were collected from monitor wells M-3 and M-4, from sediments in ditch bottom, the irrigation well, seeps from the toe of the ditch, and surface water samples from Citizens Ditch;
- Air sparge and soil vapor extraction operations conducted to remediate the area north of Citizens Ditch;
- A soil investigation and excavation was conducted in the garden area south of Citizens Ditch as a result of concerns expressed by Mr. John Jaquez;
- Nutrient injection into the passive vent system south of Citizens Ditch.

2.1 Groundwater Monitor Wells

Concerns expressed by the landowner, Mr. John Jaquez, and the New Mexico Oil Conservation Division (NMOCD) prompted EPFS to install two additional groundwater monitor wells west of the site, near the residence. On January 11 and January 12, 2000 the monitor wells numbered R-6 and M-6 were installed and completed according to the NMOCD guidelines and in accordance with the August 13, 1999 Work Plan that was previously submitted to the NMOCD. The monitoring well installation is detailed in the report submitted July 21, 2000 titled Amended Work Plan Results for the Jaquez Com. E #1 and C #1. The geologic logs and well completion diagrams are included in Appendix A.

Temporary monitor wells numbered TMW-1 and TMW-2 were installed by EPFS on July 7, 2000 and are located closest to the fence line, as indicated on the site map titled Figure 1. Details of the temporary well installations are also documented in the Amended Work Plan Results for the Jaquez Com. E #1 and C #1 submitted July 21, 2000. The geologic logs and well completion diagrams are included in Appendix A.

2.2 2000 Sampling Activities

Trace levels of phase separated hydrocarbons were detected in R-1 and R-2 during 2000. The product thickness levels have declined sufficiently allowing groundwater samples to be collected. The reduction of phase separated hydrocarbons exhibited in R-1 and R-2 is illustrated in Appendix B. Historically, product thickness levels have followed trends associated with fluctuations in the water table. Charts included in Appendix C illustrate the seasonal rise and fall of the water table compared to the product thickness levels for R-1 and R-2.

Groundwater samples were collected from each of the twelve monitor wells, (R-1 through R-6 and M-1 through M-6) and analyzed for benzene, toluene, ethyl benzene and total xylenes (BTEX) during January and March of the first quarter of 2000. Monitor wells M-3 and M-4 were also sampled in February 2000 for BTEX. The laboratory analyses are illustrated in Appendix C and copies of the analyses for each sample event are included in Appendix D.

Groundwater samples were collected from each of the twelve monitor wells and analyzed for BTEX during April, May, and June of the second quarter of 2000 with nitrates tested in groundwater samples from M-3 and M-4 during each sample event. Additionally, analyses for polynuclear aromatic hydrocarbons (PAH) were performed on samples from M-3 and M-4 in May 2000.

During the third and fourth quarters of 2000, groundwater samples were gathered from M-3, M-4, and R-1 through R-4 in July and from each of the twelve wells in August and November and submitted for laboratory analyses for BTEX. Samples form M-3 and M-4 were also tested for nitrates. Sample results, historical to present, are presented in a summary table two.

Nitrate sampling has been performed on the monitor wells to help determine the effect of nutrients injected into the passive venting system south of Citizens Ditch. Nutrients, in the form of urea nitrate, were injected into the passive vent system in June 2000. Approximately 70 gallons of urea nitrate was diluted with 600 gallons of potable water and injected as a nutrient source for indigenous microorganisms to enhance natural degradation of subsurface hydrocarbons. Results of the laboratory analyses are included in Appendix D.

The existing 6-inch irrigation well north of Citizens Ditch was sampled in February 2000. This sample event is detailed in the report submitted July 21, 2000 titled Amended Work Plan Results for the Jaquez Com. E #1 and C #1. Groundwater samples collected from the irrigation well were analyzed for BTEX. Results of the laboratory analyses are included in Appendix D.



Groundwater samples were collected from TMW-1 and TMW-2 in July 2000, following well installation and development, and submitted for laboratory analyses for BTEX. Sample results are included in Appendix D.

Sampling events from Citizens Ditch were conducted from the sediments on the ditch bottom and ditch surface water during 2000. In February, when the ditch was temporarily closed, six samples of sediment were collected from the ditch bottom. Of the six samples, four were split with the NMOCD and submitted for laboratory analyses. Laboratory analyses of the sediment samples collected by EPFS are included in Appendix E.

Surface water samples were collected from Citizens Ditch, upgradient and downgradient of the site, in June 2000, September 2000, and January 2001. Results of the laboratory analysis are included in Appendix F.

During August 2000 water seeping from the toe of the ditch bank was running into the north side of the former cornfield. The water was mixing with the fresh manure that had recently been laid in the field causing puddles of odoriferous dark brown to black water.

Samples of the seep water were collected by digging a hole approximately 1-foot in depth and allowing the void to fill with seep water. The water samples were submitted for laboratory analyses of BTEX (Appendix F). The results of this investigation and sample event was detailed in a letter to the NMOCD, dated October 3, 2000 referenced **El Paso Field Services Notification of Results of Investigation of Seep at the Jaquez Site.**

2.3 Air Sparge and Soil Vapor Extraction Remediation System

The air sparge and soil vapor extraction system that was pilot tested in 1999 began operations in 2000. The remediation system was operative twelve hours per day, five days per week. EPFS sustained a weekly monitoring plan to measure the subsurface pressure, flow rates, temperatures, levels of dissolved oxygen in the groundwater, and the radius influence produced by the remediation system.

The soil vapor extraction system strips and extracts volatile compounds from the soil by inducing air flow through the soil with a vacuum. The vacuum draws the compounds out of the soil above the water table through a perforated pipe in a shallow well referred to as an extraction well. A notice of intent was submitted to the New Mexico Air Quality Board in June of 2000. An air permit is not required as long as the air emissions remain below 25 tons per year. The volatilized hydrocarbons are emitted through the system effluent that is measured each week using a photoionization detector (PID). A monthly air sample is collected and submitted for laboratory analysis (Appendix G). Emissions calculations made from the monthly laboratory analyses are included in Appendix H.

In October 2000, EPFS conducted an evaluation of the air sparge and soil vapor extraction system to determine the performance and effectiveness of the remediation system. The results of the evaluation are submitted as Attachment I - Jaquez Com C #1 and Jaquez Com E #1 Remediation System Evaluation dated December 2000.

2.3 Soil Investigations

Approximately 204 cubic yards of soil from the northwest corner of the garden area was excavated June 14 through 16, 2000. The area was excavated to approximately 46-feet in length, 20-feet in width, and 6-feet in depth. Groundwater was encountered at approximately 5-feet below ground surface. Soils from ground surface to approximately 3-feet below ground surface were not visibly impacted by hydrocarbons. Below 3-feet darkened soils were detected and hydrocarbon impact was confirmed using field headspace readings. The impacted soils were removed and six soil samples were taken from the excavated area and submitted for laboratory analyses. Of the six soil samples two were split with the NMOCD for separate laboratory analyses. Laboratory results of the samples submitted by EPFS are included in Appendix E.

The soils impacted by hydrocarbon migration were properly managed off site and the excavation was backfilled by placing 98.79 tons of 3-inch minus aggregate rock in the bottom of the excavation, as requested by the landowner, then placing clean soil mixed with livestock manure over the aggregate. Details of the excavation and back filling are presented in the report dated July 21, 2000 titled Amended Work Plan Results for the Jaquez Com. E #1 and C #1. The area of excavation is depicted in the site map titled Figure 1.

3. CONCLUSIONS

Garden Area South of Citizen's Ditch

BTEX concentrations, summarized in the table below, remain below NMQCC groundwater standards in monitor wells M-1, M-2, M-5, and M-6. Monitor well M-3, which has exhibited either no detectable levels or trace levels of BTEX constituents since 1998, experienced a hit on benzene of 30 ug/L (parts per billion) during February 2000. Monitor well M-4 has historically exhibited transient concentrations of benzene above NMWQCC groundwater standards since 1996, often decreasing significantly when the water table is high. The source of the phase separated hydrocarbons in R-1 and/or R-2 potentially contributes to the low levels of dissolved phase hydrocarbons in M-4. Toluene, ethyl benzene and total xylenes concentrations remain below NMWQCC groundwater standards in M-4. A sample collected during August 2000 from M-5 revealed 43 ug/L of benzene. The inconsistent concentrations of benzene demonstrated in M-3, M-4, and M-5 appear to be anomalies that may be attributed a variety of

circumstances ranging from migration created by the remediation system to a sample or laboratory divergence. Charts illustrating the BTEX concentrations from 1993 to present are presented in Appendix C.

2000 Groundwater Sample Results for M-1, M-2, M-3, M-4, M-5, and M6:

M-1	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Xylene (ug/L)	Total BTEX	Nitrates (mg/L)	Polynuclear Aromatic Hydrocarbons
Jan-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
May-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
Jun-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
Aug-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
Nov-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
M-2							
Jan-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
May-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
Jun-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
Aug-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
Nov-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
M-3							
Jan-00	4.1	2.8	1.6	3.7	12.2	NA	NA
Feb-00	30	21	2.3	9.4	62.7	NA	NA
May-00	2.1	<0.5	0.9	2.2	5.2	<0.1	ND
Jun-00	0.6	<0.5	<0.5	<0.5	0.6	0.14	NA
Jul-00	<0.5	<0.5	<0.5	1.1	1.1	NA	NA
Aug-00	0.6	<0.5	<0.5	2.2	2.8	<0.05	NA
Nov-00	1.1	<0.5	<0.5	0.6	1.2	<0.05	NA
M-4							
Jan-00	27	<0.5	<0.5	9.7	37.7	NA	NA
Feb-00	11	<0.5	5.6	5.5	22.1	NA	NA
May-00	38	1.1	<0.5	23	62.1	<0.1	ND
Jun-00	44	1.6	8.9	16	70.5	<0.1	NA
Jul-00	51	0.6	<0.5	13	64.6	NA	NA
Aug-00	87	0.5	1.2	32	120.7	1.66	NA
Nov-00	99	<0.5	0.5	5.0	104.5	2.66	NA
M-5							
Jan-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
May-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
Jun-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
Aug-00	43	<0.5	<0.5	<0.5	43	NA	NA
Nov-00	2.6	<0.5	<0.5	<0.5	2.6	NA	NA
M-6							
Jan-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
May-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
Jun-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
Aug-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
Nov-00	<0.5	<0.5	<0.5	<0.5	ND	NA	NA
NMWQCC Standards	**10 ug/L**	**750 ug/L**	**750 ug/L**	**620 ug/L**	**NA**	**10 mg/L**	**0.03 mg/L**

ND = Non Detect ug/L = micrograms per liter mg/L = milligrams per liter

Groundwater samples from M-3 and M-4 were submitted for laboratory analyses of nitrates to determine the concentration of nutrients available for biodegradation of hydrocarbons. As summarized in the above table, the levels of nitrate present in M-4 have remained between 1.66 and 3.37 mg/L since the urea nitrate was injected in the passive vent system during June 2000 (Appendix D).

The PAH analysis conducted in May 2000 from groundwater samples collected in M-3 and M-4 revealed no detectable concentrations above 1.0 ug/L for each constituent (Appendix D).

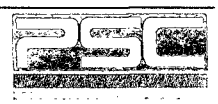
The soil samples collected during the June 14 through 16 excavation were submitted for laboratory analyses and the results are summarized in the table below.

2000 Soil Sample Results from June Excavation:

Sample Number	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylene (mg/kg)	Methyl-t-Butyl Ether	Fuel Hydro-carbons (C6-C10)	Fuel Hydro-carbons (C10-C22)	Fuel Hydro-carbons (C22-C36)
JAQEXC-S-1	<0.025	<0.025	<0.025	<0.025	<0.13	<10	<10	<10
JAQEXC-SS-2	<0.025	<0.025	<0.025	<0.025	<0.13	<10	<10	<10
JAQEXC-SS-3	<0.025	<0.025	<0.025	<0.025	<0.13	<10	<10	<10
JAQEXC-SS-4	0.10	0.085	0.047	0.51	<0.13	27	30	18
JAQEXC-SS-5	<0.025	<0.025	<0.025	<0.025	<0.13	<10	<10	<10
JAQEXC-SS-6	<0.025	<0.025	<0.025	<0.025	<0.13	<10	<10	<10
NMOCD	**10 mg/kg**	**NA**	**NA**	**NA**	**NA**	**100 mg/kg of total petroleum hydrocarbons**		

Mg/kg = milligrams per kilogram
NMOCD = New Mexico Oil Conservation Division Recommended Remediation Level

Six samples were tested for BTEX, Methyl-t-Butyl Ether, and total petroleum hydrocarbons. Of the six soil samples analyzed for BTEX, five exhibited non detectable levels of benzene, toluene, ethyl benzene, or xylenes above 0.025 mg/kg (parts per million) and Methyl-t-Butyl Ether was not detected in any of the six samples above 0.13 mg/kg. In the soil samples submitted for total petroleum hydrocarbon analyses, five of the six samples showed no detectable levels for fuel hydrocarbon chains C6-C10, C-10-C22, or C22-C36, respectively, above 10 mg/kg. The soil sample identified as JAQEXC-SS-4 was collected near M-3 at approximately 6 to 6.5 below ground surface, beneath the groundwater interface, to characterize the bottom of the excavation. This sample revealed trace levels of each BTEX constituent, totaling less than 0.75 mg/kg of total BTEX. The same sample exhibited 75 mg/kg of total petroleum hydrocarbons. The NMOCD was on



site during the sampling event, splitting two of the six samples with EPFS for laboratory analysis of volatile organic compounds and total petroleum hydrocarbons. Results of the soil analyses were transmitted by the NMOCD to EPFS on September 1, 2000 in a letter referenced **Soil Sample Results Jaquez Com. C #1 and E #1**, demonstrating that neither volatile organic compounds nor total petroleum hydrocarbons were detected.

However, soils approximately 3.5-feet below ground surface located near M-3 appeared darkened and field headspace reading confirmed the presence of hydrocarbons. Therefore, based on the groundwater sample results and soil investigations, current as well as historical, the extent of hydrocarbon migration appears to be limited to the vadose zone (soil/water interface) in the unexcavated area between the ditch and northern most limit of excavation. This area has not been nor is it a candidate for excavation due to the proximity to Citizens Ditch and the potential for breaching the ditch during excavation. Details of the excavation and soil sampling were presented in the report dated July 21, 2000 titled Amended Work Plan Results for the Jaquez Com. E #1 and C #1.

The seep sample collected during August 2000 was submitted for laboratory analyses of BTEX. The water from the toe of the ditch bank was running into the north side of the former cornfield and mixing with the fresh manure causing puddles of dark brown to black water. Laboratory analyses of the seep sample, summarized below, revealed no detectable levels of BTEX.

2000 Seep Samples:

Sample Number	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Xylenes (ug/L)	Total BTEX (ug/L)
JAQ-0008-SEEP	<1.0	<1.0	<1.0	<1.0	ND
NMWQCC Standards	**10 ug/L**	**750 ug/L**	**750 ug/L**	**620 ug/L**	**NA**

ND = Non Detect
NA = Not Applicable
ug/L = micrograms per liter

Citizen's Ditch

Sediment samples were collected in February 2000 from the bottom of Citizens Ditch while the ditch was temporarily closed. Six samples of sediment were collected from various locations on the ditch bottom and submitted for laboratory analyses for BTEX and total petroleum hydrocarbons. The sample results revealed no detectable levels of any analytes with the exception of sediment sample numbered JQZ-CD-SS-05. This sample exhibited a trace level of toluene that was less than 1.0 part per million, as illustrated in the table below. The sample was collected approximately 12-feet west of the western pipeline and approximately 3.5-feet from the southern edge of the ditch bank and appeared dark in color with an abundance of organic material. Laboratory analyses of the sediment samples collected by EPFS are included in Appendix E.

2000 Sediment Sample Results from Citizens Ditch:

Sample Number	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylene (mg/kg)	Total BTEX	Fuel Hydro-carbons (C6-C10)	Fuel Hydro-carbons (C10-C22)	Fuel Hydro-carbons (C22-C36)
JQZ-CD-SS-01	<0.025	<0.025	<0.025	<0.025	ND	<10	<10	<20
JQZ-CD-SS-2	<0.025	<0.025	<0.025	<0.025	ND	<10	<10	<20
JQZ-CD-SS-3	<0.025	<0.025	<0.025	<0.025	ND	<10	<10	<20
JQZ-CD-SS-4	<0.025	<0.025	<0.025	<0.025	ND	<10	<10	<20
JQZ-CD-SS-5	<0.025	0.091	<0.025	<0.025	0.091	<10	<10	<20
JQZ-CD-SS-6	<0.025	<0.025	<0.025	<0.025	ND	<10	<10	<20
NMOCD	**10 mg/kg**	**NA**	**NA**	**NA**	**50**	**100 mg/kg of total petroleum hydrocarbons**		

Mg/kg = milligrams per kilogram
NMOCD = New Mexico Oil Conservation Division Recommended Remediation Level

As requested by the NMOCD in correspondence dated May 15, 2000 referencing the **Investigation Results and Work Plans Jaquez Com C #1 and E #1** surface water samples were collected from Citizens Ditch, upgradient and downgradient of the site, in June 2000, September 2000, and January 2001. Results of the laboratory analyses reveal no detectable levels of BTEX, as summarized in the following table and documented in Appendix F.

2000 Surface Water Samples from Citizens Ditch:

Sample Number	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Xylenes (ug/L)	Total BTEX (ug/L)
JAQ-0006-CDUG	<0.5	<0.5	<0.5	<0.5	ND
JAQ-0006-CDDG	<0.5	<0.5	<0.5	<0.5	ND
JAQ-0009-CDUG	<0.5	<0.5	<0.5	<0.5	ND
JAQ-0009-CDDG	<0.5	<0.5	<0.5	<0.5	ND
JAQ-0101-CDUG	<0.5	<0.5	<0.5	<0.5	ND
JAQ-0101-CDDG	<0.5	<0.5	<0.5	<0.5	ND

Meter Site Location North of Citizen's Ditch

Historically, phase separated hydrocarbons have continued to accumulate in R-1 and R-2, with only trace amounts during periods of low groundwater. Approximately 264.03 gallons of phase separated hydrocarbons have been removed from recovery well R-1 from when the belt skimming system went into place until 1998. The belt skimming system did not operate in 1999 or 2000 due to trace amounts observed during this period.

While R-3, R-5 and R-6 have always exhibited either no detectable levels of BTEX or levels below the NMWQCC standards; R-1, R-2 and R-4 have always exhibited phase separated hydrocarbons or elevated levels of dissolved phase hydrocarbons. Groundwater samples from R-1 and R-2 was not obtained during 1997, 1998, or 1999 due to the presence of phase separated product in the well.

The table below summarizes the results of the laboratory analyses from sampling events during the year 2000 for R-1, R-2, and R-4. Levels of phase separated hydrocarbons in R-1 and R-2 was reduced to trace levels or sheen. Monitor well R-1 and R-2 were sampled six out of twelve months in 2000 with an average benzene concentration of more than 3,000 parts per billion and more than 1,500 parts per billion, respectively. Groundwater samples from R-4 have always revealed levels of dissolved phase hydrocarbons with benzene levels showing a wide range of fluctuations. During 2000, groundwater samples collected from R-4 revealed an average benzene concentration of 800 parts per billion.

2000 Groundwater Sample Results for R-1, R-2, R-3, R-4, R-5, and R-6:

R-1	Benzene(ug/L)	Toluene(ug/L)	Ethyl Benzene(ug/L)	Xylene(ug/L)	Total BTEX
Jan-00	2500	3800	180	1900	8380
May-00	2300	1000	120	2000	5420
Jun-00	2400	690	150	2000	5420
Jul-00	4900	2900	150	3100	11050
Aug-00	2500	1400	180	2200	6280
Nov-00	3500	2700	210	2900	9310
R-2					
Jan-00	1200	2000	<130	1500	4700
May-00	2300	3200	280	3000	8780
Jun-00	1300	1300	79	1100	3779
Jul-00	3600	3200	150	2300	9250
Aug-00	1600	1500	82	1100	4282
Nov-00	770	1300	170	1500	3740
R-3					
Jan-00	<0.5	<0.5	0.5	5.2	5.7
May-00	1.0	1.4	0.5	5.4	8.3
Jun-00	<0.5	<0.5	<0.5	<0.5	ND
Jul-00	<0.5	<0.5	<0.5	<0.5	ND
Aug-00	<0.5	<0.5	<0.5	<0.5	ND
Nov-00	<0.5	<0.5	<0.5	<0.5	ND
R-4					
Jan-00	280	89	60	690	1119
May-00	960	980	29	1900	3869
Jun-00	950	1000	43	2500	4493
Jul-00	520	400	50	1600	2570
Aug-00	1500	1800	110	1800	5210
Nov-00	590	580	110	1800	3080
R-5					
Jan-00	<0.5	<0.5	<0.5	<0.5	ND
May-00	<0.5	<0.5	<0.5	<0.5	ND
Jun-00	<0.5	<0.5	<0.5	<0.5	ND
Jul-00	<0.5	<0.5	<0.5	<0.5	ND
Aug-00	<0.5	<0.5	<0.5	<0.5	ND
Nov-00	<0.5	<0.5	<0.5	0.9	0.9
R-6					
Jan-00	<0.5	<0.5	<0.5	<0.5	ND
May-00	<0.5	<0.5	<0.5	<0.5	ND
Jun-00	<0.5	<0.5	<0.5	<0.5	ND
Jul-00	<0.5	<0.5	<0.5	<0.5	ND
Aug-00	<0.5	<0.5	2.6	13	15.6
Nov-00	<0.5	<0.5	<0.5	0.5	0.5
NMWQCC Standards	10	750	750	620	NA

ug/L = micrograms per liter NA = not applicable ND = non detect

Following the evaluation of the remediation system performed during the last quarter of 2000 and subsequent system adjustments, groundwater from each of the most impacted monitor wells have shown a vast decrease in each of the BTEX constituents, as summarized in the table below.

2000 Sample Progress for R-1, R-2, and R-4:

R-1	Benzene(ug/L)	Toluene(ug/L)	Ethyl Benzene(ug/L)	Xylene(ug/L)	Total BTEX
Average for 2000	3016	2082	165	2350	7643
Last Qtr of 2000 (11/20/00)	3500	2700	210	2900	9310
First Qtr Of 2001 (2/15/01)	***120***	***<10***	***<10***	***190***	***310***
Percent Change	96.6 %	~100 %	~100 %	93.4 %	96.7 %
R-2	Benzene(ug/L)	Toluene(ug/L)	Ethyl Benzene(ug/L)	Xylene(ug/L)	Total BTEX
Average for 2000	1795	2083	152	1750	5755
Last Qtr of 2000 (11/20/00)	770	1300	170	1500	3740
First Qtr Of 2001 (2/15/01)	***620***	***400***	***43***	***440***	***1503***
Percent Change	19.5 %	69.2 %	74.7 %	70.7 %	59.8 %
R-4	Benzene(ug/L)	Toluene(ug/L)	Ethyl Benzene(ug/L)	Xylene(ug/L)	Total BTEX
Average for 2000	800	808	67	1715	3390
Last Qtr of 2000 (11/20/00)	590	580	110	1800	3080
First Qtr Of 2001 (2/15/01)	***19***	***<10***	***<10***	***36***	***55***
Percent Change	96.8 %	~100 %	~100 %	98.0 %	98.2 %

As discussed in Option 2 of the Attachment I - Jaquez Com. C #1 and Jaquez Com. E #1 Remediation System Evaluation the remediation system is operating at optimal levels for the present configuration. Installation of the proposed sparge wells and extraction well will enhance the current system effecting a more aggressive remediation system.

The existing 6-inch diameter irrigation well, sampled in February 2000, was submitted for laboratory analyses for BTEX. Sample results are summarized in the following table and copies of the laboratory analyses are included in Appendix F.

2000 Groundwater Sample of Irrigation Well:

Sample Number	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Xylene (ug/L)	Total BTEX
JQZ0002R071 (IRRIGATION WELL)	<0.5	<0.5	<0.5	<0.5	ND
NMWQCC Standards	10	750	750	620	NA

ug/L = micrograms per liter
ND = non detect
NA = not applicable

4. RECOMMENDATIONS

Based on the current site activities and the proposed system modifications described in Option 2 of the Attachment I - Jaquez Com. C #1 and Jaquez Com. E #1 Remediation System Evaluation, PSC recommends the following:

- Install two additional sparge wells between R-1 and R-2 and inside the southern limits of the former excavation.
- Install one additional vent well northeast of R-2 in the native soils outside the former excavation.
- Sample monitoring wells R-1, R-2, R-3, R-4, R-5, and R-6 monthly for BTEX to evaluate the effectiveness of remediation system for at least one quarter.
- Sample monitoring wells R-1, R-2, R-3, R-4, R-5, and R-6 quarterly for BTEX following the remediation system evaluation, unless an increased frequency is deemed necessary.
- Sample monitoring wells M-1, M-2, M-3, M-4, M-5, and M-6 quarterly for BTEX.
- Continue sampling monitoring wells M-3 and M-4 quarterly for BTEX and nitrates.
- Discontinue PAH sampling in M-3 and M-4 due to non-detectable levels of analytes.
- Collect one more quarter of surface water samples from Citizens Ditch, upgradient and downgradient of site.
- Collect monthly groundwater elevation data at each well.
- Collect biweekly dissolved oxygen levels from R-1, R-2, R-3, R-4, R-5, R-6, M-3, M-4 and M-5.
- Collect weekly oxygen and volatile organic compound (VOC) readings of soil gases and record subsurface pressures.
- Collect monthly air samples from soil vapor extraction effluent for laboratory analyses.
- Inject nutrients into the passive vent system and add magnesium peroxide socks to M-3 and M-4 south of Citizens Ditch.
- Evaluate the area between the passive vent system and the south side of Citizens Ditch as a candidate for soil vapor extraction.

Table 1 - Product Recovery Data

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-1	02/07/97	19.97	17.55	2.42	0.00	99.07	77.24	79.66	Prior to Skimmer Installation
R-1	02/19/97	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

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	02/25/98	19.25	19.19	0.06	185.77	99.07	77.96	78.02	Adjust to run 12 hrs/ Day, Ditch empty
R-1	03/04/98	19.99	19.24	0.75	198.98	99.07	77.22	77.97	Adjust to run 24 hrs/ Day, Ditch empty
R-1	03/11/98	19.52	19.32	0.20	207.97	99.07	77.69	77.89	Adjust to run 12 hrs/ Day, Ditch empty
R-1	03/18/98	19.94	19.54	0.40	224.24	99.07	77.27	77.67	Adjust to run 24 hrs/ Day, Ditch empty
R-1	03/25/98	19.08	19.03	0.05	248.16	99.07	78.13	78.18	Adjust to run 12 hrs/ day, Ditch empty
R-1	04/02/98	17.31	17.31	0.00	258.30	99.07	79.90	79.90	Shut skimmer down, Ditch running again
R-1	04/08/98	16.77	16.61	0.16	258.30	99.07	80.44	80.60	Adjust to run 4 hrs/ Day, Ditch running full
R-1	04/15/98	16.42	16.42	0.00	264.03	99.07	80.79	80.79	Shut skimmer down, Ditch running full
R-1	04/23/98	16.02	15.87	0.15	264.03	99.07	81.19	81.34	Adjust to run 4 hrs/ Day, Ditch running full
R-1	04/29/98	16.04	16.04	0.00	264.03	99.07	81.17	81.17	Shut system down, ditch running full
R-1	05/08/98	15.42	15.32	0.10	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

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-1	01/20/00	14.37	14.37	0.00	264.03	5599.99	5585.62	NA	New Survey
R-1	03/29/00	16.24	16.11	0.13	264.03	5599.99	5583.75	5583.88	Water running in ditch
R-1	04/28/00	14.13	14.13	0.00	264.03	5599.99	5585.86	NA	Water running in ditch
R-1	05/31/00	13.57	13.57	0.00	264.03	5599.99	5586.42	NA	Water running in ditch
R-1	06/26/00	13.23	13.23	0.00	264.03	5599.99	5586.76	NA	Water running in ditch
R-1	07/26/00	13.13	13.13	0.00	264.03	5599.99	5586.86	NA	Water running in ditch
R-1	08/23/00	12.78	12.78	0.00	264.03	5599.99	5587.21	NA	Water running in ditch
R-1	11/20/00	13.66	13.66	0.00	264.03	5599.99	5586.33	NA	Water running in ditch
R-1	02/15/01	14.88	14.88	0.00	264.03	5599.99	5585.11	NA	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
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

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	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
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	82.75	Leave system shut down, Ditch running
R-2	05/20/98	13.58	13.58	0.00	15.39	98.05	82.57	82.57	Leave system shut down, Ditch running
R-2	05/27/98	14.00	14.00	0.00	15.39	98.05	82.15	82.15	Leave system shut down, Ditch running
R-2	06/29/98	13.67	13.67	0.00	15.39	98.05	82.48	82.48	Leave system shut down, Ditch running
R-2	10/08/98	13.79	13.79	0.00	15.39	98.05	82.36	82.36	Leave system shut down, Ditch running
R-2	11/11/98	13.79	13.79	0.00	15.39	98.05	82.36	82.36	Leave system shut down, Ditch running
R-2	11/24/98	14.01	14.01	0.00	15.39	98.05	82.14	82.14	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	12/01/98	14.51	14.51	0.00	15.39	98.05	81.64	81.64	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	15.49	0.00	15.39	98.05	80.66	80.66	Water running in ditch
R-2	04/09/99	15.13	15.13	0.00	15.39	98.05	81.02	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-2	01/20/00	15.21	15.21	0.00	15.39	5598.97	5583.76	N/A	New Survey
R-2	03/29/00	15.09	15.01	0.08	15.39	5598.97	5583.88	5583.96	Water running in ditch
R-2	04/28/00	12.92	12.92	0.00	15.39	5598.97	5586.05	N/A	Water running in ditch
R-2	05/31/00	12.38	12.38	0.00	15.39	5598.97	5586.59	N/A	Water running in ditch
R-2	06/26/00	12.05	12.05	0.00	N/A	5598.97	5586.92	N/A	Water running in ditch
R-2	07/26/00	12.00	12.00	0.00	N/A	5598.97	5586.97	NA	Water running in ditch
R-2	08/23/00	11.54	11.54	0.00	N/A	5598.97	5587.43	N/A	Water running in ditch
R-2	11/20/00	12.51	12.51	0.00	N/A	5598.97	5586.46	N/A	Water running in ditch
R-2	02/15/01	13.63	13.63	0.00	N/A	5598.97	5585.34	N/A	Water running in ditch
R-3	02/19/97	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	

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	06/18/97	14.33	N/A	N/A	N/A	99.29	84.96	N/A	
R-3	06/27/97	14.17	N/A	N/A	N/A	99.29	85.12	N/A	
R-3	07/02/97	14.02	N/A	N/A	N/A	99.29	85.27	N/A	
R-3	07/09/97	14.02	N/A	N/A	N/A	99.29	85.27	N/A	
R-3	08/21/97	13.41	N/A	N/A	N/A	99.29	85.88	N/A	
R-3	11/10/97	14.87	N/A	N/A	N/A	99.29	84.42	N/A	
R-3	01/21/98	16.34	N/A	N/A	N/A	99.29	82.95	N/A	
R-3	01/28/98	16.38	N/A	N/A	N/A	99.29	82.91	N/A	
R-3	02/05/98	16.20	N/A	N/A	N/A	99.29	83.09	N/A	
R-3	02/11/98	16.84	N/A	N/A	N/A	99.29	82.45	N/A	Ditch empty
R-3	02/19/98	17.16	N/A	N/A	N/A	99.29	82.13	N/A	Ditch empty
R-3	02/25/98	17.26	N/A	N/A	N/A	99.29	82.03	N/A	Ditch empty
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

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	02/24/99	14.59	N/A	N/A	N/A	99.29	84.70	N/A	Took water level & product level
R-3	01/20/00	14.05	N/A	N/A	N/A	5600.21	5586.16	N/A	New Survey
R-3	03/29/00	16.02	N/A	N/A	N/A	5600.21	5584.19	N/A	Water running in ditch
R-3	04/28/00	13.86	N/A	N/A	N/A	5600.21	5586.35	N/A	Water running in ditch
R-3	05/31/00	13.36	N/A	N/A	N/A	5600.21	5586.85	N/A	Water running in ditch
R-3	06/26/00	12.00	N/A	N/A	N/A	5600.21	5588.21	N/A	Water running in ditch
R-3	07/26/00	12.85	N/A	N/A	N/A	5600.21	5587.36	N/A	Water running in ditch
R-3	08/23/00	12.31	N/A	N/A	N/A	5600.21	5587.90	N/A	Water running in ditch
R-3	11/20/00	13.45	N/A	N/A	N/A	5600.21	5586.76	N/A	Water running in ditch
R-3	02/15/01	14.50	N/A	N/A	N/A	5600.21	5585.71	N/A	Water running in ditch
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	

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	02/11/98	16.28	N/A	N/A	N/A	98.29	82.01	N/A	Ditch empty
R-4	02/19/98	16.58	N/A	N/A	N/A	98.29	81.71	N/A	Ditch empty
R-4	02/25/98	16.68	N/A	N/A	N/A	98.29	81.61	N/A	Ditch empty
R-4	03/04/98	16.88	N/A	N/A	N/A	98.29	81.41	N/A	Ditch empty
R-4	03/11/98	16.86	N/A	N/A	N/A	98.29	81.43	N/A	Ditch empty
R-4	03/18/98	16.59	N/A	N/A	N/A	98.29	81.70	N/A	Ditch empty
R-4	03/25/98	16.52	N/A	N/A	N/A	98.29	81.77	N/A	Ditch empty
R-4	04/02/98	14.80	N/A	N/A	N/A	98.29	83.49	N/A	Ditch running
R-4	04/08/98	14.19	N/A	N/A	N/A	98.29	84.10	N/A	Ditch running
R-4	04/15/98	13.94	N/A	N/A	N/A	98.29	84.35	N/A	Ditch running
R-4	04/23/98	13.45	N/A	N/A	N/A	98.29	84.84	N/A	Ditch running
R-4	04/29/98	13.53	N/A	N/A	N/A	98.29	84.76	N/A	Ditch running
R-4	05/08/98	13.00	N/A	N/A	N/A	98.29	85.29	N/A	Ditch running
R-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-4	01/20/00	13.51	N/A	N/A	N/A	5599.21	5585.70	N/A	New Survey
R-4	03/29/00	15.44	N/A	N/A	N/A	5599.21	5583.77	N/A	Water running in ditch
R-4	04/28/00	13.38	N/A	N/A	N/A	5599.21	5585.83	N/A	Water running in ditch
R-4	05/31/00	12.81	N/A	N/A	N/A	5599.21	5586.40	N/A	Water running in ditch
R-4	06/26/00	12.40	N/A	N/A	N/A	5599.21	5586.81	N/A	Water running in ditch
R-4	07/26/00	12.40	N/A	N/A	N/A	5599.21	5586.81	N/A	Water running in ditch

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	08/23/00	12.00	N/A	N/A	N/A	5599.21	5587.21	N/A	Water running in ditch
R-4	11/20/00	12.92	N/A	N/A	N/A	5599.21	5586.29	N/A	Water running in ditch
R-4	02/15/01	14.05	N/A	N/A	N/A	5599.21	5585.16	N/A	Water running in ditch
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	
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

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	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
R-5	01/20/00	16.54	N/A	N/A	N/A	5602.42	5585.88	N/A	New Survey
R-5	03/29/00	18.05	N/A	N/A	N/A	5602.42	5584.37	N/A	Water running in ditch
R-5	04/27/00	17.17	N/A	N/A	N/A	5602.42	5585.25	N/A	Water running in ditch
R-5	05/31/00	16.22	N/A	N/A	N/A	5602.42	5586.20	N/A	Water running in ditch
R-5	06/26/00	15.28	N/A	N/A	N/A	5602.42	5587.14	N/A	Water running in ditch
R-5	08/23/00	15.17	N/A	N/A	N/A	5602.42	5587.25	N/A	Water running in ditch
R-5	11/20/00	15.77	N/A	N/A	N/A	5602.42	5586.65	N/A	Water running in ditch
R-5	02/15/01	16.59	N/A	N/A	N/A	5602.42	5585.83	N/A	Water running in ditch
R-6	01/20/00	15.61	N/A	N/A	N/A	5599.58	5583.97	NA	Water running in ditch
R-6	03/29/00	18.05	N/A	N/A	N/A	5599.58	5581.53	NA	Water running in ditch
R-6	04/27/00	15.85	N/A	N/A	N/A	5599.58	5583.73	NA	Water running in ditch

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-6	05/31/00	14.88	N/A	N/A	N/A	5599.58	5584.70	NA	Water running in ditch
R-6	06/26/00	13.52	N/A	N/A	N/A	5599.58	5586.06	N/A	Water running in ditch
R-6	08/23/00	12.38	N/A	N/A	N/A	5599.58	5587.20	N/A	Water running in ditch
R-6	11/20/00	14.27	N/A	N/A	N/A	5599.58	5585.31	N/A	Water running in ditch
R-6	02/15/01	16.22	N/A	N/A	N/A	5599.58	5583.36	N/A	Water running in ditch
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

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-1	03/11/98	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
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-1	01/19/00	5.11	N/A	N/A	N/A	5585.76	5580.65	N/A	New Survey
M-1	03/27/00	5.86	N/A	N/A	N/A	5585.76	5579.90	N/A	Water running in ditch
M-1	04/27/00	5.08	N/A	N/A	N/A	5585.76	5580.68	N/A	Water running in ditch
M-1	05/30/00	4.14	N/A	N/A	N/A	5585.76	5581.62	N/A	Water running in ditch
M-1	06/22/00	3.50	N/A	N/A	N/A	5585.76	5582.26	N/A	Water running in ditch
M-1	08/22/00	4.50	N/A	N/A	N/A	5585.76	5581.26	N/A	Water running in ditch
M-1	11/17/00	3.88	N/A	N/A	N/A	5585.76	5581.88	N/A	Water running in ditch
M-1	02/14/01	4.30	N/A	N/A	N/A	5585.76	5581.46	N/A	Water running in ditch
M-2	02/19/97	6.00	N/A	N/A	N/A	85.89	79.89	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	02/26/97	6.02	N/A	N/A	N/A	85.89	79.87	N/A	
M-2	03/05/97	6.12	N/A	N/A	N/A	85.89	79.77	N/A	
M-2	03/12/97	6.19	N/A	N/A	N/A	85.89	79.70	N/A	
M-2	03/17/97	6.32	N/A	N/A	N/A	85.89	79.57	N/A	
M-2	04/09/97	6.31	N/A	N/A	N/A	85.89	79.58	N/A	
M-2	04/16/97	6.62	N/A	N/A	N/A	85.89	79.27	N/A	
M-2	04/23/97	6.70	N/A	N/A	N/A	85.89	79.19	N/A	
M-2	05/01/97	4.23	N/A	N/A	N/A	85.89	81.66	N/A	
M-2	05/07/97	3.25	N/A	N/A	N/A	85.89	82.64	N/A	
M-2	05/13/97	3.67	N/A	N/A	N/A	85.89	82.22	N/A	
M-2	05/21/97	4.24	N/A	N/A	N/A	85.89	81.65	N/A	
M-2	05/28/97	4.79	N/A	N/A	N/A	85.89	81.10	N/A	
M-2	06/04/97	3.89	N/A	N/A	N/A	85.89	82.00	N/A	
M-2	06/11/97	3.86	N/A	N/A	N/A	85.89	82.03	N/A	
M-2	06/18/97	4.61	N/A	N/A	N/A	85.89	81.28	N/A	
M-2	06/27/97	4.27	N/A	N/A	N/A	85.89	81.62	N/A	
M-2	07/02/97	4.34	N/A	N/A	N/A	85.89	81.55	N/A	
M-2	07/09/97	3.43	N/A	N/A	N/A	85.89	82.46	N/A	
M-2	08/21/97	2.91	N/A	N/A	N/A	85.89	82.98	N/A	
M-2	11/10/97	4.76	N/A	N/A	N/A	85.89	81.13	N/A	
M-2	01/21/98	6.36	N/A	N/A	N/A	85.89	79.53	N/A	
M-2	01/28/98	6.48	N/A	N/A	N/A	85.89	79.41	N/A	
M-2	02/05/98	6.62	N/A	N/A	N/A	85.89	79.27	N/A	
M-2	02/11/98	6.50	N/A	N/A	N/A	85.89	79.39	N/A	Ditch empty
M-2	02/19/98	6.70	N/A	N/A	N/A	85.89	79.19	N/A	Ditch empty
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

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	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
M-2	01/19/00	4.21	N/A	N/A	N/A	5586.81	5582.60	N/A	
M-2	03/27/00	5.21	N/A	N/A	N/A	5586.81	5581.60	N/A	Water running in ditch
M-2	04/27/00	4.80	N/A	N/A	N/A	5586.81	5582.01	N/A	Water running in ditch
M-2	05/30/00	3.03	N/A	N/A	N/A	5586.81	5583.78	N/A	Water running in ditch
M-2	06/22/00	3.42	N/A	N/A	N/A	5586.81	5583.39	N/A	Water running in ditch
M-2	08/22/00	3.49	N/A	N/A	N/A	5586.81	5583.32	N/A	Water running in ditch
M-2	11/17/00	3.75	N/A	N/A	N/A	5586.81	5583.06	N/A	Water running in ditch
M-2	02/14/01	4.12	N/A	N/A	N/A	5586.81	5582.69	N/A	Water running in ditch
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	

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	04/23/97	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
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

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	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-3	01/19/00	4.99	N/A	N/A	N/A	5588.71	5583.72	N/A	New Survey
M-3	02/24/00	5.50	N/A	N/A	N/A	5588.71	5583.21	N/A	Water running in ditch
M-3	03/27/00	6.52	N/A	N/A	N/A	5588.71	5582.19	N/A	Water running in ditch
M-3	04/27/00	4.75	N/A	N/A	N/A	5588.71	5583.96	N/A	Water running in ditch
M-3	05/30/00	4.10	N/A	N/A	N/A	5588.71	5584.61	N/A	Water running in ditch
M-3	06/22/00	4.00	N/A	N/A	N/A	5588.71	5584.71	N/A	Water running in ditch
M-3	07/25/00	3.41	N/A	N/A	N/A	5588.71	5585.30	N/A	Water running in ditch
M-3	08/22/00	3.00	N/A	N/A	N/A	5588.71	5585.71	N/A	Water running in ditch
M-3	11/17/00	3.62	N/A	N/A	N/A	5588.71	5585.09	N/A	Water running in ditch
M-3	02/14/01	4.40	N/A	N/A	N/A	5588.71	5584.31	N/A	Water running in ditch
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	

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	06/11/97	3.45	N/A	N/A	N/A	88.01	84.56	N/A	
M-4	06/18/97	3.79	N/A	N/A	N/A	88.01	84.22	N/A	
M-4	06/27/97	3.79	N/A	N/A	N/A	88.01	84.22	N/A	
M-4	07/02/97	3.69	N/A	N/A	N/A	88.01	84.32	N/A	
M-4	07/09/97	3.07	N/A	N/A	N/A	88.01	84.94	N/A	
M-4	08/21/97	2.86	N/A	N/A	N/A	88.01	85.15	N/A	
M-4	11/10/97	4.41	N/A	N/A	N/A	88.01	83.60	N/A	
M-4	01/21/98	5.48	N/A	N/A	N/A	88.01	82.53	N/A	
M-4	01/28/98	5.59	N/A	N/A	N/A	88.01	82.42	N/A	
M-4	02/05/98	5.76	N/A	N/A	N/A	88.01	82.25	N/A	
M-4	02/11/98	5.86	N/A	N/A	N/A	88.01	82.15	N/A	Ditch empty
M-4	02/19/98	6.08	N/A	N/A	N/A	88.01	81.93	N/A	Ditch empty
M-4	02/25/98	6.17	N/A	N/A	N/A	88.01	81.84	N/A	Ditch empty
M-4	03/04/98	6.37	N/A	N/A	N/A	88.01	81.64	N/A	Ditch empty
M-4	03/11/98	6.42	N/A	N/A	N/A	88.01	81.59	N/A	Ditch empty
M-4	03/18/98	6.21	N/A	N/A	N/A	88.01	81.80	N/A	Ditch empty
M-4	03/25/98	6.12	N/A	N/A	N/A	88.01	81.89	N/A	Ditch empty
M-4	04/02/98	4.54	N/A	N/A	N/A	88.01	83.47	N/A	Ditch running
M-4	04/08/98	3.97	N/A	N/A	N/A	88.01	84.04	N/A	Ditch running
M-4	04/15/98	3.73	N/A	N/A	N/A	88.01	84.28	N/A	Ditch running
M-4	04/23/98	3.34	N/A	N/A	N/A	88.01	84.67	N/A	Ditch running
M-4	04/29/98	3.42	N/A	N/A	N/A	88.01	84.59	N/A	Ditch running
M-4	05/08/98	2.98	N/A	N/A	N/A	88.01	85.03	N/A	Ditch running
M-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

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	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
M-4	01/19/00	3.41	N/A	N/A	N/A	5588.93	5585.52	N/A	New Survey
M-4	02/24/00	4.05	N/A	N/A	N/A	5588.93	5584.88	N/A	Water running in ditch
M-4	03/27/00	4.89	N/A	N/A	N/A	5588.93	5584.04	N/A	Water running in ditch
M-4	04/27/00	3.64	N/A	N/A	N/A	5588.93	5585.29	N/A	Water running in ditch
M-4	05/30/00	2.57	N/A	N/A	N/A	5588.93	5586.36	N/A	Water running in ditch
M-4	06/22/00	2.58	N/A	N/A	N/A	5588.93	5586.35	N/A	Water running in ditch
M-4	07/25/00	2.15	N/A	N/A	N/A	5588.93	5586.78	N/A	Water running in ditch
M-4	08/22/00	1.90	N/A	N/A	N/A	5588.93	5587.03	N/A	Water running in ditch
M-4	11/17/00	2.72	N/A	N/A	N/A	5588.93	5586.21	N/A	Water running in ditch
M-4	02/14/01	3.01	N/A	N/A	N/A	5588.93	5585.92	N/A	Water running in ditch
M-5	02/19/97	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	

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	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
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
M-5	01/19/00	4.57	N/A	N/A	N/A	5587.74	5583.17	N/A	New Survey

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

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-5	03/27/00	6.06	N/A	N/A	N/A	5587.74	5581.68	N/A	Water running in ditch
M-5	04/27/00	5.02	N/A	N/A	N/A	5587.74	5582.72	N/A	Water running in ditch
M-5	05/30/00	3.69	N/A	N/A	N/A	5587.74	5584.05	N/A	Water running in ditch
M-5	06/22/00	3.66	N/A	N/A	N/A	5587.74	5584.08	N/A	Water running in ditch
M-5	08/22/00	3.80	N/A	N/A	N/A	5587.74	5583.94	N/A	Water running in ditch
M-5	11/17/00	3.65	N/A	N/A	N/A	5587.74	5584.09	N/A	Water running in ditch
M-5	02/14/01	4.30	N/A	N/A	N/A	5587.74	5583.44	N/A	Water running in ditch
M-6	01/19/00	8.94	N/A	N/A	N/A	5590.36	5581.42	N/A	Water running in ditch
M-6	03/27/00	9.27	N/A	N/A	N/A	5590.36	5581.09	N/A	Water running in ditch
M-6	04/27/00	8.16	N/A	N/A	N/A	5590.36	5582.20	N/A	Water running in ditch
M-6	05/30/00	7.29	N/A	N/A	N/A	5590.36	5583.07	N/A	Water running in ditch
M-6	06/22/00	6.71	N/A	N/A	N/A	5590.36	5583.65	N/A	Water running in ditch
M-6	08/22/00	6.35	N/A	N/A	N/A	5590.36	5584.01	N/A	Water running in ditch
M-6	11/17/00	6.88	N/A	N/A	N/A	5590.36	5583.48	N/A	Water running in ditch
M-6	02/14/01	7.40	N/A	N/A	N/A	5590.36	5582.96	N/A	Water running in ditch

Table 2 - Summary of Groundwater Analytical Results

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	09/07/1993	991	164	113	1111	2379	No	ND	NA
R-1	N31056	10/04/1993	1280	1328	74	799	3481	No	1"	NA
R-1	N31240	11/10/1993	242	322	15.0	93.9	673	No	ND	NA
R-1	N31384	12/15/1993	328	411	26.6	196	962	No	ND	NA
R-1	940026	01/12/1994	1830	1965	90.3	1053	4938	No	17"	NA
R-1	940233	02/09/1994	1255	1504	42.3	730	3531	No	32"	NA
R-1	940491	03/07/1994	7600	8500	280	2700	19080	Yes	4"	NA
R-1	N/A	05/17/1994	No Test	No Test	No Test	No Test	NoTest	No	10"	NA
R-1	941003	06/13/1994	1450	1930	70.0	944	4394	No	11"	NA
R-1	N/A	09/07/1994	No Test	No Test	No Test	No Test	No Test	No	2"	NA
R-1	941619	12/15/1994	1890	2130	105.0	990	5115	No	TR	NA
R-1	N/A	08/25/1995	No Test	No Test	No Test	No Test	No Test	No	TR	NA
R-1	951178	11/02/1995	2330	2400	108	946	5784	No	ND	NA
R-1	N/A	02/05/1996	No Test	No Test	No Test	No Test	No Test	Yes	0.24"	NA
R-1	N/A	05/28/1996	No Test	No Test	No Test	No Test	No Test	No	4.8"	NA
R-1	960684	08/06/1996	2970	3080	130	1200	7380	No	TR	NA
R-1	960900	10/28/1996	1690	1970	60.8	800	4520	No	ND	NA
R-1	961007	11/20/1996	1240	1540	61.9	600	3450	No	ND	NA
R-1	N/A	02/19/1997	No Test	No Test	No Test	No Test	No Test	No	29.76"	NA
R-1	N/A	02/24/1999	No Test	No Test	No Test	No Test	No Test	No	.09'	NA
R-1	N/A	05/25/1999	No Test	No Test	No Test	No Test	No Test	No	TR	NA
R-1	JQ0001R01-1	01/20/2000	2500	3800	180	1900	8380	NO	NO	NA
R-1	JAQ-0005-R1	05/31/2000	2300	1000	120	2000	5420	NO	TR	NA
R-1	JAQ-0006-R1	06/26/2000	2400	690	150	2000	5420	No	TR	NA
R-1	JAQ-0007-R1	07/26/2000	4900	2900	150	3100	11050	No	TR	NA
R-1	JAQ-0008-R1	08/23/2000	2500	1400	180	2200	6280	No	TR	NA
R-1	JAQ-0011-R1	11/20/2000	3500	2700	210	2900	9310	No	TR	NA
R-1	JAQ-0102-R1	02/15/2001	120	<10	<10	190	310	No	NO	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	N30970	09/07/1993	278	651	59.0	538	1526	No	ND	NA
R-2	N31057	10/04/1993	509	789	73.0	741	2112	No	ND	NA
R-2	N31241	11/10/1993	284	470	38.0	401	1193	No	ND	NA
R-2	N31385	12/15/1993	529	864	65.3	709	2167	No	1"	NA
R-2	940027	01/12/1994	1722	2501	150	1702	6075	No	24"	NA
R-2	940234	02/09/1994	2806	3667	89.5	1520	8083	No	26"	NA
R-2	940492	03/07/1994	5600	6800	290	2700	15390	Yes	4"	NA
R-2	N/A	05/17/1994	No Test	No Test	No Test	No Test	No Test	No	7"	NA
R-2	941004	06/13/1994	3210	3790	139	1670	8809	No	7"	NA
R-2	N/A	09/07/1994	No Test	No Test	No Test	No Test	No Test	No	ND	NA
R-2	941620	12/15/1994	1140	2200	148	1520	5008	No	0.6"	NA
R-2	N/A	08/25/1995	No Test	No Test	No Test	No Test	No Test	No	TR	NA
R-2	951179	11/02/1995	1250	2030	116	1010	4406	No	TR	NA
R-2	N/A	02/05/1996	No Test	No Test	No Test	No Test	No Test	Yes	2.52	NA
R-2	N/A	05/28/1996	No Test	No Test	No Test	No Test	No Test	No	2.04"	NA
R-2	960685	08/06/1996	2610	3960	165	1540	8275	No	0.72"	NA
R-2	960901	10/28/1996	1100	2300	85.4	1100	4585	No	0.96"	NA
R-2	961009	11/20/1996	428	1340	87.3	821	2680	No	0.48"	NA
R-2	N/A	02/19/1997	No Test	No Test	No Test	No Test	No Test	No	NA	NA
R-2	N/A	02/24/1999	No Test	No Test	No Test	No Test	No Test	No	0.07	NA
R-2	N/A	05/25/1999	No Test	No Test	No Test	No Test	No Test	No	TR	NA
R-2	JQ0001R02-1	01/20/2000	1200	2000	<130	1500	4700	No	NO	NA
R-2	JAQ-0005-R2	05/31/2000	2300	3200	280	3000	8780	No	TR	NA
R-2	JAQ-0006-R2	06/26/2000	1300	1300	79	1100	3779	No	TR	NA
R-2	JAQ-0007-R2	07/26/2000	3600	3200	150	2300	9250	No	TR	NA
R-2	JAQ-0008-R2	08/23/2000	1600	1500	82	1100	4282	No	TR	NA
R-2	JAQ-0011-R2	11/20/2000	770	1300	170	1500	3740	No	TR	NA
R-2	JAQ-0102-R2	02/15/2001	620	400	43	440	1503	No	0.03	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	N30971	09/07/1993	<2.0	61.4	22.0	207	290	No	ND	NA
R-3	N31058	10/04/1993	21	179	32.0	310	542	No	ND	NA
R-3	N31242	11/10/1993	6.19	27.7	10.4	89.2	134	No	ND	NA
R-3	N31386	12/15/1993	26	88.4	19.4	178	312	No	ND	NA
R-3	940028	01/12/1994	4.4	2.9	2.7	18	28	No	ND	NA
R-3	940235	02/09/1994	<2.0	10.9	8.3	59.6	79	No	ND	NA
R-3	940493	03/07/1994	7.7	43	24	220	295	Yes	ND	NA
R-3	N/A	05/17/1994	No Test	No Test	No Test	No Test	No Test	No	ND	NA
R-3	941005	06/13/1994	3.03	41.4	18.4	188	251	No	ND	NA
R-3	941259	09/07/1994	<2.5	18	6.9	67.9	93	No	ND	NA
R-3	941621	12/15/1994	11.7	12.2	12.4	114	150	No	ND	NA
R-3	950099	02/09/1995	7.36	2.7	2.68	20.8	34	Yes	ND	NA
R-3	950562	05/08/1995	16.6	11.7	13.9	126	168	No	ND	NA
R-3	950896	08/25/1995	<2.5	15.2	13.6	101	130	No	ND	NA
R-3	951180	11/02/1995	<2.5	14.0	9.3	82	105	No	ND	NA
R-3	960095	02/05/1996	5.34	14.0	12.8	108	140	Yes	ND	NA
R-3	960479	05/28/1996	1.05	18.7	22.9	203	246	No	ND	NA
R-3	960686	08/06/1996	1.24	24.7	25.9	236	288	No	ND	NA
R-3	960902	10/28/1996	<1.0	10.7	12.6	109	132	No	ND	NA
R-3	961010	11/20/1996	<1.0	12.5	12.4	114	139	No	ND	NA
R-3	970124	02/19/1997	2.12	1.9	2.29	12.6	19	Yes	ND	NA
R-3	970501	05/28/1997	<1.0	15.3	13.5	130	159	No	ND	<1.2
R-3	970917	08/21/1997	<1.0	20.8	18.6	176	215	No	ND	<1.2
R-3	971196	11/10/1997	<1.0	13.6	17.2	149	180	No	ND	<1.2
R-3	980164	02/18/1998	<1.0	<1.0	<1.0	<3	<6	Yes	ND	<1.2
R-3	980405	05/19/1998	<1.0	11.9	12.5	125	150	No	ND	NA
R-3	990254	05/25/1999	0.5	3.3	6.3	26	36	Yes	ND	NA
R-3	JQ0001R03-1	01/20/2000	<0.5	<0.5	0.5	5.2	5.7	No	ND	NA
R-3	JAQ-0005-R3	05/31/2000	1.0	1.4	0.5	5.4	8.3	No	ND	NA
R-3	JAQ-0006-R3	06/26/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
R-3	JAQ-0007-R3	07/26/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
R-3	JAQ-0008-R3	08/23/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
R-3	JAQ-0011-R3	11/20/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
R-3	JAQ-0102-R3	02/15/2001	2.2	<0.5	<0.5	<0.5	2.2	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	N30972	09/07/1993	104	267	39.9	370	781	No	ND	NA
R-4	N31060	10/04/1993	118	266	41	364	789	No	ND	NA
R-4	N31243	11/10/1993	93.6	132	40.4	347	613	No	ND	NA
R-4	N31387	12/15/1993	102	161	48.4	418	729	No	ND	NA
R-4	940030	01/12/1994	124	101	38.5	353	617	No	ND	NA
R-4	940237	02/09/1994	120	51.4	20.8	150	342	No	ND	NA
R-4	940494	03/07/1994	150	63	20	190	423	Yes	ND	NA
R-4	N/A	05/17/1994	No Test	No Test	No Test	No Test	No Test	No	ND	NA
R-4	941007	06/13/1994	179	60.6	17.2	176	433	No	ND	NA
R-4	941260	09/07/1994	238	102	26	218	584	No	ND	NA
R-4	941622	12/15/1994	222	63.3	26.9	213	525	No	ND	NA
R-4	950100	02/09/1995	273	61	20.4	165	519	Yes	ND	NA
R-4	950564	05/08/1995	278	251	23.1	220	772	No	ND	NA
R-4	950897	08/25/1995	646	278	50.8	544	1519	No	ND	NA
R-4	951181	11/02/1995	343	60.4	35.1	284	723	No	ND	NA
R-4	960097	02/05/1996	218	43.3	23.1	200	484	Yes	ND	NA
R-4	960481	05/28/1996	716	199.0	36.6	394	1346	No	ND	NA
R-4	960687	08/06/1996	384	156.0	24	275	839	No	ND	NA
R-4	960904	10/28/1996	320	53.4	20.1	237	631	No	ND	NA
R-4	9601011	11/20/1996	289	31.2	19.3	220	560	No	ND	NA
R-4	970125	02/19/1997	162	65.9	34.4	337	599	Yes	ND	NA
R-4	970503	05/28/1997	189	92.5	13.3	144	439	No	ND	<1.2
R-4	970918	08/21/1997	343	377.0	45.5	408	1174	No	ND	<1.2
R-4	971197	11/10/1997	542	129.0	31.1	267	969	No	ND	<1.2
R-4	980166	02/18/1998	98.0	15.9	10.0	79.3	203	Yes	ND	<1.2
R-4	980406	05/19/1998	916.0	244.0	38.1	304	1502	No	ND	NA
R-4	990255	05/25/1999	110.0	63.0	15.0	144	332	Yes	ND	NA
R-4	JQ0001R04-1	01/20/2000	280	89	60	690	1,119	No	ND	NA
R-4	JAQ-0005-R4	05/31/2000	960	980	29	1900	3869	No	ND	NA
R-4	JAQ-0006-R4	06/26/2000	950	1000	43	2500	4493	No	ND	NA
R-4	JAQ-0007-R4	07/26/2000	520	400	50	1600	2570	No	ND	NA
R-4	JAQ-0008-R4	08/23/2000	1500	1800	110	1800	5210	No	ND	NA
R-4	JAQ-0011-R4	11/20/2000	590	580	110	1800	3080	No	ND	NA
R-4	JAQ-0201-R4	02/15/2001	19	<10	<10	36	55	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-5	N30973	09/07/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	N31061	10/04/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	N31244	11/10/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	N31388	12/15/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	940031	01/12/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	940238	02/09/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	940496	03/07/1994	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND	NA
R-5	N/A	05/17/1994	No Test	No Test	No Test	No Test	No Test	No	ND	NA
R-5	941008	06/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	941261	09/07/1994	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	941623	12/15/1994	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	950102	02/09/1995	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
R-5	950565	05/08/1995	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	950898	08/25/1995	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	951182	11/02/1995	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	960098	02/05/1996	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
R-5	960482	05/28/1996	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
R-5	960689	08/06/1996	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
R-5	960905	10/28/1996	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
R-5	961012	11/20/1996	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
R-5	970127	02/19/1997	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	NA
R-5	970504	05/28/1997	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
R-5	970919	08/21/1997	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
R-5	971199	11/10/1997	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
R-5	980167	02/18/1998	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	<1.2
R-5	980407	05/19/1998	<1.0	<1.0	<1.0	<3.0	<6	No	ND	NA
R-5	990256	05/25/1999	0.5	0.5	0.5	1.5	3	Yes	ND	NA
R-5	JQ0001R05-1	01/20/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
R-5	JAQ-0005-R5	05/31/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
R-5	JAQ-0006-R5	06/26/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
R-5	JAQ-0008-R5	08/23/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
R-5	JAQ-0011-R5	11/20/2000	<0.5	<0.5	<0.5	0.9	0.9	No	ND	NA
R-5	JAQ-0201-R5	02/15/2001	<0.5	<0.5	<0.5	<0.5	ND	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-6	JQ0001R06-1	01/20/2000	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**	**No**	**ND**	**NA**
R-6	JAQ-0005-R6	**05/31/2000**	<0.5	**<0.5**	**<0.5**	**<0.5**	**ND**	**No**	**ND**	**NA**
R-6	JAQ-0006-R6	**06/26/2000**	<0.5	**<0.5**	**<0.5**	**<0.5**	**ND**	**No**	**ND**	**NA**
R-6	JAQ-0008-R6	08/23/2000	<0.5	<0.5	2.6	13	15.6	No	**ND**	**NA**
R-6	JAQ-0011-R6	11/20/2000	**<0.5**	**<0.5**	**<0.5**	0.5	0.5	No	**ND**	**NA**
R-6	JAQ-0201-R6	02/15/2001	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**	**No**	**ND**	**NA**

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
M-1	N30974	09/08/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	N31062	10/05/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	N31245	11/11/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	N31389	12/16/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	940032	01/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	940239	02/10/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	940497	03/07/1994	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND	NA
M-1	N/A	05/17/1994	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-1	941009	06/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	941262	09/07/1994	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	941624	12/15/1994	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	950103	02/09/1995	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-1	950566	05/08/1995	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	950899	08/25/1995	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	951183	11/02/1995	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	960099	02/05/1996	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-1	960483	05/28/1996	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-1	960690	08/06/1996	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-1	960906	10/28/1996	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-1	961013	11/20/1996	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-1	970128	02/19/1997	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	NA
M-1	970505	05/28/1997	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-1	970920	08/21/1997	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-1	971200	11/10/1997	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-1	980168	02/18/1998	5.08	<1.0	<1.0	<3.0	N/A	Yes	ND	<1.2
M-1	980408	05/19/1998	<1.0	<1.0	<1.0	<3.0	<6.0	No	ND	<0.1
M-1	990257	05/25/1999	0.5	0.5	0.5	1.5	3	Yes	ND	0.05
M-1	JQ0001MO-1-1	01/19/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-1	JAQ-0005-MW1	05/30/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-1	JAQ-0006-MW1	06/22/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-1	JAQ-0008-M1	08/22/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-1	JAQ-0011-M1	11/17/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-1	JAQ-0201-M1	02/14/2001	10	<0.5	<0.5	<0.5	10	No	ND	NA

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
M-2	N30975	09/08/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	N31063	10/05/1993	2.0	2.0	<2.0	<2.0	4.0	No	ND	NA
M-2	N31246	11/11/1993	2.3	2.0	<2.0	<2.0	4.3	No	ND	NA
M-2	N31390	12/16/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	940033	01/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	940240	02/10/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	940498	03/07/1994	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND	NA
M-2	N/A	05/17/1994	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-2	941010	06/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	941263	09/07/1994	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	941625	12/15/1994	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	950104	02/09/1995	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-2	950567	05/05/1995	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	950900	08/25/1995	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	951184	11/02/1995	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	960100	02/05/1996	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-2	960484	05/28/1996	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-2	960691	08/06/1996	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-2	960907	10/28/1996	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-2	961014	11/20/1996	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-2	970129	02/19/1997	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	NA
M-2	970506	05/28/1997	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-2	970921	08/21/1997	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-2	971201	11/10/1997	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-2	980169	02/18/1998	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	<1.2
M-2	980409	05/19/1998	<1.0	<1.0	<1.0	<3.0	<6	No	ND	<0.1
M-2	990258	05/25/1999	0.5	0.5	0.5	1.5	3	Yes	ND	0.05
M-2	JQ0001MO-2-1	01/19/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-2	JAQ-0005-MW2	05/30/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-2	JAQ-0006-MW2	06/22/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-2	JAQ-0008-M2	08/22/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-2	JAQ-0011-M2	11/20/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-2	JAQ-0201-M2	02/14/2001	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
M-3	N30976	09/08/1993	116	<2.0	3.0	37.6	157	No	ND	NA
M-3	N31064	10/05/1993	306	<2.0	4.0	19	329	No	ND	NA
M-3	N31247	11/11/1993	8.4	5.3	<2.0	2.6	16	No	ND	NA
M-3	N31391	12/16/1993	42	<2.0	<2.0	<2.0	42	No	ND	NA
M-3	940034	01/13/1994	19	2.1	<2.0	<2.0	21	No	ND	NA
M-3	940241	02/10/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-3	940499	03/07/1994	<0.5	<0.5	<0.5	2.5	3	Yes	ND	NA
M-3	N/A	05/17/1994	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-3	941011	06/13/1994	3.65	<2.0	<2.0	<2.0	4	No	ND	NA
M-3	941264	09/07/1994	2.87	<2.5	<2.5	2.5	5	No	ND	NA
M-3	941626	12/15/1994	<2.5	<2.5	<2.5	5.61	6	No	ND	NA
M-3	950105	02/09/1995	11.4	<2.5	<2.5	<2.5	11	Yes	ND	NA
M-3	950568	05/08/1995	180	67.2	<2.5	53.9	301	No	ND	NA
M-3	950901	08/25/1995	11.8	<2.5	<2.5	16.8	29	No	ND	NA
M-3	951185	11/02/1995	<2.5	<2.5	<2.5	5.03	5	No	ND	NA
M-3	960101	02/05/1996	236	<2.5	5.77	22.2	264	Yes	ND	NA
M-3	960485	05/28/1996	88.4	<1.0	5.93	20.3	115	No	ND	NA
M-3	960692	08/06/1996	96.4	<1.0	2.5	3.27	102	No	ND	NA
M-3	960908	10/29/1996	17.4	<1.0	1.55	2.23	21	No	ND	NA
M-3	961015	11/20/1996	70.2	<1.0	1.89	<3	72	No	ND	NA
M-3	970130	02/19/1997	2.44	<1.0	2.61	7.43	12	Yes	ND	NA
M-3	970507	05/28/1997	38	6.1	<1	13.5	58	No	ND	20.1
M-3	970922	08/21/1997	<1	<1	<1	7.68	8	No	ND	<1.2
M-3	971202	11/10/1997	<1	<1	<1	7.68	8	No	ND	<1.2
M-3	980170	02/18/1998	<1	<1	<1	<3	<6	Yes	ND	<1.2
M-3	980410	05/19/1998	26.7	<1	<1	2.52	29	No	ND	0.32
M-3	980589	08/26/1998	<1	2.8	<1	<3	3	No	ND	0.30
M-3	980786	11/05/1998	1.93	3.2	<1	<3	5	No	ND	NA
M-3	990047	02/23/1999	<1	<1	<1	<3	<6	No	ND	<1
M-3	990259	05/25/1999	4.2	0.8	0.5	1.5	7	No	ND	0.05
M-3	990352	08/05/1999	<1	1.8	<1	<3	<6	No	ND	<.1
M-3	990454	11/12/1999	6	2.2	1.7	5.4	15	No	ND	ND
M-3	JQ0001MO-3-1	01/19/2000	4.1	2.8	1.6	3.7	12.2	No	ND	NA
M-3	JAQ-0002MW3	02/24/2000	30	21	2.3	9.4	62.7	No	ND	NA

M-3	JAQ-0005-MW3	05/30/2000	2.1	<0.5	0.9	2.2	5.2	Yes	ND	<0.1
M-3	JAQ-0006-MW3	06/22/2000	0.6	<0.5	<0.5	<0.5	0.6	No	ND	0.14
M-3	JAQ-0007-MW3	07/25/2000	<0.5	<0.5	<0.5	1.1	1.1	No	ND	NA
M-3	JAQ-0008-MW3	08/22/2000	0.6	<0.5	<0.5	2.2	2.8	No	ND	<0.05
M-3	JAQ-0011-M3	11/20/2000	1.1	<0.5	<0.5	3.4	4.5	No	ND	<0.05
M-3	JAQ-0201-M3	02/14/2001	0.6	<0.5	<0.5	0.6	1.2	No	ND	<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-4	N30977	09/08/1993	213	13.3	58	519	803	No	ND	NA
M-4	N31065	10/05/1993	302	2.0	55	395	754	No	ND	NA
M-4	N31248	11/11/1993	234	2.0	56	383	675	No	ND	NA
M-4	N31392	12/16/1993	171	<2.0	34.3	244	449	No	ND	NA
M-4	940035	01/13/1994	175	2.5	38	288	504	No	ND	NA
M-4	940242	02/10/1994	137	<2.0	29.8	192	359	No	ND	NA
M-4	940500	03/07/1994	120	<2.5	27	220	367	Yes	ND	NA
M-4	N/A	05/17/1994	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-4	941012	06/13/1994	151	<2.0	28.4	246	425	No	ND	NA
M-4	941265	09/07/1994	145	<2.5	24.1	231	400	No	ND	NA
M-4	941628	12/15/1994	184	<2.5	22.3	215	421	No	ND	NA
M-4	950106	02/09/1995	160	<2.5	19.6	186	366	Yes	ND	NA
M-4	950569	05/08/1995	108	<2.5	11.7	119	239	No	ND	NA
M-4	950902	08/25/1995	29.3	<2.5	13	116	158	No	ND	NA
M-4	951187	11/02/1995	15.1	<2.5	12.9	136	164	No	ND	NA
M-4	960102	02/05/1996	33.5	<2.5	19.3	209	262	Yes	ND	NA
M-4	960486	05/28/1996	17	<1.0	8.93	93.6	120	No	ND	NA
M-4	960693	08/06/1996	2.77	<1.0	3.5	38.5	45	No	ND	NA
M-4	960909	10/29/1996	1.03	<1.0	3.66	55.5	60	No	ND	NA
M-4	961016	11/22/1996	3.28	<1.0	7.77	90.3	101	No	ND	NA
M-4	970131	02/19/1997	17.7	1.5	8.3	54	82	Yes	ND	NA
M-4	970508	05/28/1997	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	11/10/1997	44.8	<1.0	<1.0	71	116	No	ND	1.31
M-4	980171	02/18/1998	91.0	<1.0	1.1	74.9	167	Yes	ND	<1.2
M-4	980411	05/19/1998	46.6	<1.0	2.81	83.1	133	No	ND	0.21
M-4	980590	08/26/1998	51.0	2.6	2.08	45.1	101	No	ND	43.9
M-4	980787	11/05/1998	69.0	<1.0	<1.0	33	102	No	ND	NA
M-4	990048	02/23/1999	133.0	<1	1.31	59.3	194	No	ND	283
M-4	990260	05/25/1999	230.0	1.8	1.2	63	296	Yes	ND	190
M-4	990353	08/05/1999	100.0	<2	<2	15.3	115	No	ND	54.9
M-4	990455	11/12/1999	110.0	<2.5	<2.5	56	166	No	ND	57
M-4	JQ0001MO-4-1	01/19/2000	27.0	<0.5	<0.5	9.7	37.7	No	ND	NA

M-4	JAQ-0002-MW4	02/24/2000	11	<0.5	5.6	5.5	22.1	No	ND	NA
M-4	JAQ-0005-MW4	05/30/2000	38	1.1	<0.5	23	62.1	Yes	ND	<0.1
M-4	JAQ-0006-MW4	06/22/2000	44	1.6	8.9	16	70.5	No	ND	<0.1
M-4	JAQ-0007-MW4	07/25/2000	51	0.6	<0.5	13	64.6	No	ND	NA
M-4	JAQ-0008-MW4	08/22/2000	87	0.5	1.2	32	120.7	No	ND	1.66
M-4	JAQ-0011-M4	11/17/2000	99	<0.5	0.5	5.0	104.5	No	ND	2.66
M-4	JAQ-0201-M4	02/14/2001	94	<0.5	0.7	13	107.7	No	ND	3.37

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-5	N30979	09/08/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	N31066	10/05/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	N31250	11/11/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	N31393	12/16/1993	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	940036	01/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	940243	02/10/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	940501	03/07/1994	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND	NA
M-5	N/A	05/17/1994	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-5	941013	06/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	941267	09/07/1994	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	941629	12/15/1994	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	950107	02/09/1995	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-5	950570	05/08/1995	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	950904	08/25/1995	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	951188	11/02/1995	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	960103	02/05/1996	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-5	960487	05/28/1996	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-5	960694	08/06/1996	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-5	960910	10/29/1996	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-5	961017	11/21/1996	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-5	970132	02/19/1997	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	NA
M-5	970509	05/28/1997	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-5	970925	08/21/1997	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-5	971204	08/21/1997	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-5	980172	02/18/1998	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	<1.2
M-5	980413	05/19/1998	<1.0	<1.0	<1.0	<3.0	<6	No	ND	<0.1
M-5	990262	05/25/1999	0.5	0.5	0.5	1.5	3	Yes	ND	0.05
M-5	JQ0001MO-5-1	01/19/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-5	JAQ-0005-MW5	05/30/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-5	JAQ-0006-MW5	06/22/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-5	JAQ-0008-MW5	08/22/2000	43	<0.5	<0.5	<0.5	43	No	ND	NA
M-5	JAQ-0011-M5	11/17/2000	2.6	<0.5	<0.5	<0.5	2.6	No	ND	NA
M-5	JAQ-0201-M5	02/14/2001	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
M-6	JQ0001MO-6-1	1/19/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-6	JAQ-0005-MW6	05/30/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-6	JAQ-0006-MW6	06/22/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-6	JAQ-0008-MW6	08/22/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-6	JAQ-0011-M6	11/17/2000	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA
M-6	JAQ-0201-M6	02/15/2001	<0.5	<0.5	<0.5	<0.5	ND	No	ND	NA

Figures

Figure 1 Site Map

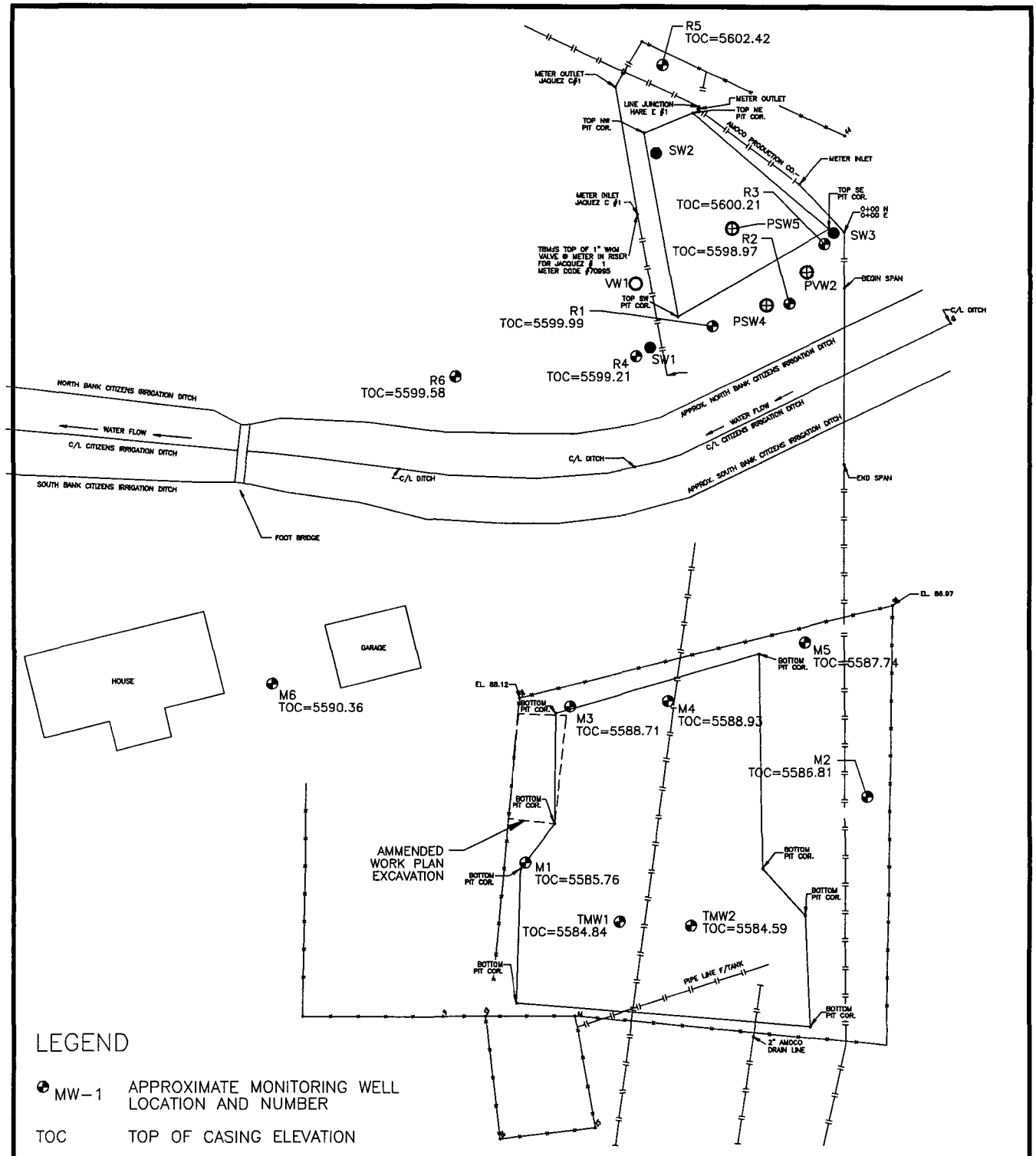
Figure 2 2000 First Quarter Contour Map

Figure 3 2000 Second Quarter Contour Map

Figure 4 2000 Third Quarter Contour Map

Figure 5 2000 Fourth Quarter Contour Map

Figure 6 2001 First Quarter Contour Map



LEGEND

MW-1	APPROXIMATE MONITORING WELL LOCATION AND NUMBER
TOC	TOP OF CASING ELEVATION
EL	GROUNDWATER ELEVATION
	APPROXIMATE GROUNDWATER GRADIENT
5487.50	GROUNDWATER POTENTIOMETRIC SURFACE
SW1	SPARGE WELL LOCATION
VW1	EXTRACTION WELL LOCATION
PVW2	PROPOSED EXTRATION WELL
PSW4	PROPOSED SPARGE WELL

0 50
FEET

PHILIP SERVICES CORP

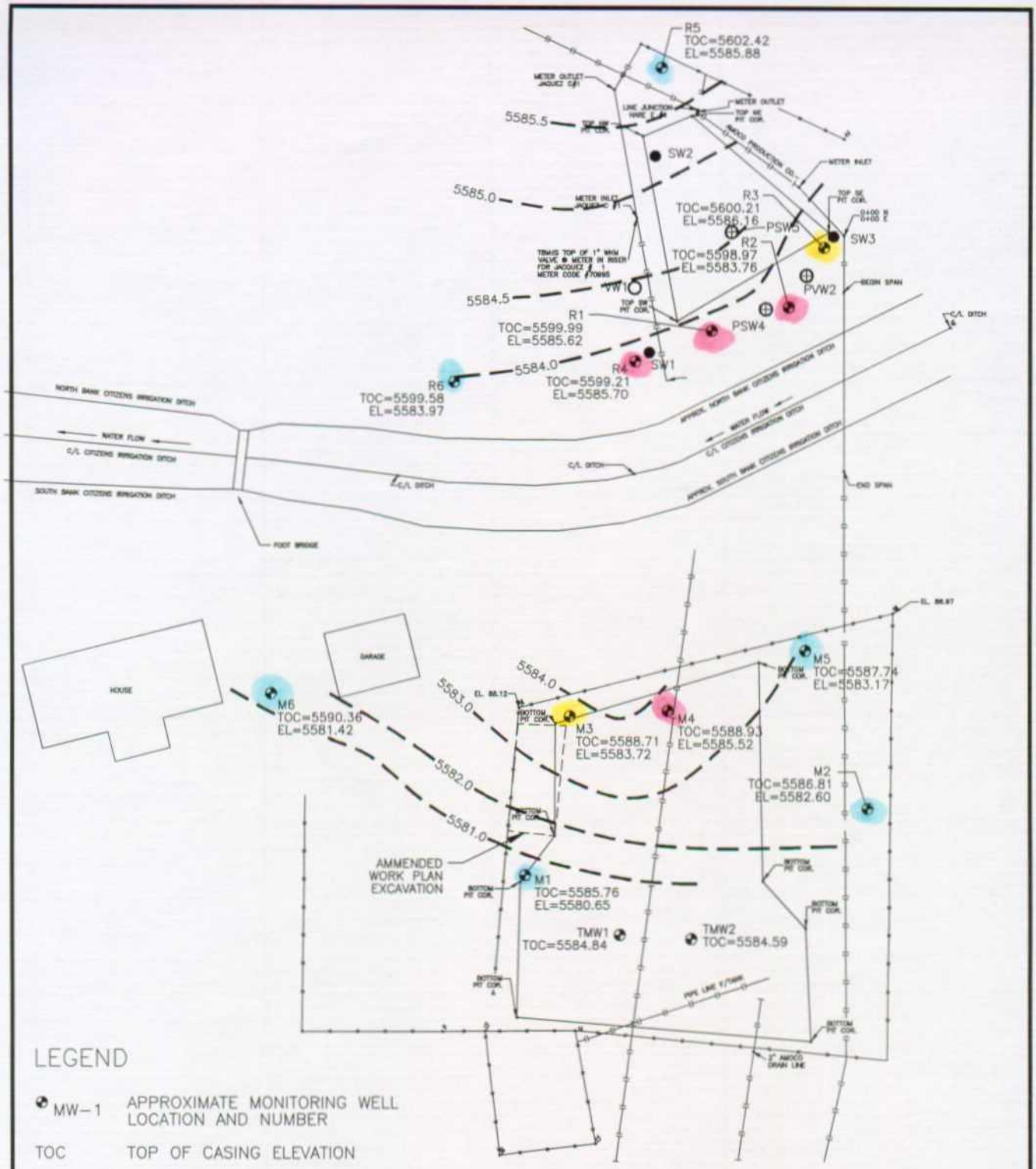
TITLE: SITE MAP

DWN:	DES.:
TMM	LW
CHKD:	APPD:
DATE: 3/16/01	REV.: 0

PROJECT NO.: 62800411
EL PASO FIELD SERVICE COMPANY

FIGURE 1

COL 628\00411A-004



LEGEND

MW-1	APPROXIMATE MONITORING WELL LOCATION AND NUMBER
TOC	TOP OF CASING ELEVATION
EL	GROUNDWATER ELEVATION
	APPROXIMATE GROUNDWATER GRADIENT
5487.50	GROUNDWATER POTENTIOMETRIC SURFACE
SW1	SPARGE WELL LOCATION
VW1	EXTRACTION WELL LOCATION
PVW2	PROPOSED EXTRATION WELL
PSW4	PROPOSED SPARGE WELL

0 50
FEET

PHILIP SERVICES CORP

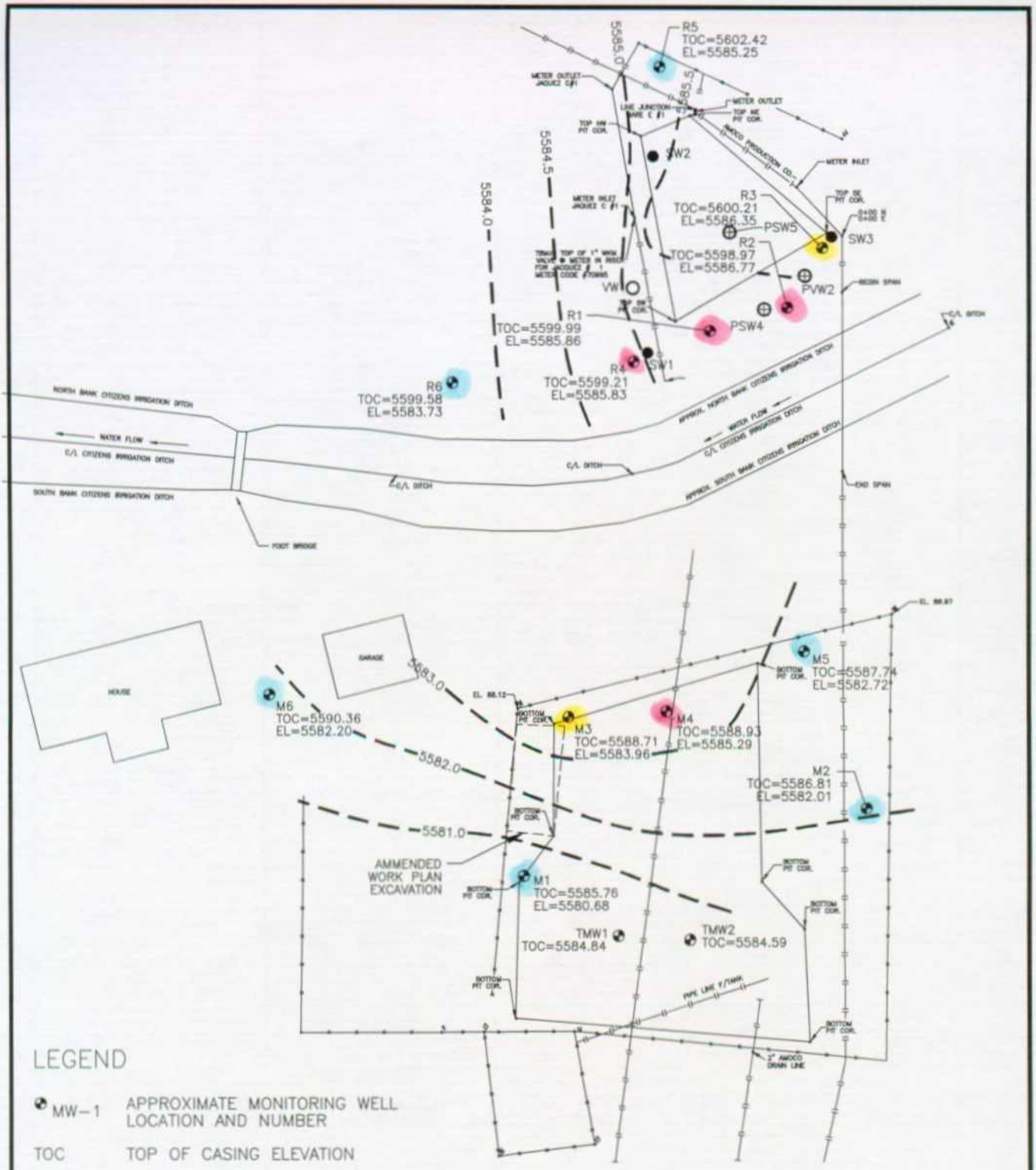
TITLE:
GROUNDWATER CONTOUR MAP
JAQUEZ COM C#1 AND
JAQUEZ COM E#1 (01/20/00)

DWN:	DES.:
TMM	LW
CHKD:	APPD:
DATE: 3/16/01	REV.: 0

PROJECT NO.: 62800411
EL PASO FIELD SERVICE COMPANY

FIGURE 2

COL. 628\00411A-005



LEGEND

MW-1	APPROXIMATE MONITORING WELL LOCATION AND NUMBER
TOC	TOP OF CASING ELEVATION
EL	GROUNDWATER ELEVATION
	APPROXIMATE GROUNDWATER GRADIENT
5487.50	GROUNDWATER POTENTIOMETRIC SURFACE
SW1	SPARGE WELL LOCATION
VW1	EXTRACTION WELL LOCATION
PVW2	PROPOSED EXTRATION WELL
PSW4	PROPOSED SPARGE WELL

0 50
FEET

PHILIP SERVICES CORP

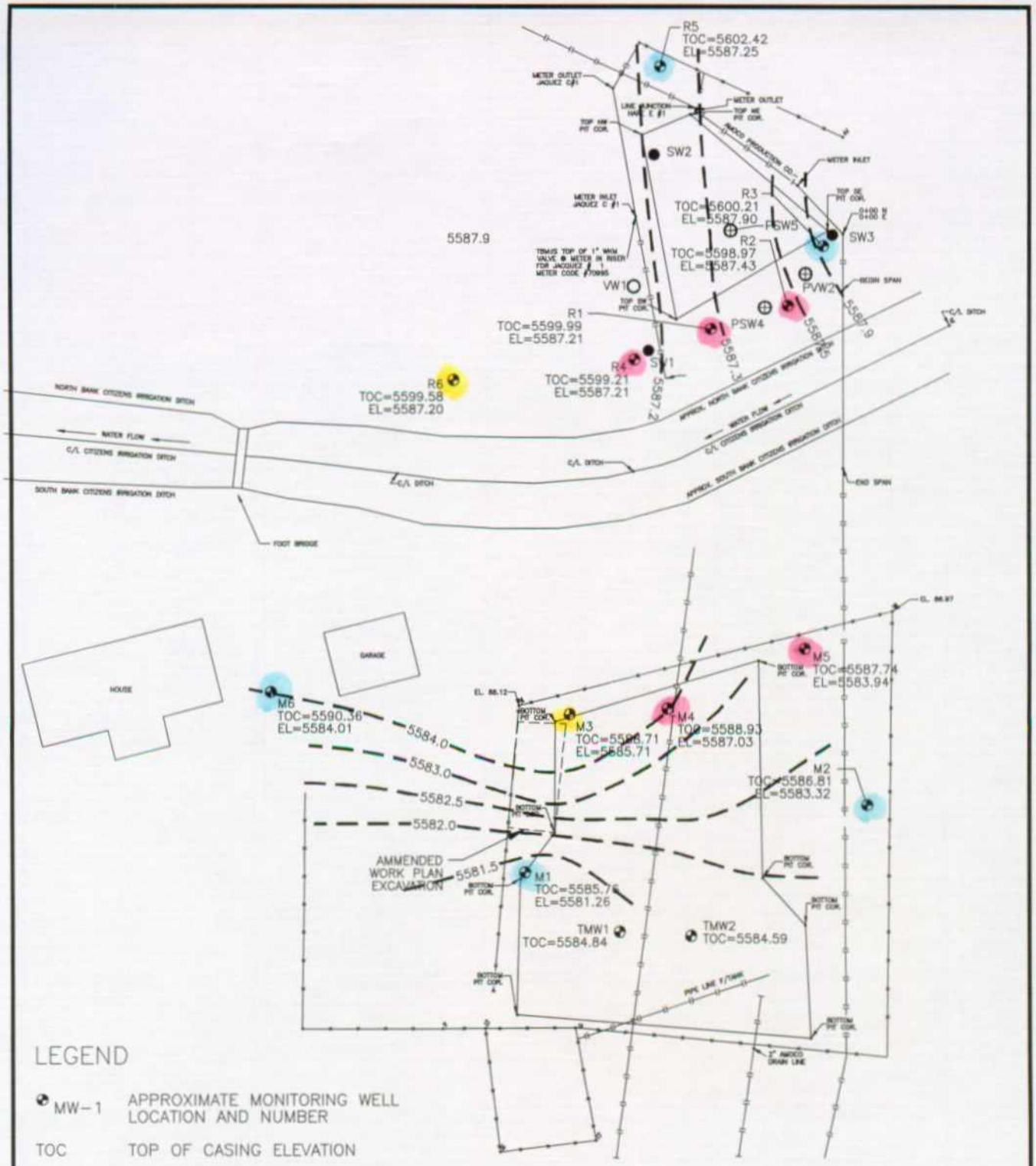
TITLE:
GROUNDWATER CONTOUR MAP
JAQUEZ COM C#1 AND
JAQUEZ COM E#1 (04/27/00)

DWN:	DES.:
TMM	LW
CHKD:	APPD:
DATE: 3/16/01	REV.: 0

PROJECT NO.: 62800411
EL PASO FIELD SERVICE COMPANY

FIGURE 3

COL 628\00411A-006



LEGEND

MW-1	APPROXIMATE MONITORING WELL LOCATION AND NUMBER
TOC	TOP OF CASING ELEVATION
EL	GROUNDWATER ELEVATION
	APPROXIMATE GROUNDWATER GRADIENT
5487.50	GROUNDWATER POTENTIOMETRIC SURFACE
SW1	SPARGE WELL LOCATION
VW1	EXTRACTION WELL LOCATION
PVW2	PROPOSED EXTRATION WELL
PSW4	PROPOSED SPARGE WELL

0 50
FEET

PHILIP SERVICES CORP

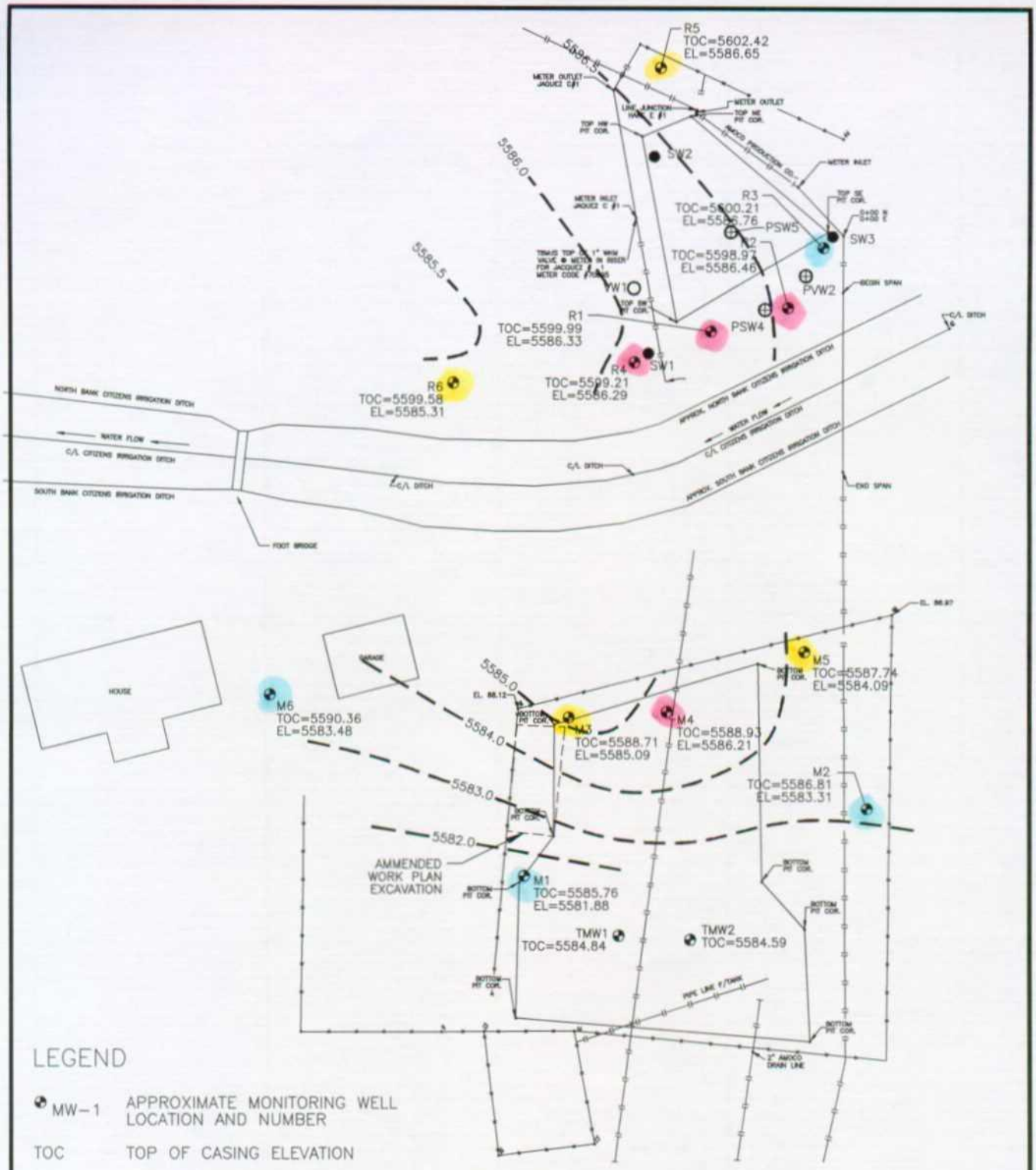
TITLE:
GROUNDWATER CONTOUR MAP
JAQUEZ COM C#1 AND
JAQUEZ COM E#1 (08/23/00)

DWN:	DES.:
TMM	LW
CHKD:	APPD:
DATE: 3/16/01	REV.: 0

PROJECT NO.: 62800411
EL PASO FIELD SERVICE COMPANY

FIGURE 4

COL_626\00411A-001



PHILIP SERVICES CORP

TITLE:

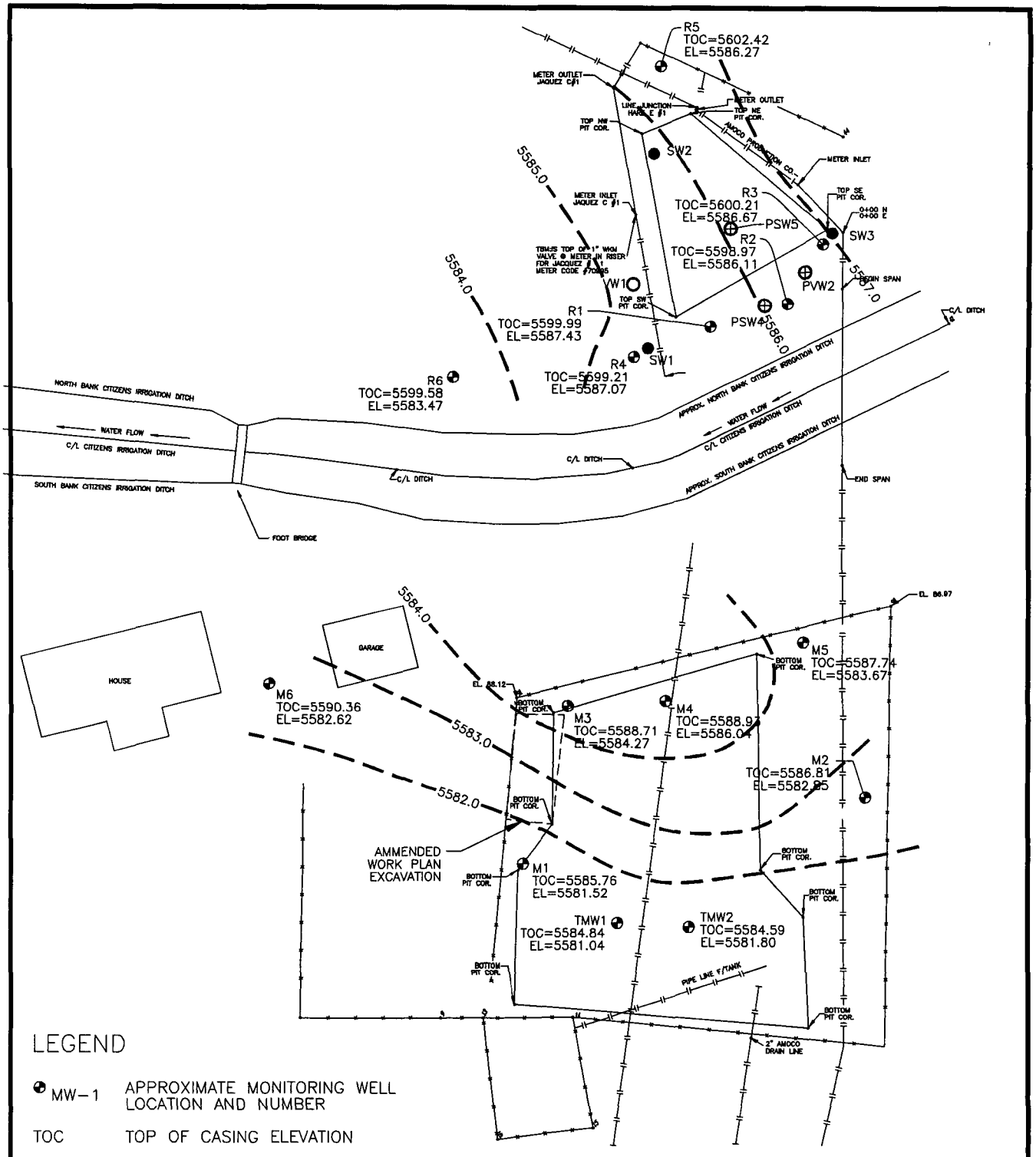
GROUNDWATER CONTOUR MAP
JAQUEZ COM C#1 AND
JAQUEZ COM E#1 (11/20/00)

DWN:	DES.:
TMM	LW
CHKD:	APPD:
DATE: 3/16/01	REV.: 0

PROJECT NO.: 62800411
EL PASO FIELD SERVICE COMPANY

FIGURE 5

COL 828\00411A-002



LEGEND

MW-1	APPROXIMATE MONITORING WELL LOCATION AND NUMBER
TOC	TOP OF CASING ELEVATION
EL	GROUNDWATER ELEVATION
	APPROXIMATE GROUNDWATER GRADIENT
5487.50	GROUNDWATER POTENTIOMETRIC SURFACE
SW1	SPARGE WELL LOCATION
VW1	EXTRACTION WELL LOCATION
PVW2	PROPOSED EXTRATION WELL
PSW4	PROPOSED SPARGE WELL

0 50
FEET

PHILIP SERVICES CORP

TITLE:
GROUNDWATER CONTOUR MAP
JAQUEZ COM C#1 AND
JAQUEZ COM E#1 (02/14/01)

DWN:	DES.:
TMM	LW
CHKD:	APPD:
DATE: 3/16/01	REV.: 0

PROJECT NO.: 62800411
EL PASO FIELD SERVICE COMPANY

FIGURE 6

COL 628\00411A-003

Appendix A – Geologic Logs and Well Completion Diagrams

RECORD OF SUBSURFACE EXPLORAT

Borehole # 2
Well # R-06
Page 1 of 2

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

Project Name Jaquez Drilling
Project Number ____ Phase ____
Project Location Jaquez Water Run Area

Elevation ____
Borehole Location ____
GWL Depth ____
Logged By C Irby
Drilled By K Pro drill
Date/Time Started 1-12-00 1345
Date/Time Completed 1-12-00 1545

Well Logged By C Irby
Personnel On-Site ____
Contractors On-Site ____
Client Personnel On-Site ____

Drilling Method Hollow Stem
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			Brown silty Sand, some clay, moist			0	0	0	Headspace (PPM) 0
5			Tan VF-FS silty fine sand.						
10			Brown silty Sand and clay medium plastic soft			0	0	0	0
15		▽							
20			Brown med-coarse Sand little silt saturated			0	0	0	0
25			TD = 22 feet BGS.						
30									
35									
40									

Comments: ____

Geologist Signature Cecil

MONITORING WELL INSTALL. ON RECORD

Borehole # 2
Well # R-06
Page 2 of 2

Philip Services Corporation
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name JAQUEZ Drilling
Project Number 62800089 Cost Code 35
Project Location JAQUEZ
BLANCO, NM

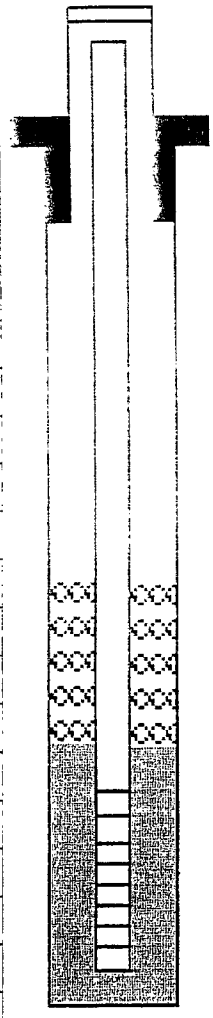
Elevation
Well Location L: S: T: R:
GWL Depth
Installed By K Padilla

On-Site Geologist C Irby
Personnel On-Site
Contractors On-Site
Client Personnel On-Site

Date/Time Started 1-12-00 1545
Date/Time Completed 1-12-00 1630

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing		+3.5'
Bottom of Protective Casing		0
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		0
Bottom of Concrete		-3'
Top of Grout		
Bottom of Grout		
Top of Well Riser	4" SCH 40	+3'
Bottom of Well Riser		
Top of Well Screen	4" SCH 40 .010 SLOT	-7'
Bottom of Well Screen	4" SCH 40	-22'
Top of Peltonite Seal		
Bottom of Peltonite Seal		
Top of Gravel Pack	10x20 Silica	-5'
Bottom of Gravel Pack	10x20 Silica	-22'
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		-15'
Total Depth of Borehole		-22'



Top of Protective Casing +3.5'
Top of Riser +3
Ground Surface 0
Top of Seal -3'
Top of Gravel Pack -5'
Top of Screen -7'
Bottom of Screen -22'
Bottom of Borehole -22'

Comments:

Geologist Signature

RECORD OF SUBSURFACE EXPLORA N

Borehole # 1
Well # M-06
Page 1 of 2

Philip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(5)6-2282 FAX (505) 326-2388

Project Name Jaquez Drilling
Project Number 628000089 Phase 35
Project Location Jaquez - Garden Area M-06

Elevation
Borehole Location JAQUEZ
GWL Depth 5.75
Logged By C Irby
Drilled By K Padilla
Date/Time Started 1-12-00 10:40 AM
Date/Time Completed 1-12-00 12:45

Well Logged By C Irby
Personnel On-Site
Contractors On-Site
Client Personnel On-Site

Drilling Method Hollow Stem 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										Headspace (ppm)
5	1		12	Tan - [illegible]			0	0		0 ppm
10	2		-	Tan - [illegible] Sandy Silty moist			0	0		0 ppm
15	3			Tan [illegible]			0	0		[illegible]
20				[illegible]			0	0		0 ppm
25				TD = 18 feet BGS.						
30										
35										
40										

Comments: no odor, no stainings, No apparent hydrocarbon impact

Geologist Signature [signature]

MONITORING WELL INSTALLATION RECORD

Phillip Environmental Services Corp.
[illegible] Road
Farmington, New Mexico 87401
(505) 32[illegible]2 FAX (505) 325-2388

Borehole # 1
Well # MW-06
Page 1 of 1

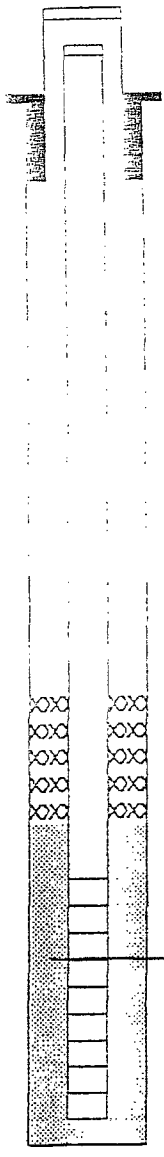
Project Name Jaquez Drilling
Project Number 6280089 Phase 35
Project Location Jaquez Garden area

Elevation
Well Location
SWL Depth 5.7'
Installed By R. Padilla
D. Padilla
Date/Time Started 1-12-00 1245
Date/Time Completed 1-12-00 1350

On-Site Geologist C. Irby
Personnel On-Site
Contractors On-Site
Client Personnel On-Site

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing	Flush Mount	0
Bottom of Protective Casing		
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout		-6"
Bottom of Grout		
Top of Well Riser		
Bottom of Well Riser		
Top of Well Screen	4" SCH 40	-3'
Bottom of Well Screen	0.010 slot	-18'
Top of Peltonite Seal		
Bottom of Peltonite Seal		
Top of Gravel Pack		-1'
Bottom of Gravel Pack	10 x 20 Silica	-18'
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		-5.75'
Total Depth of Borehole		-18'



Top of Protective Casing Flush Mount
Top of Riser
Ground Surface 0

Top of Seal -6"

Top of Gravel Pack -1'

Top of Screen -3'

5'7" water (BGS)

Flowing sand

Bottom of Screen -18
Bottom of Borehole -18

Comments: 6 sacks Sand, 2 Bags Bentonite, Flush, 3 sacks

Geologist Signature Cecil Irby

RECORD OF SUBSURFACE PLORATION

Borehole # TMW-1
Well #
Page 1 of 2

PHILIP SERVICES CORP.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Number 28000243 Phase
Project Name JAQUEZ EXCAVATION
Project Location JAQUEZ cornfield
Blanco, New Mexico.

Elevation
Borehole Location
GWL Depth
Drilled By S. STELLAVATO
Well Logged By S. STELLAVATO
Date Started 7/7/00
Date Completed 7/7/00

Drilling Method ~~4 1/4 ID HSA~~ HAND AUGER
Air Monitoring Method PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM BZ	BH	S	Drilling Conditions & Blow Counts
0				0-1' light-brown fine sandy clay, some cobbles. Dry.						Ø PPM
1				1'-2' med-brown fine sandy clay, Moist, some roots,						Ø PPM
2				2'-3' dark-gray to black fine sandy clay, Moist.						30 PPM
3				3'-3.5' light-gray fine SAND, little clay, Moist,						
4				3.5'-6' dark-gray to black fine SAND, Wet.						180 PPM
5										
6				TD = 6' BGS.						
7										
8										

Z

Comments: Groundwater at approximately 5' BGS. Black fine sand. Strong odor.

Geologist Signature Stephen Stellavato

12/18/97\Drillog

MONITOR WELL INSTALLAT')FORM

Boreh / Well # TMW-1
Page 2 of 2

Philip Services Corp.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

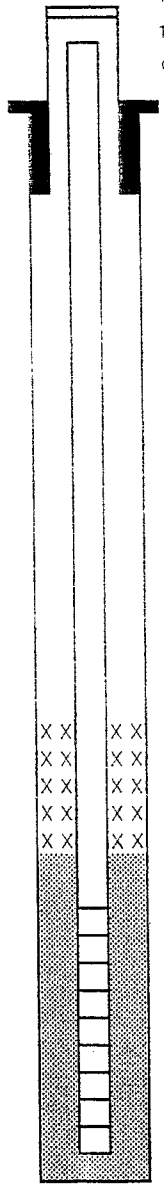
Project Name JAQUEZ EXCAVATION
Project Number 62800243 Phase
Site Location JAQUEZ Cornfield
BLANCO NM

Elevation
Well Location
GWL Depth
Installed By ~~K PADILLA~~ S STellAVATO
Date/Time Started 7/7/00 1130
Date/Time Complete 7/7/00 1208

On-Site Geologist S STellAVATO
Personnel On-Site NONE
Contractors On-Site None
Client Personnel On-Site None

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
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		
Bottom of Well Riser		
Top of Well Screen	2"	+ 2'
Bottom of Well Screen	2"	- 6'
Top of Peltonite Seal		
Bottom of Peltonite Seal		
Top of Gravel Pack		
Bottom of Gravel Pack		
Top of Natural Cave-in		
Bottom of Natural Cave-in		
Top of Groundwater		- 5'
Total Depth of Borehole		- 6'



Top of Protective Casing +2
Top of Riser (survey elev.) NA
Ground Surface NA

TEMPORARY MONITOR WELL

Top of Seal NA
Top of Gravel Pack NA
Top of Screen +2
Bottom of Screen -6'
Bottom of Borehole -6'

Commen Temporary Monitor Well.

Geologist Signature Stephen Stellavato

MWINSTAL.wk1

RECORD OF SUBSURFACE EXPLORATION

Borehole # TMW-2
Well #
Page 1 of 2

PHILIP SERVICES CORP.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Number 62800243 Phase
Project Name JAQUEZ EXCAVATION
Project Location JAQUEZ Cornfield
BLANCO, NEW MEXICO

Elevation
Borehole Location
GWL Depth
Drilled By S. STELLAVATO
Well Logged By S. STELLAVATO
Date Started 7/7/00
Date Completed 7/7/00

Drilling Method ~~4 1/4 ID~~ HSA HAND AUGER
Air Monitoring Method PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM BZ	BH	S	Drilling Conditions & Blow Counts
0				0-1' Light-brown fine sandy clay, dry. Cobbles and roots.						0 PPM
1				1'-2.5' Med-brown fine sandy clay, moist, roots.						0 PPM
2				2.5'-3.5' dark-gray to black fine sandy clay, moist roots.						5 PPM
3				3.5'-4.5' dark-gray fine sand, moist.						35 PPM
4				4.5'-6' Light-gray fine SAND, wet.						70 PPM
5										
6				TD = 6' BGS.						
7										
8										

Comments: Groundwater at approximately 5' BGS. Light-Gray Sand. Black sandy clay above water table. Strong odor.

Geologist Signature Stephen Stellavato

12/18/97\Drillog

MONITOR WELL INSTALLAT FORM

Boret TMW-2
Well #
Page 2 of 2

Philip Services Corp.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

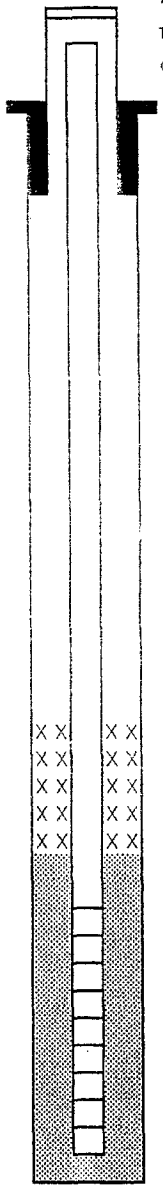
Project Name JAQUEZ EXCAVATION
Project Number 62800243 Phase
Site Location JAQUEZ CORNFIELD
BLANCO, NEW MEXICO

Elevation
Well Location BLANCO, NM
GWL Depth
Installed By ~~K RADILLA~~
S STELLAVATO
Date/Time Started 7/7/00 1210
Date/Time Complete 7/7/00 1240

On-Site Geologist S STELLAVATO
Personnel On-Site NONE
Contractors On-Site NONE
Client Personnel On-Site NONE

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
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		
Bottom of Well Riser		
Top of Well Screen	2"	+2
Bottom of Well Screen	2"	-6'
Top of Peltonite Seal		
Bottom of Peltonite Seal		
Top of Gravel Pack		
Bottom of Gravel Pack		
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		-5'
Total Depth of Borehole		-6'



Top of Protective Casing +2
Top of Riser (survey elev.) NA
Ground Surface NA

Temporary monitor well

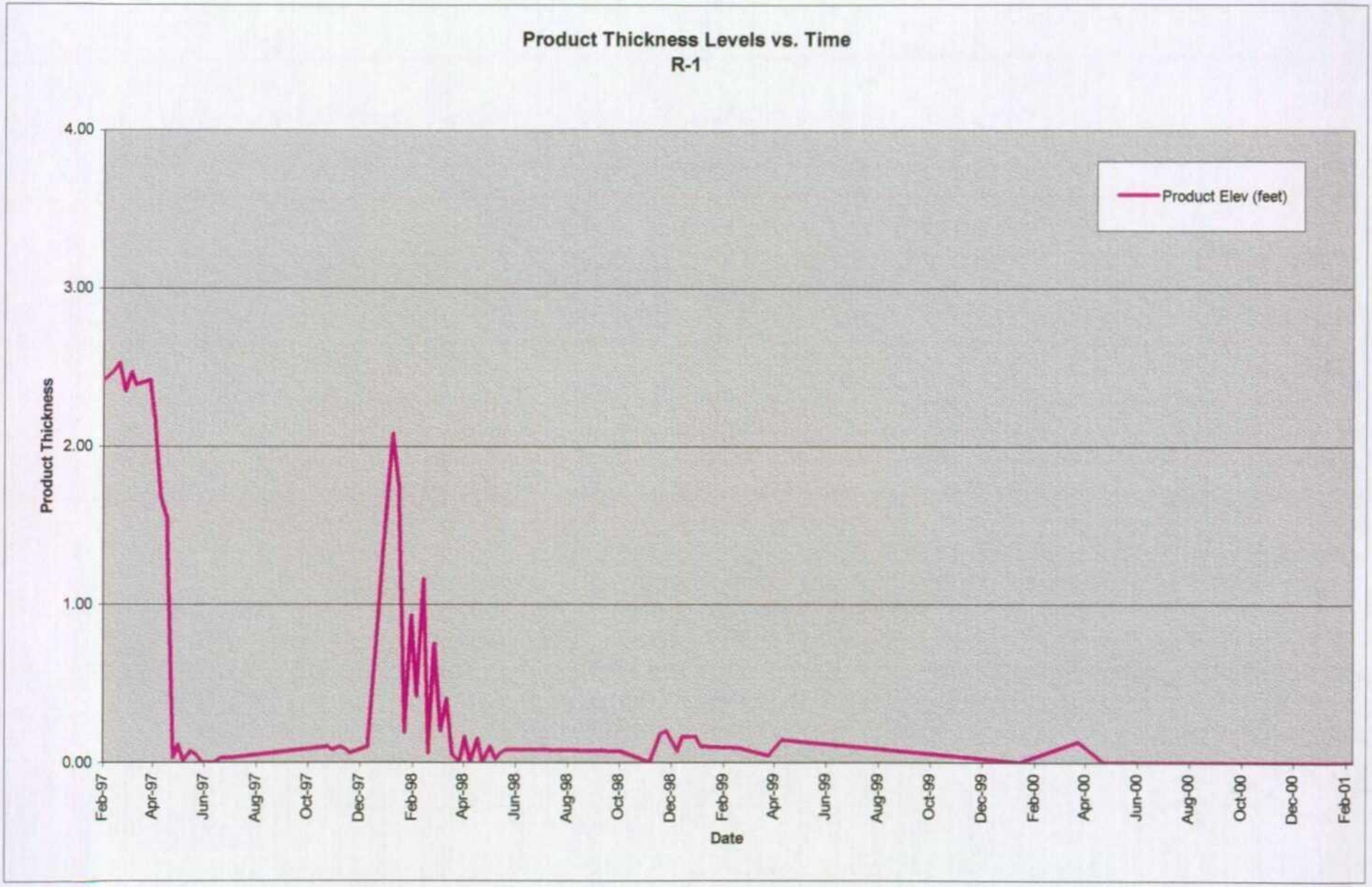
Top of Seal NA
Top of Gravel Pack NA
Top of Screen +2
Bottom of Screen -6'
Bottom of Borehole -6'

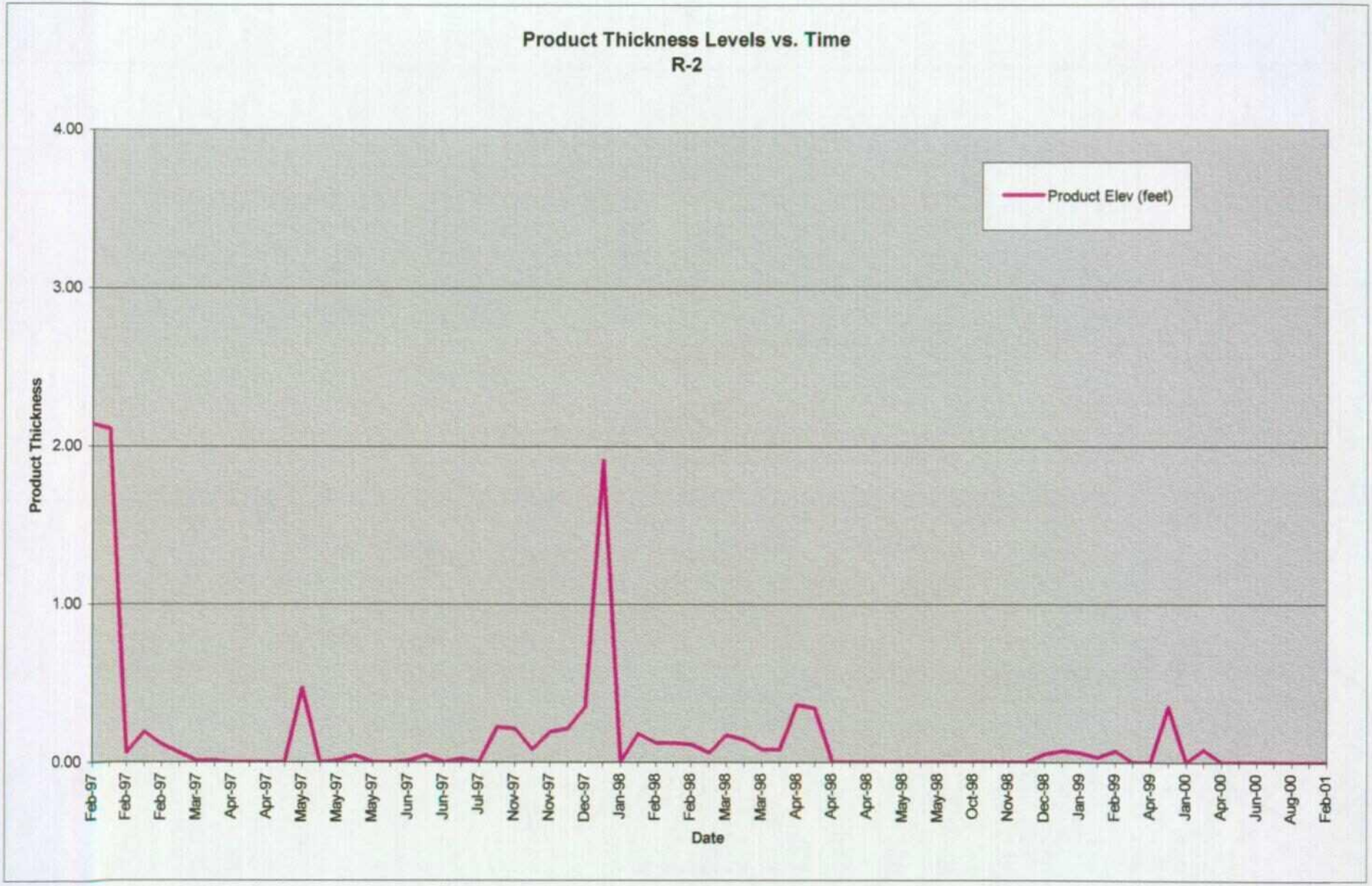
Commen Temporary Monitor Well

Geologist Signature Stephen Stellavato

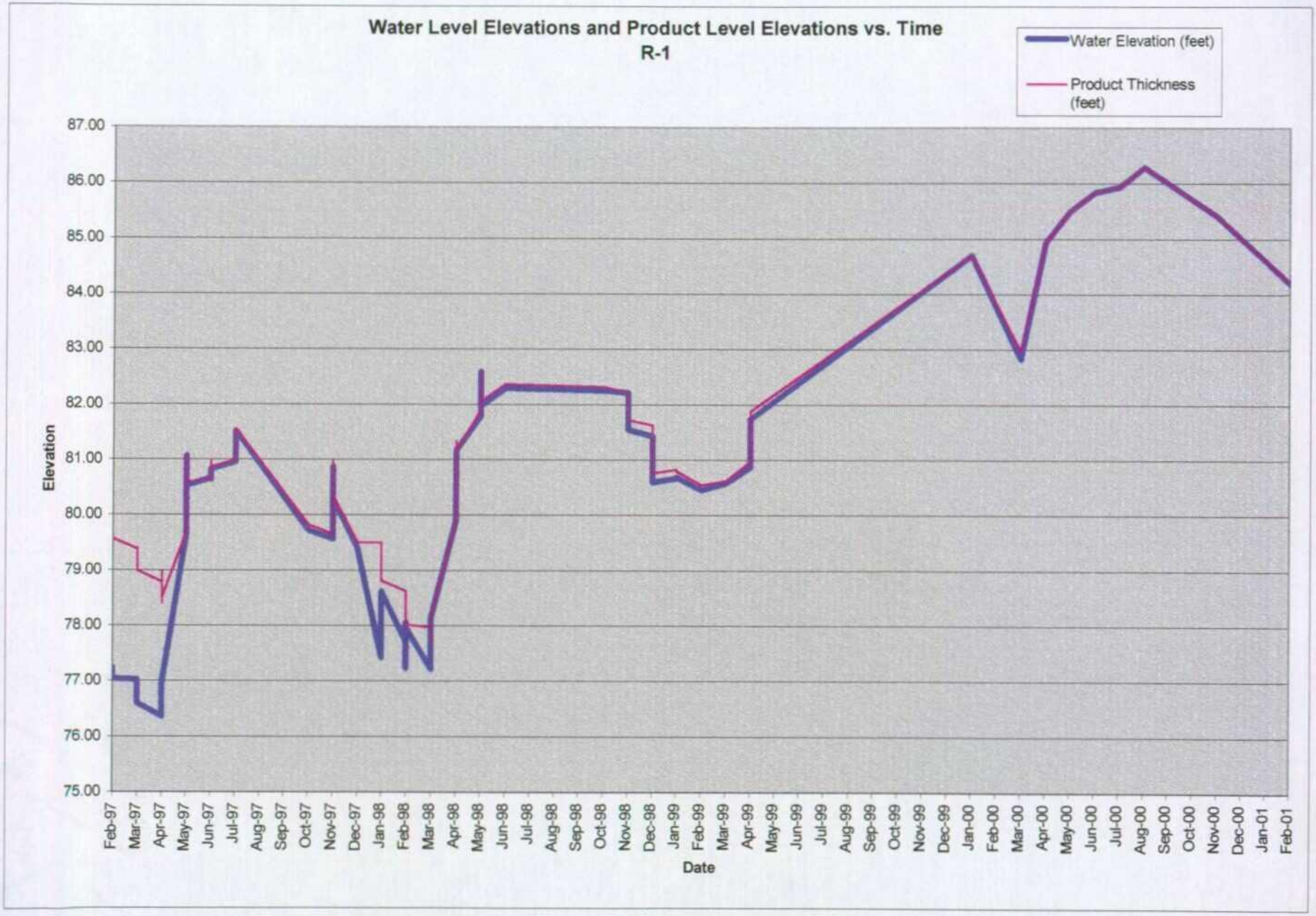
MWINSTAL.wk1

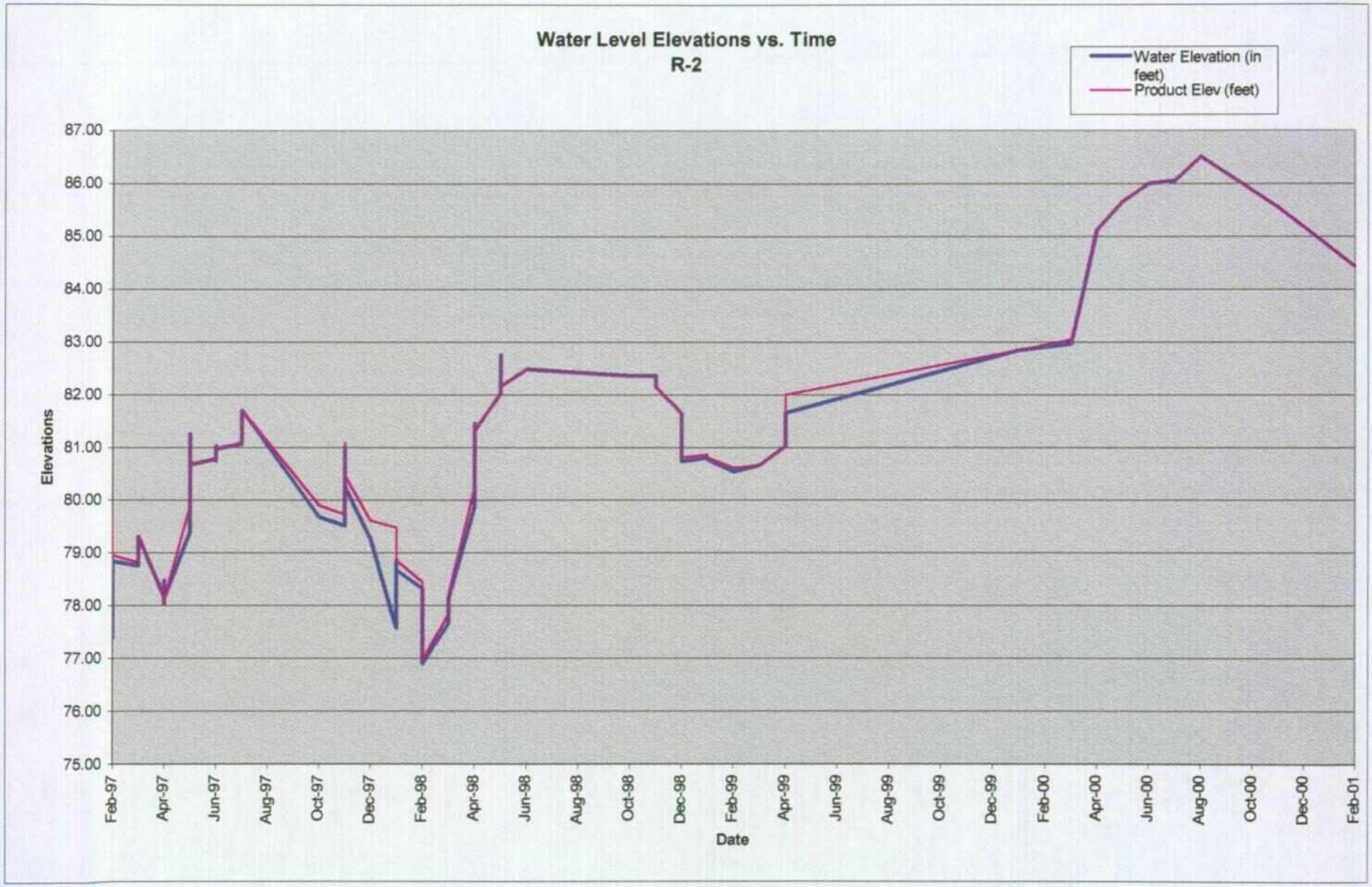
Appendix B - Product Thickness vs. Time for R-1 and R-2


Product Thickness Levels vs. Time
R-1
Product Elev (feet)
Product Thickness
4.00
3.00
2.00
1.00
0.00
Feb-97
Apr-97
Jun-97
Aug-97
Oct-97
Dec-97
Feb-98
Apr-98
Jun-98
Aug-98
Oct-98
Dec-98
Feb-99
Apr-99
Jun-99
Aug-99
Oct-99
Dec-99
Feb-00
Apr-00
Jun-00
Aug-00
Oct-00
Dec-00
Feb-01
Date

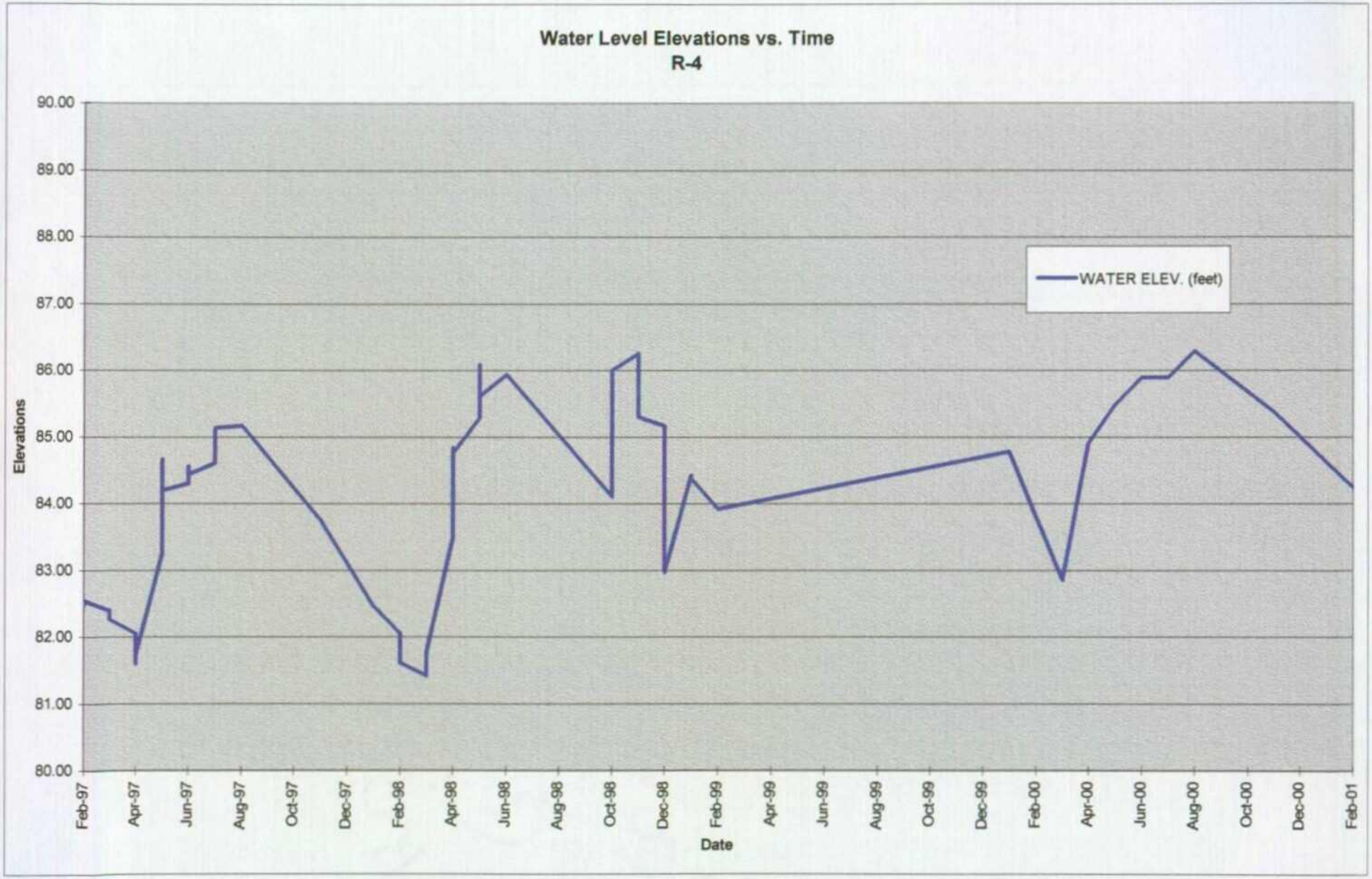

Product Thickness Levels vs. Time
R-2
Product Elev (feet)
Product Thickness
4.00
3.00
2.00
1.00
0.00
Feb-97
Feb-97
Feb-97
Mar-97
Apr-97
Apr-97
May-97
May-97
May-97
Jun-97
Jun-97
Jul-97
Nov-97
Nov-97
Dec-97
Jan-98
Feb-98
Feb-98
Mar-98
Mar-98
Apr-98
Apr-98
Apr-98
May-98
May-98
Oct-98
Nov-98
Dec-98
Jan-99
Feb-99
Apr-99
Jan-00
Apr-00
Jun-00
Aug-00
Feb-01
Date

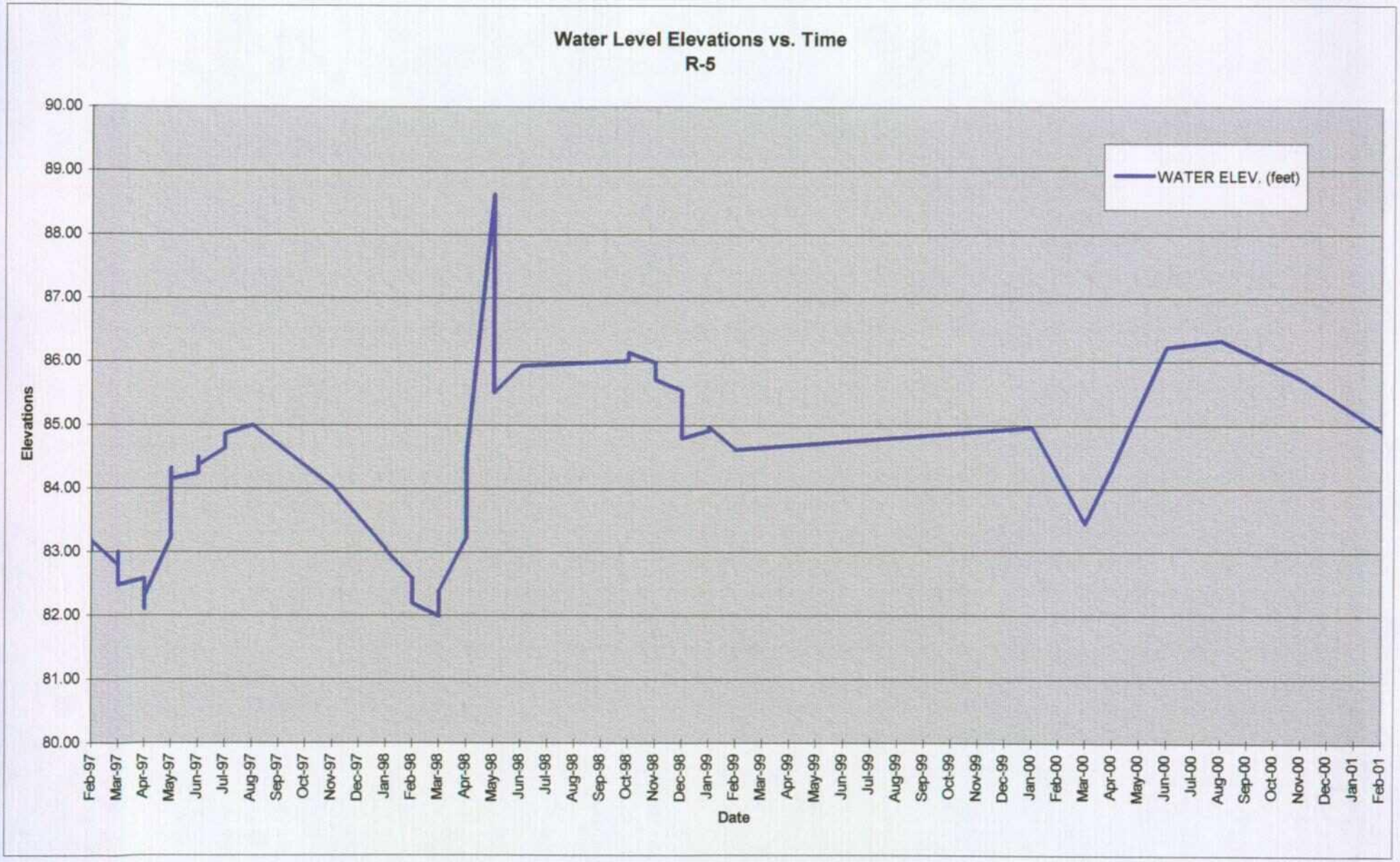
Appendix C – Groundwater Elevations vs. Time

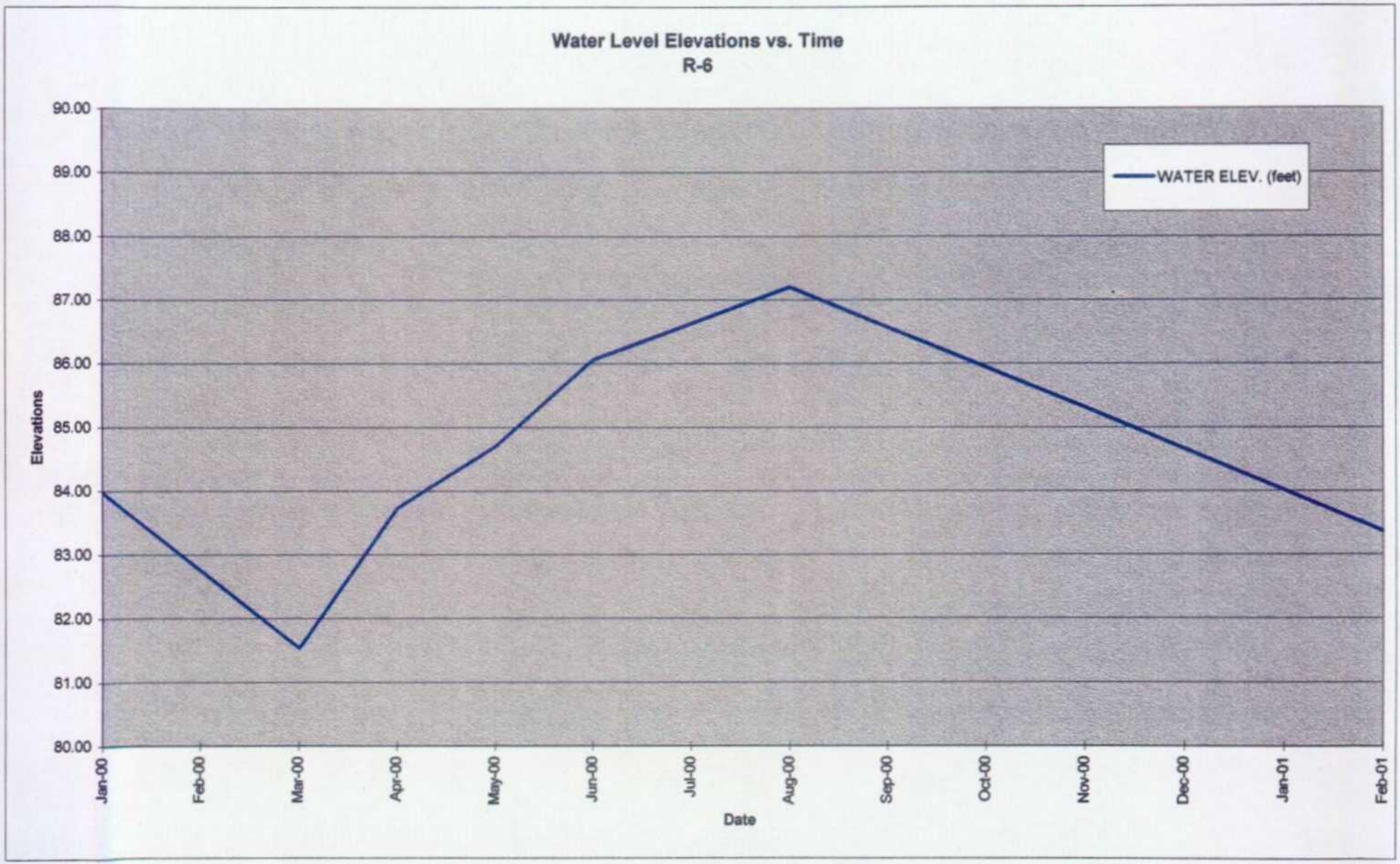

Water Level Elevations and Product Level Elevations vs. Time
R-1
Water Elevation (feet)
Product Thickness (feet)
Elevation
87.00
86.00
85.00
84.00
83.00
82.00
81.00
80.00
79.00
78.00
77.00
76.00
75.00
Feb-97
Mar-97
Apr-97
May-97
Jun-97
Jul-97
Aug-97
Sep-97
Oct-97
Nov-97
Dec-97
Jan-98
Feb-98
Mar-98
Apr-98
May-98
Jun-98
Jul-98
Aug-98
Sep-98
Oct-98
Nov-98
Dec-98
Jan-99
Feb-99
Mar-99
Apr-99
May-99
Jun-99
Jul-99
Aug-99
Sep-99
Oct-99
Nov-99
Dec-99
Jan-00
Feb-00
Mar-00
Apr-00
May-00
Jun-00
Jul-00
Aug-00
Sep-00
Oct-00
Nov-00
Dec-00
Jan-01
Feb-01
Date

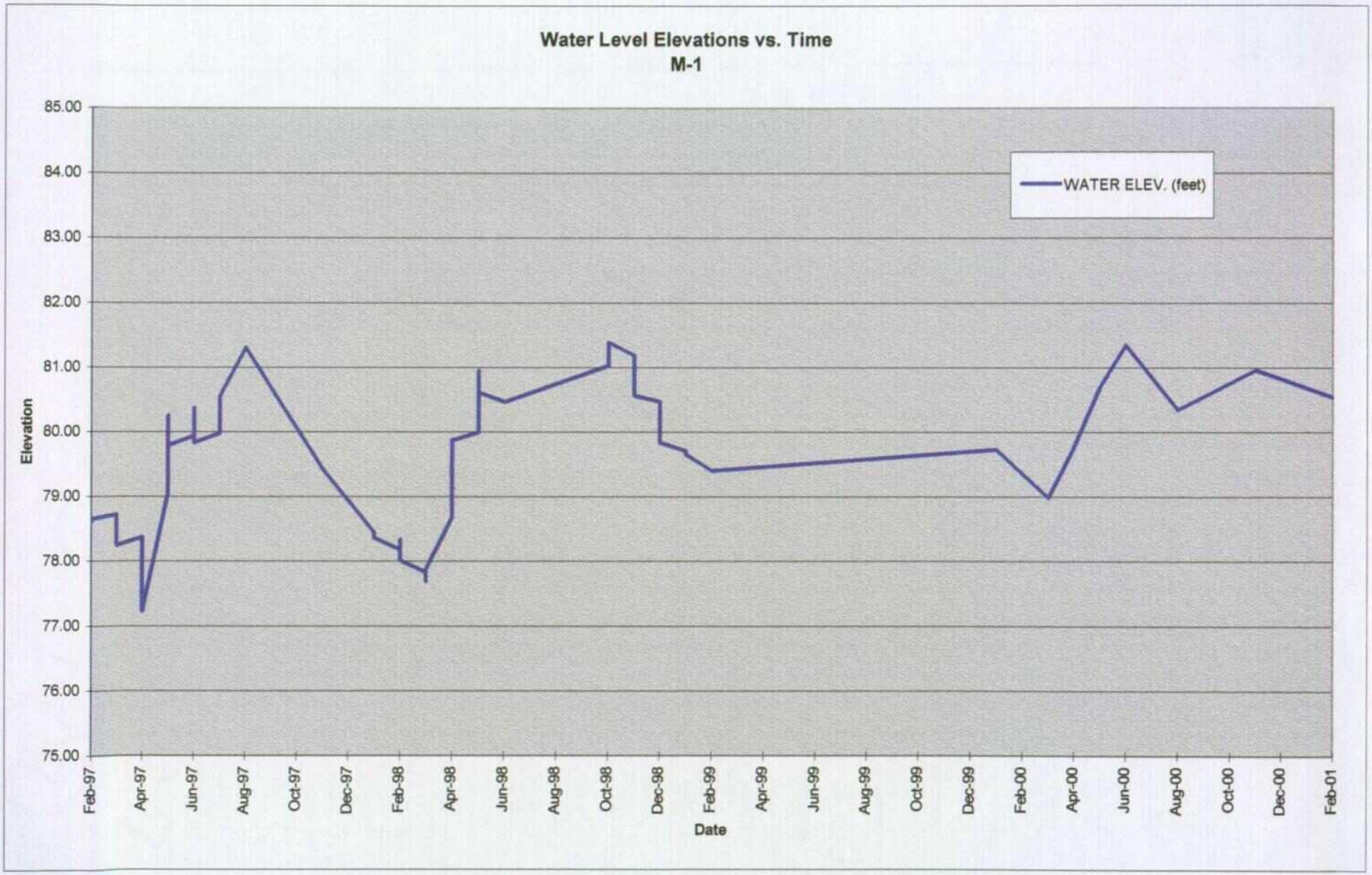

Water Level Elevations vs. Time
R-2
Water Elevation (in feet)
Product Elev (feet)
Elevations
87.00
86.00
85.00
84.00
83.00
82.00
81.00
80.00
79.00
78.00
77.00
76.00
75.00
Feb-97
Apr-97
Jun-97
Aug-97
Oct-97
Dec-97
Feb-98
Apr-98
Jun-98
Aug-98
Oct-98
Dec-98
Feb-99
Apr-99
Jun-99
Aug-99
Oct-99
Dec-99
Feb-00
Apr-00
Jun-00
Aug-00
Oct-00
Dec-00
Feb-01
Date

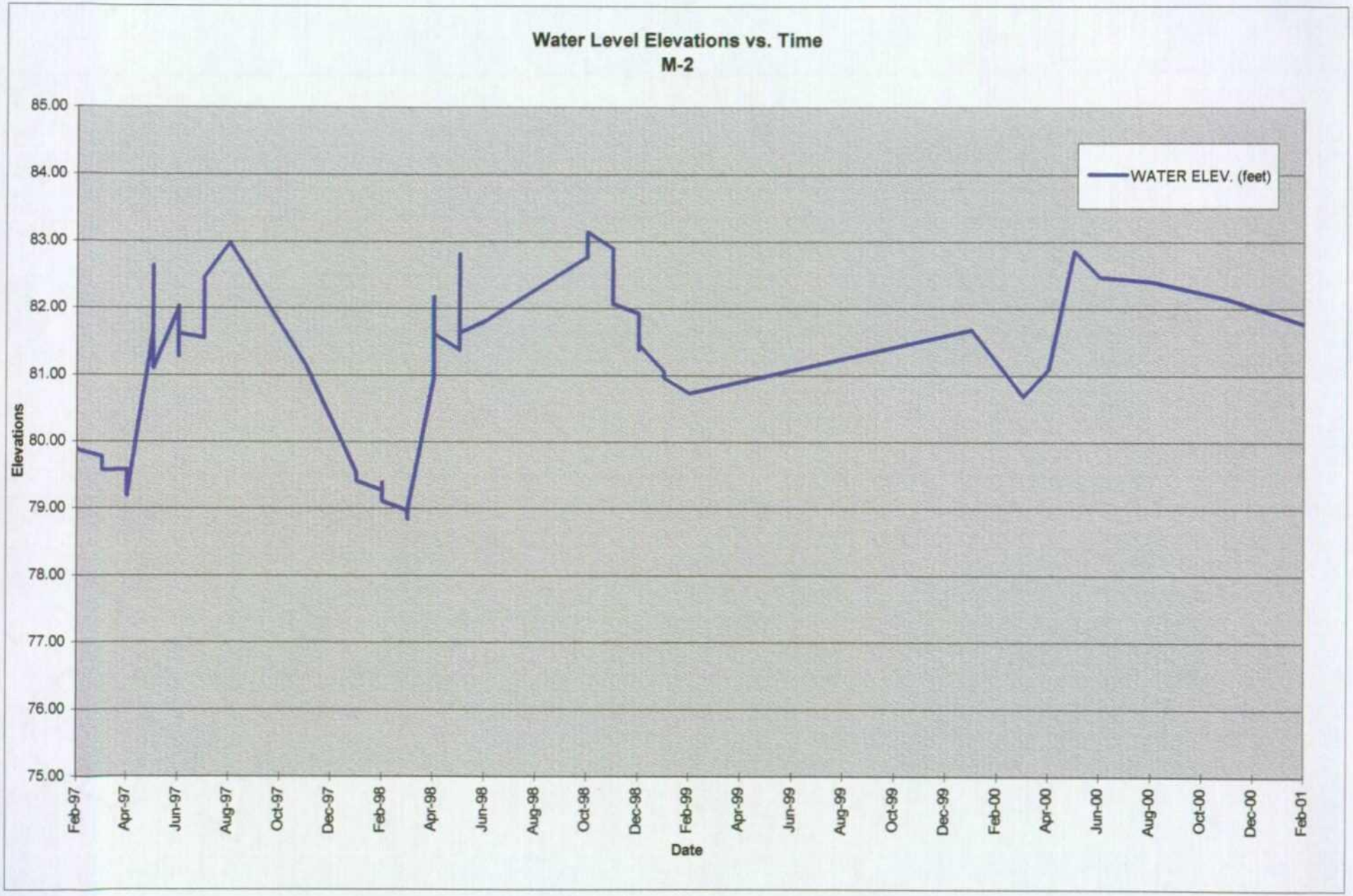

Water Level Elevations vs. Time
R-3
WATER ELEV. (feet)
Elevations
90.00
89.00
88.00
87.00
86.00
85.00
84.00
83.00
82.00
81.00
80.00
Feb-97
Apr-97
Jun-97
Aug-97
Oct-97
Dec-97
Feb-98
Apr-98
Jun-98
Aug-98
Oct-98
Dec-98
Feb-99
Apr-99
Jun-99
Aug-99
Oct-99
Dec-99
Feb-00
Apr-00
Jun-00
Aug-00
Oct-00
Dec-00
Feb-01
Date

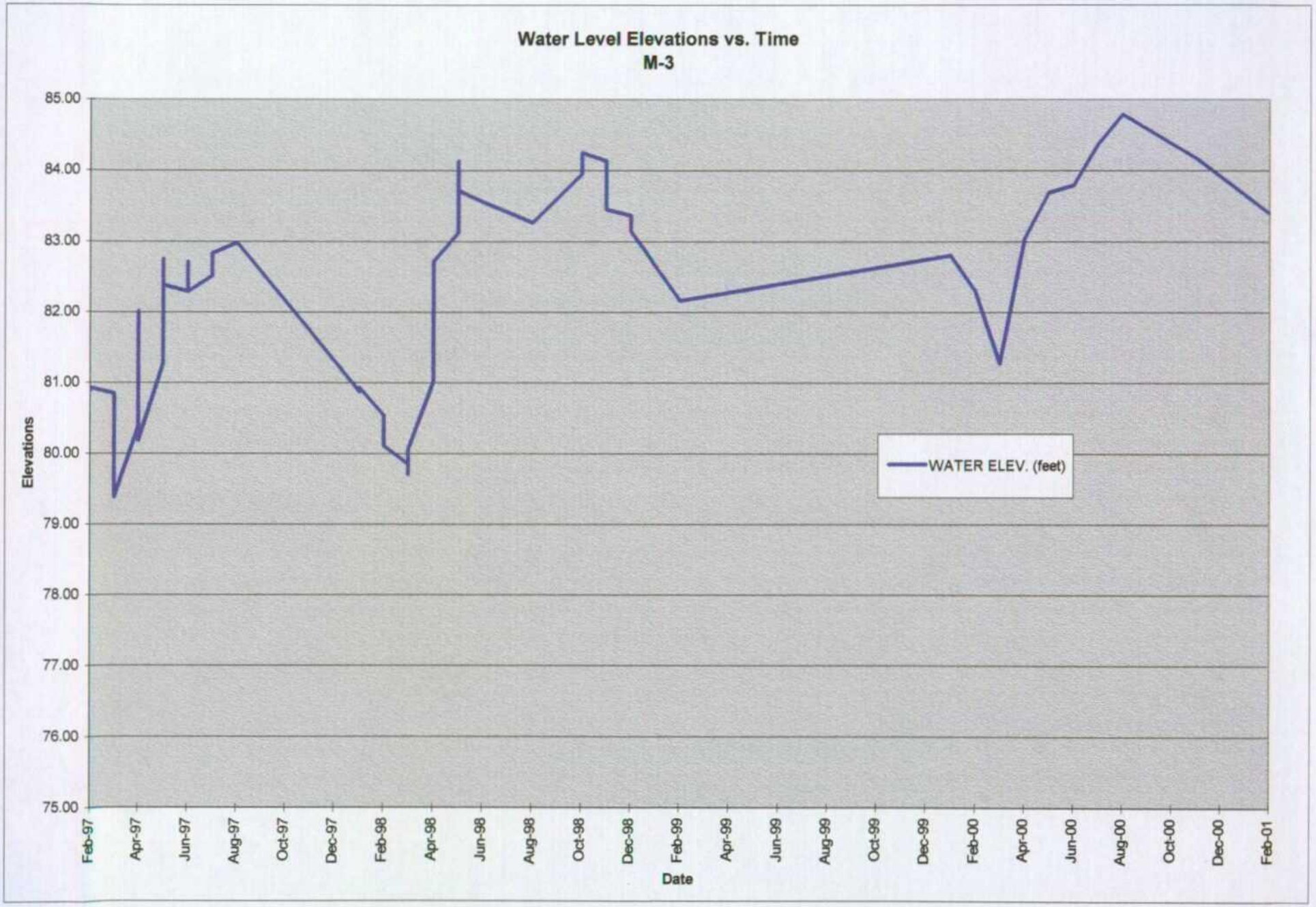

Water Level Elevations vs. Time
R-4
90.00
89.00
88.00
87.00
86.00
85.00
84.00
83.00
82.00
81.00
80.00
Elevations
WATER ELEV. (feet)
Feb-97
Apr-97
Jun-97
Aug-97
Oct-97
Dec-97
Feb-98
Apr-98
Jun-98
Aug-98
Oct-98
Dec-98
Feb-99
Apr-99
Jun-99
Aug-99
Oct-99
Dec-99
Feb-00
Apr-00
Jun-00
Aug-00
Oct-00
Dec-00
Feb-01
Date

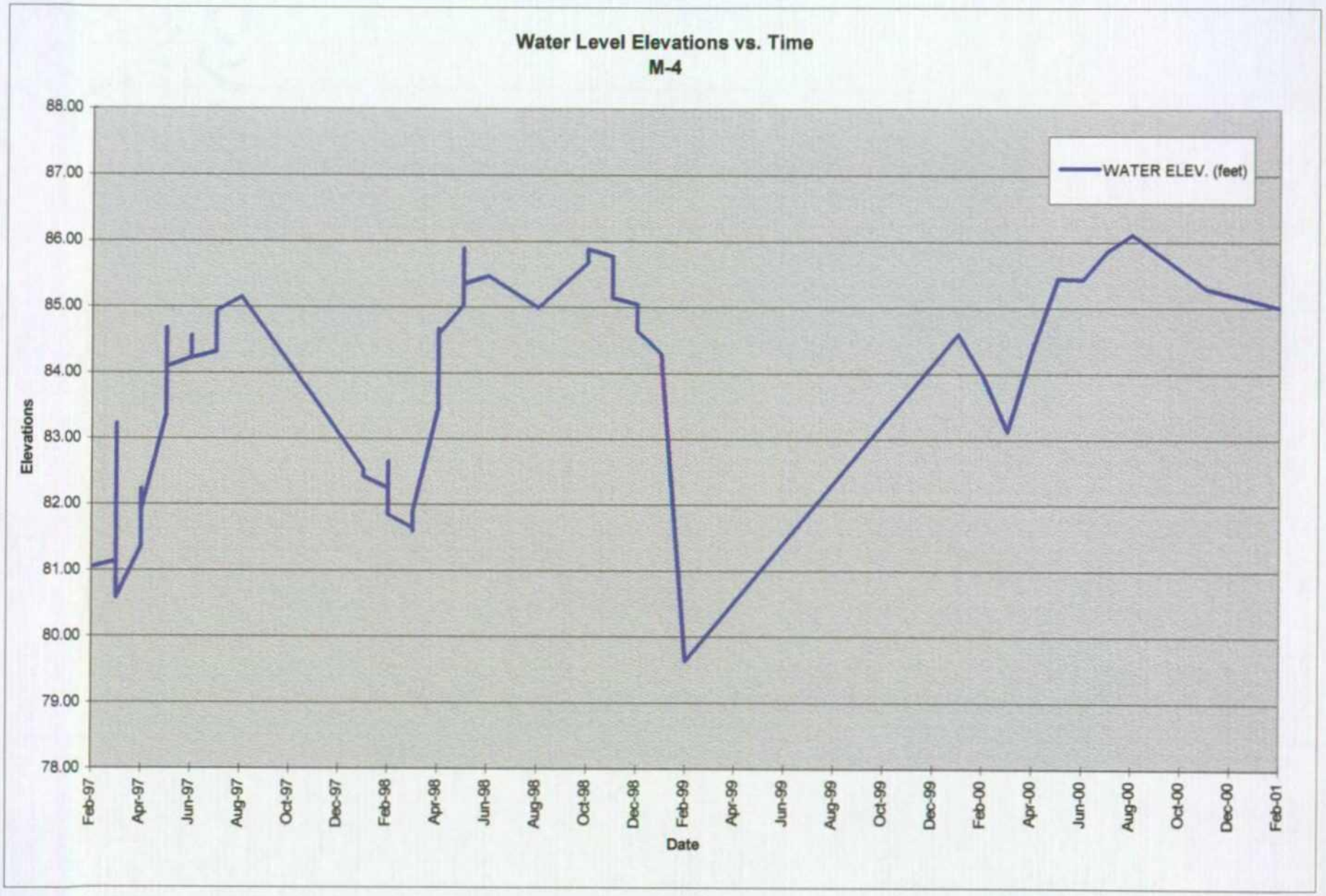

Water Level Elevations vs. Time
R-5
WATER ELEV. (feet)
Elevations
90.00
89.00
88.00
87.00
86.00
85.00
84.00
83.00
82.00
81.00
80.00
Feb-97
Mar-97
Apr-97
May-97
Jun-97
Jul-97
Aug-97
Sep-97
Oct-97
Nov-97
Dec-97
Jan-98
Feb-98
Mar-98
Apr-98
May-98
Jun-98
Jul-98
Aug-98
Sep-98
Oct-98
Nov-98
Dec-98
Jan-99
Feb-99
Mar-99
Apr-99
May-99
Jun-99
Jul-99
Aug-99
Sep-99
Oct-99
Nov-99
Dec-99
Jan-00
Feb-00
Mar-00
Apr-00
May-00
Jun-00
Jul-00
Aug-00
Sep-00
Oct-00
Nov-00
Dec-00
Jan-01
Feb-01
Date

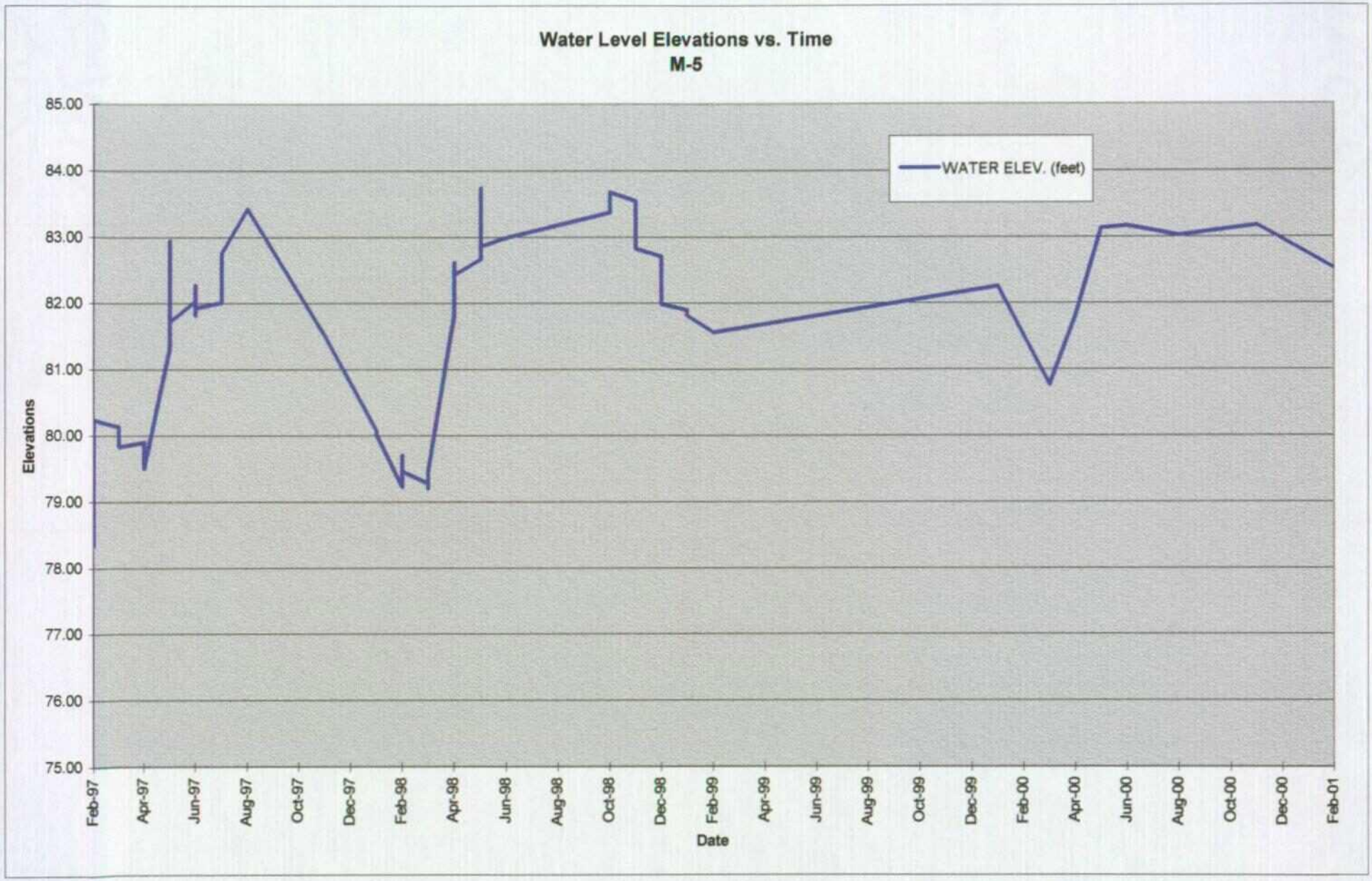

Water Level Elevations vs. Time
R-6
WATER ELEV. (feet)
Elevations
90.00
89.00
88.00
87.00
86.00
85.00
84.00
83.00
82.00
81.00
80.00
Jan-00
Feb-00
Mar-00
Apr-00
May-00
Jun-00
Jul-00
Aug-00
Sep-00
Oct-00
Nov-00
Dec-00
Jan-01
Feb-01
Date

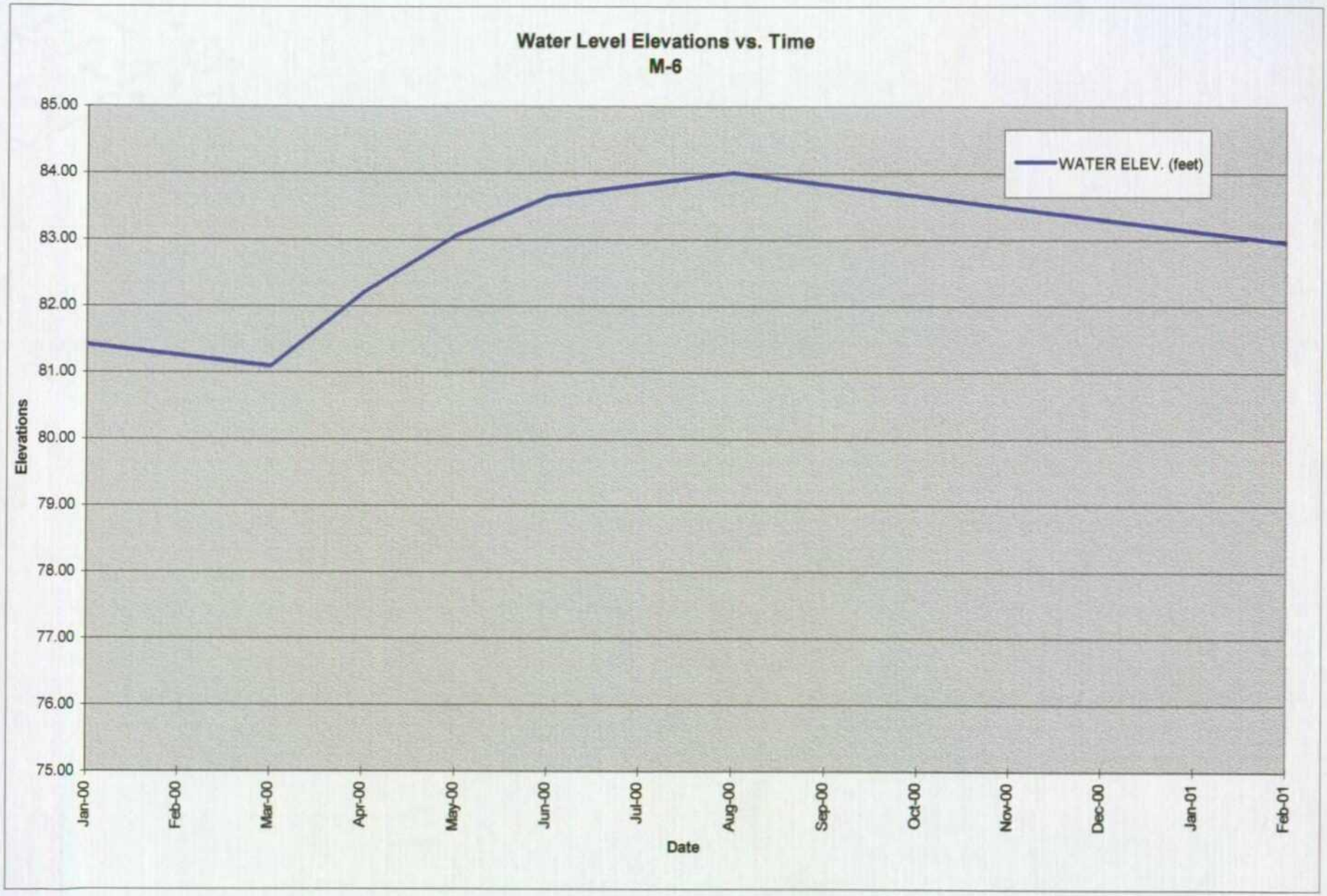

Water Level Elevations vs. Time
M-1
WATER ELEV. (feet)
Elevation
85.00
84.00
83.00
82.00
81.00
80.00
79.00
78.00
77.00
76.00
75.00
Feb-97
Apr-97
Jun-97
Aug-97
Oct-97
Dec-97
Feb-98
Apr-98
Jun-98
Aug-98
Oct-98
Dec-98
Feb-99
Apr-99
Jun-99
Aug-99
Oct-99
Dec-99
Feb-00
Apr-00
Jun-00
Aug-00
Oct-00
Dec-00
Feb-01
Date


Water Level Elevations vs. Time
M-2
WATER ELEV. (feet)
Elevations
85.00
84.00
83.00
82.00
81.00
80.00
79.00
78.00
77.00
76.00
75.00
Feb-97
Apr-97
Jun-97
Aug-97
Oct-97
Dec-97
Feb-98
Apr-98
Jun-98
Aug-98
Oct-98
Dec-98
Feb-99
Apr-99
Jun-99
Aug-99
Oct-99
Dec-99
Feb-00
Apr-00
Jun-00
Aug-00
Oct-00
Dec-00
Feb-01
Date

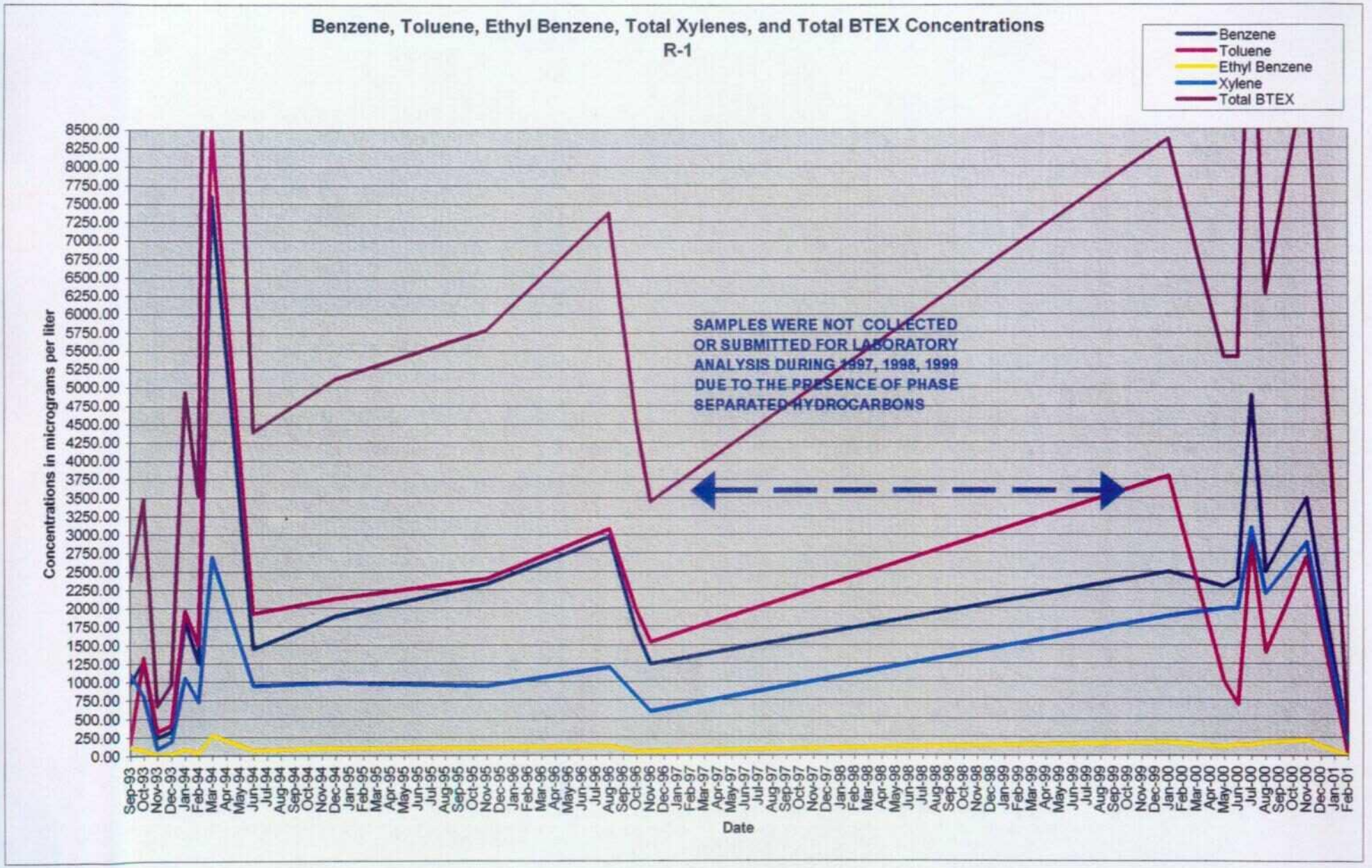

Water Level Elevations vs. Time
M-3
85.00
84.00
83.00
82.00
81.00
80.00
79.00
78.00
77.00
76.00
75.00
Elevations
WATER ELEV. (feet)
Feb-97
Apr-97
Jun-97
Aug-97
Oct-97
Dec-97
Feb-98
Apr-98
Jun-98
Aug-98
Oct-98
Dec-98
Feb-99
Apr-99
Jun-99
Aug-99
Oct-99
Dec-99
Feb-00
Apr-00
Jun-00
Aug-00
Oct-00
Dec-00
Feb-01
Date

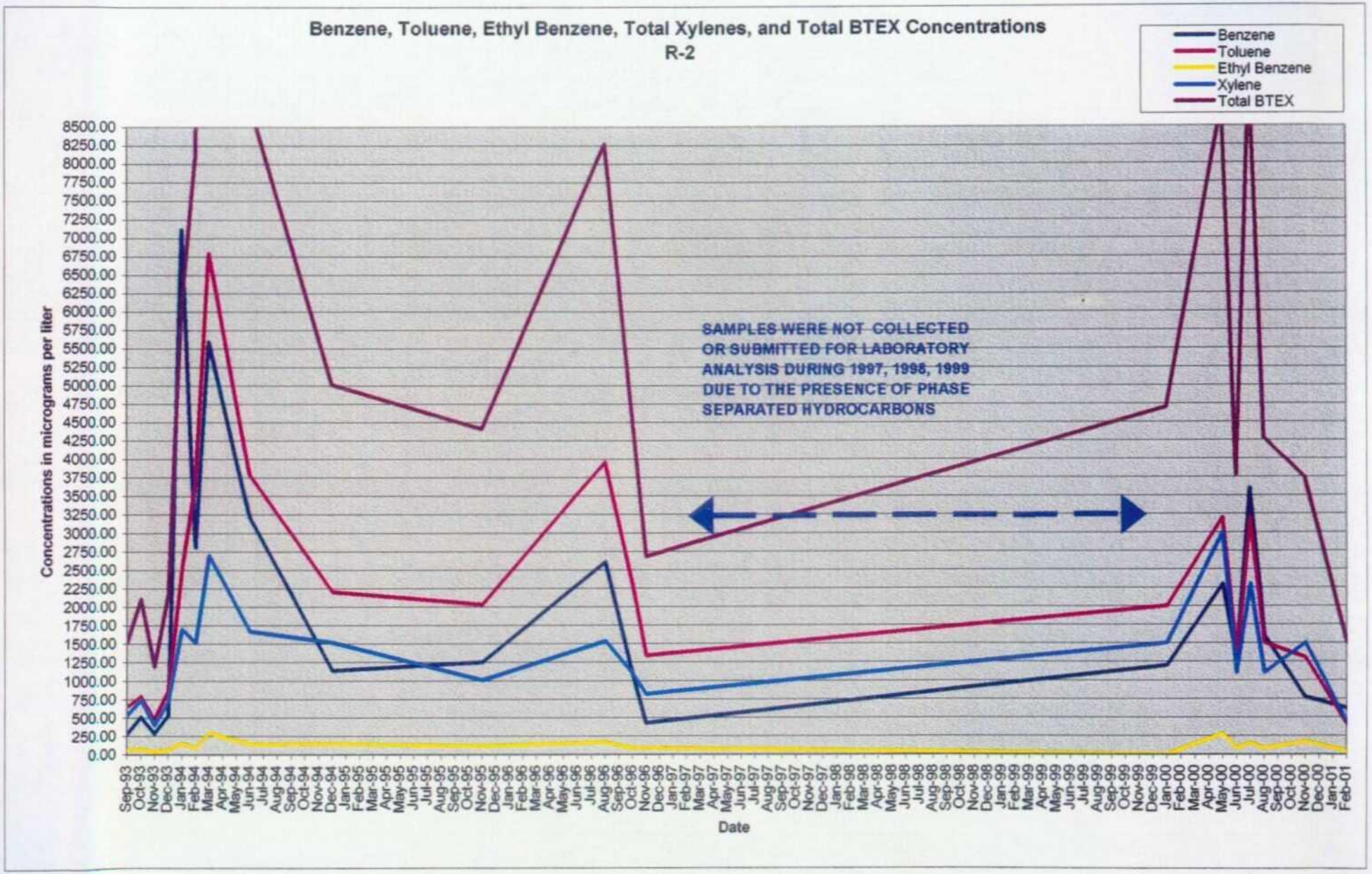

Water Level Elevations vs. Time
M-4
WATER ELEV. (feet)
Elevations
88.00
87.00
86.00
85.00
84.00
83.00
82.00
81.00
80.00
79.00
78.00
Feb-97
Apr-97
Jun-97
Aug-97
Oct-97
Dec-97
Feb-98
Apr-98
Jun-98
Aug-98
Oct-98
Dec-98
Feb-99
Apr-99
Jun-99
Aug-99
Oct-99
Dec-99
Feb-00
Apr-00
Jun-00
Aug-00
Oct-00
Dec-00
Feb-01
Date

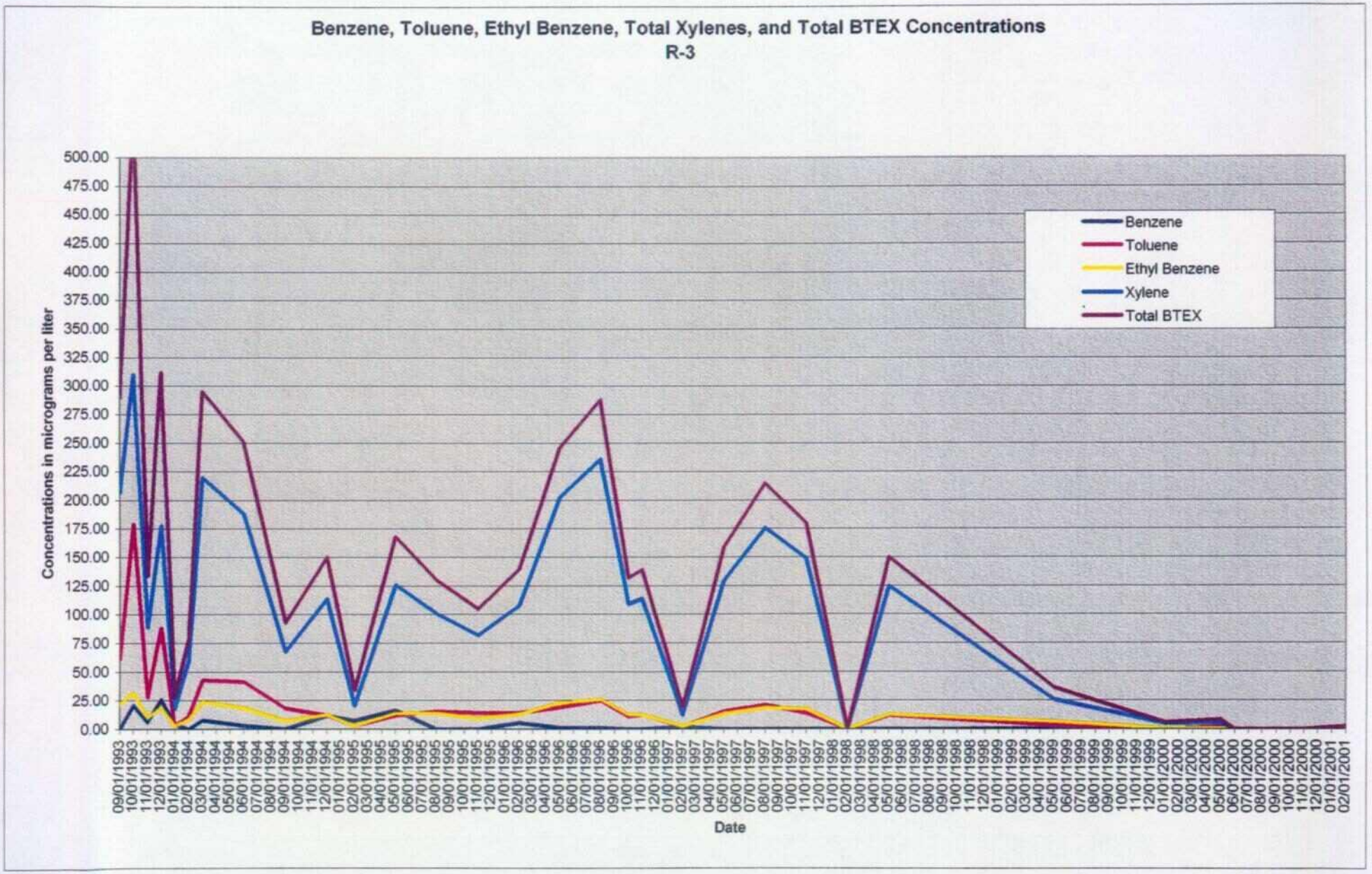

Water Level Elevations vs. Time
M-5
WATER ELEV. (feet)
Elevations
85.00
84.00
83.00
82.00
81.00
80.00
79.00
78.00
77.00
76.00
75.00
Feb-97
Apr-97
Jun-97
Aug-97
Oct-97
Dec-97
Feb-98
Apr-98
Jun-98
Aug-98
Oct-98
Dec-98
Feb-99
Apr-99
Jun-99
Aug-99
Oct-99
Dec-99
Feb-00
Apr-00
Jun-00
Aug-00
Oct-00
Dec-00
Feb-01
Date


Water Level Elevations vs. Time
M-6
WATER ELEV. (feet)
Elevations
85.00
84.00
83.00
82.00
81.00
80.00
79.00
78.00
77.00
76.00
75.00
Jan-00
Feb-00
Mar-00
Apr-00
May-00
Jun-00
Jul-00
Aug-00
Sep-00
Oct-00
Nov-00
Dec-00
Jan-01
Feb-01
Date

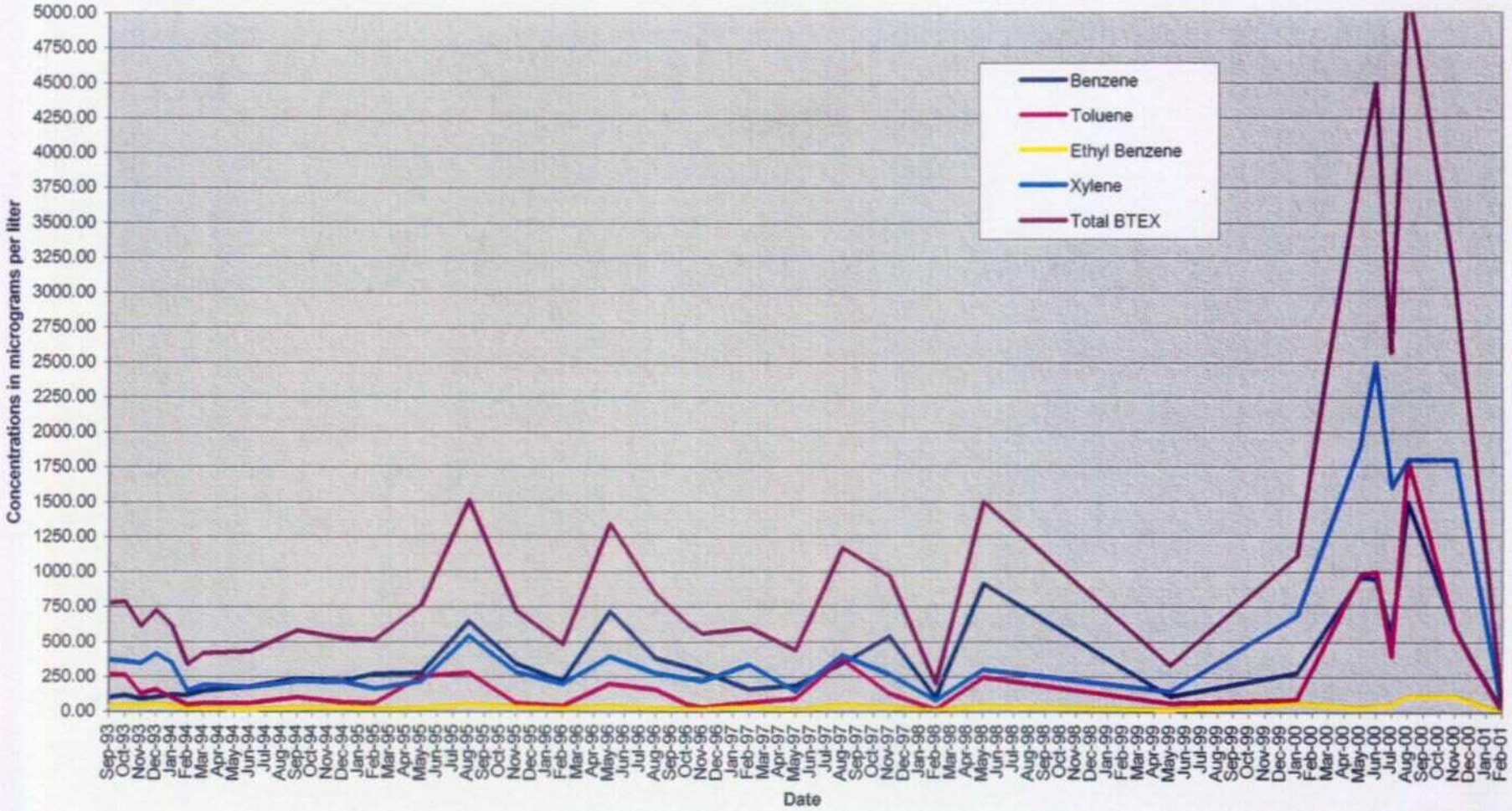
BTEX CONCENTRATIONS

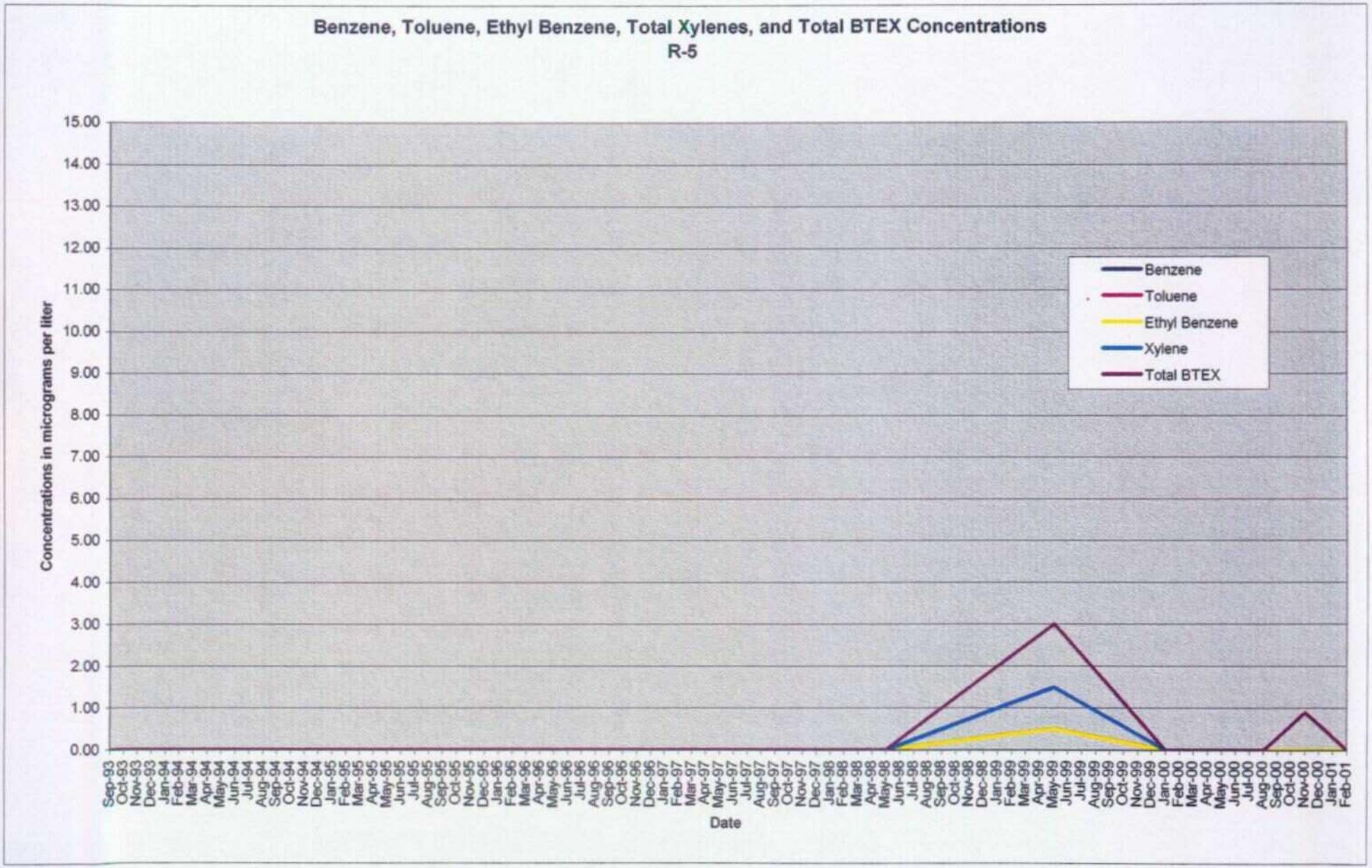

Benzene, Toluene, Ethyl Benzene, Total Xylenes, and Total BTEX Concentrations
R-1
Benzene
Toluene
Ethyl Benzene
Xylene
Total BTEX
SAMPLES WERE NOT COLLECTED OR SUBMITTED FOR LABORATORY ANALYSIS DURING 1997, 1998, 1999 DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS
Concentrations in micrograms per liter
Date

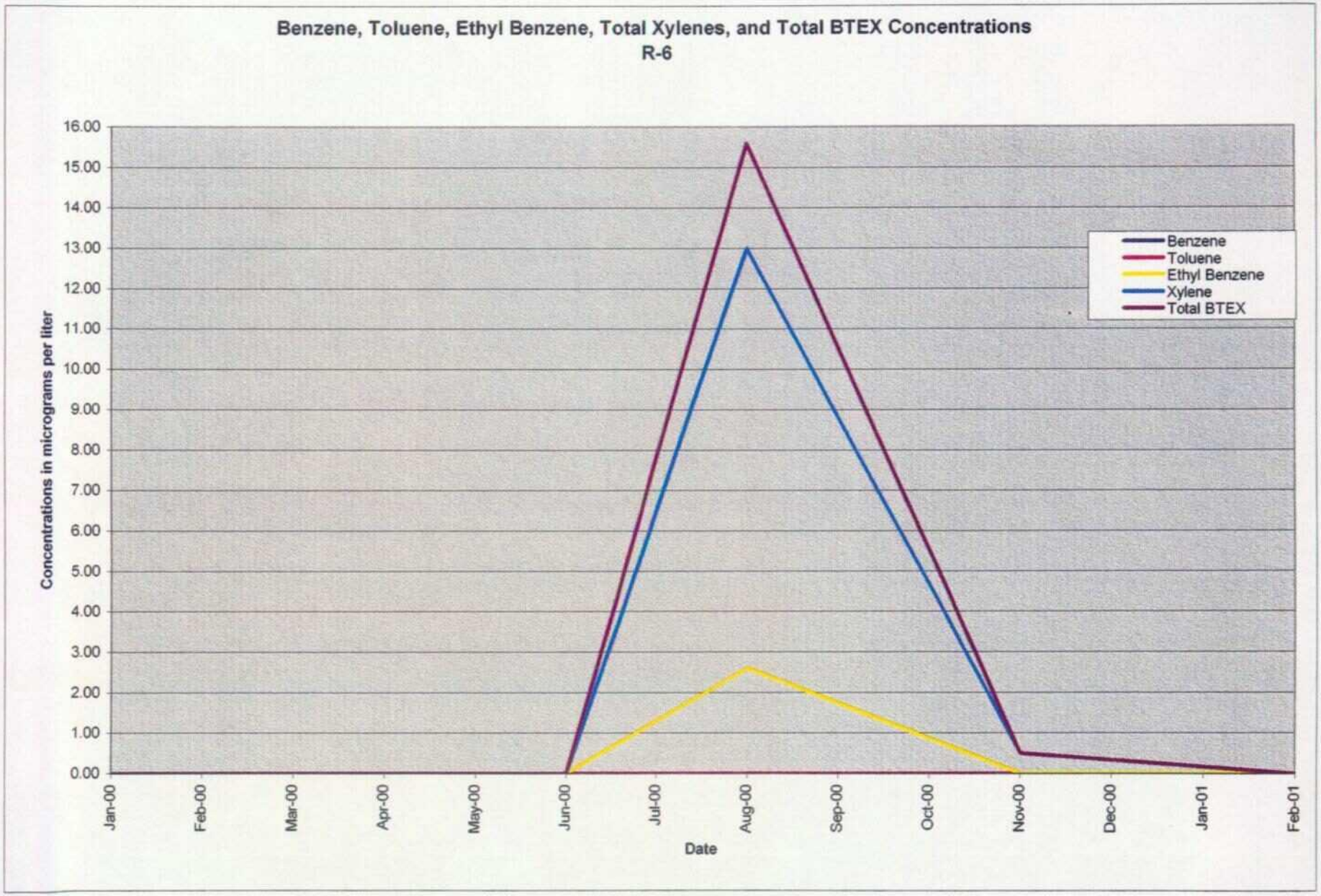

Benzene, Toluene, Ethyl Benzene, Total Xylenes, and Total BTEX Concentrations
R-2
Benzene
Toluene
Ethyl Benzene
Xylene
Total BTEX
SAMPLES WERE NOT COLLECTED OR SUBMITTED FOR LABORATORY ANALYSIS DURING 1997, 1998, 1999 DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS
Concentrations in micrograms per liter
Date

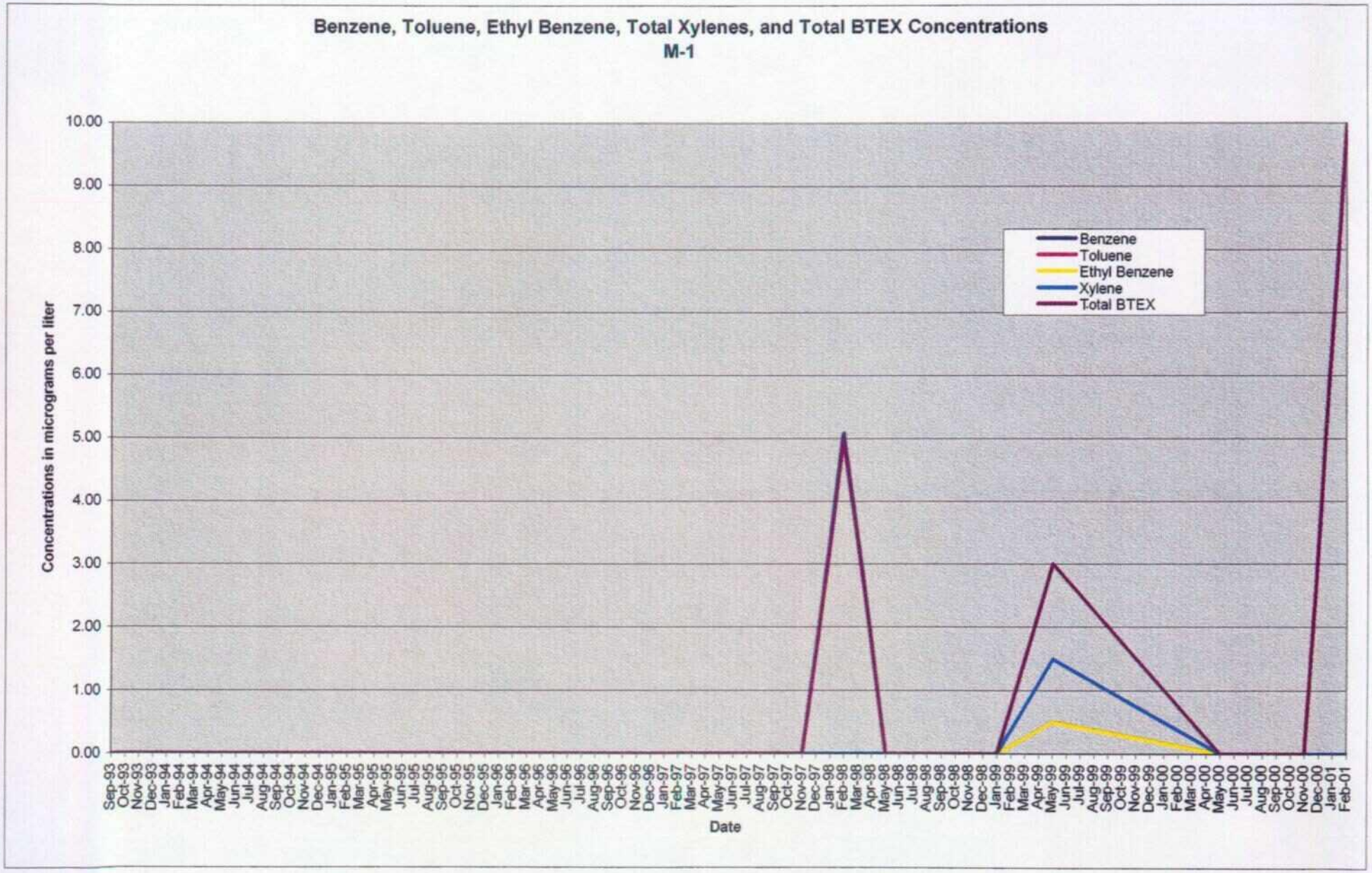

Benzene, Toluene, Ethyl Benzene, Total Xylenes, and Total BTEX Concentrations
R-3
Concentrations in micrograms per liter
Date
Benzene
Toluene
Ethyl Benzene
Xylene
Total BTEX

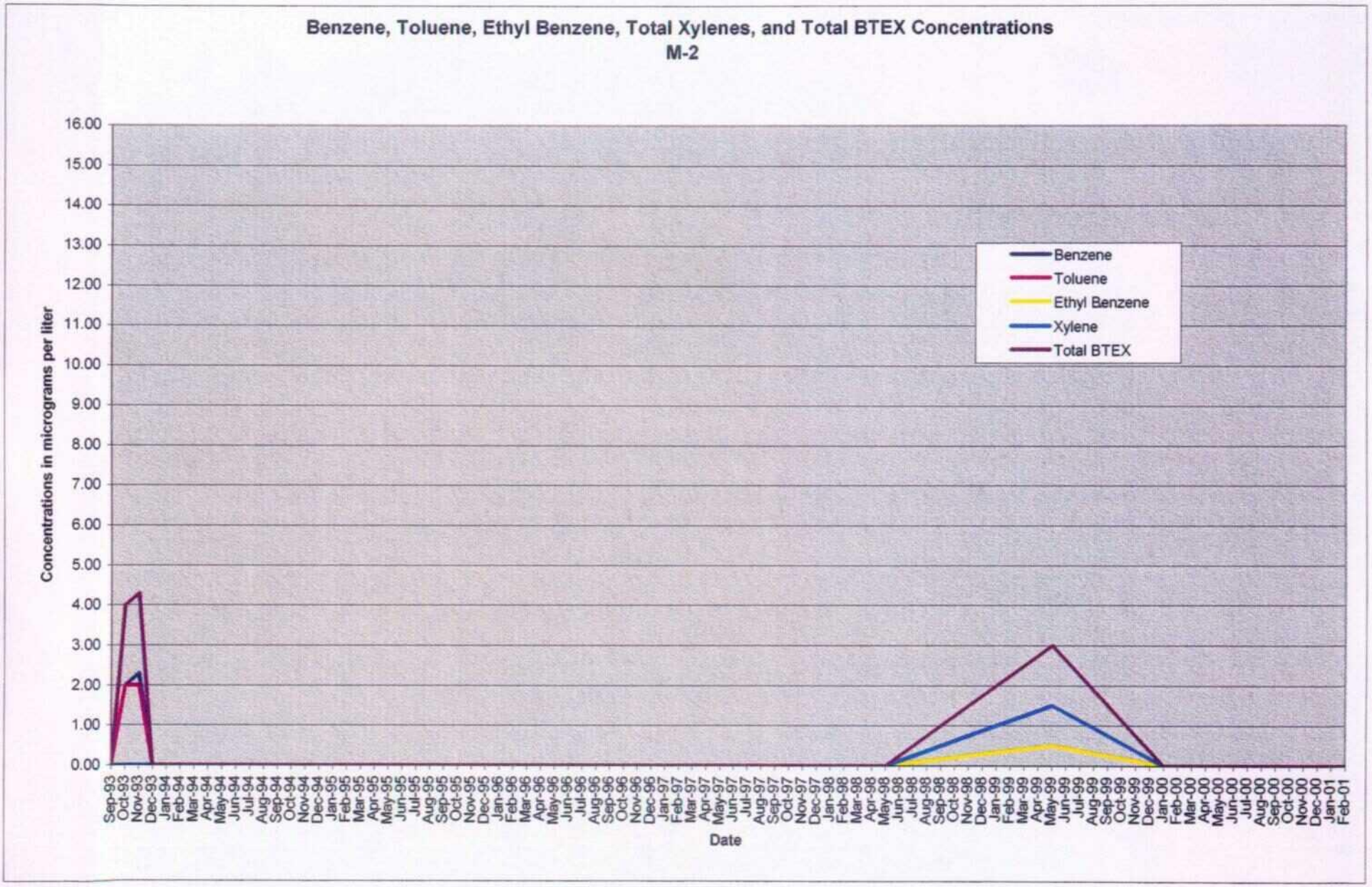
Benzene, Toluene, Ethyl Benzene, Total Xylenes, and Total BTEX Concentrations
R-4

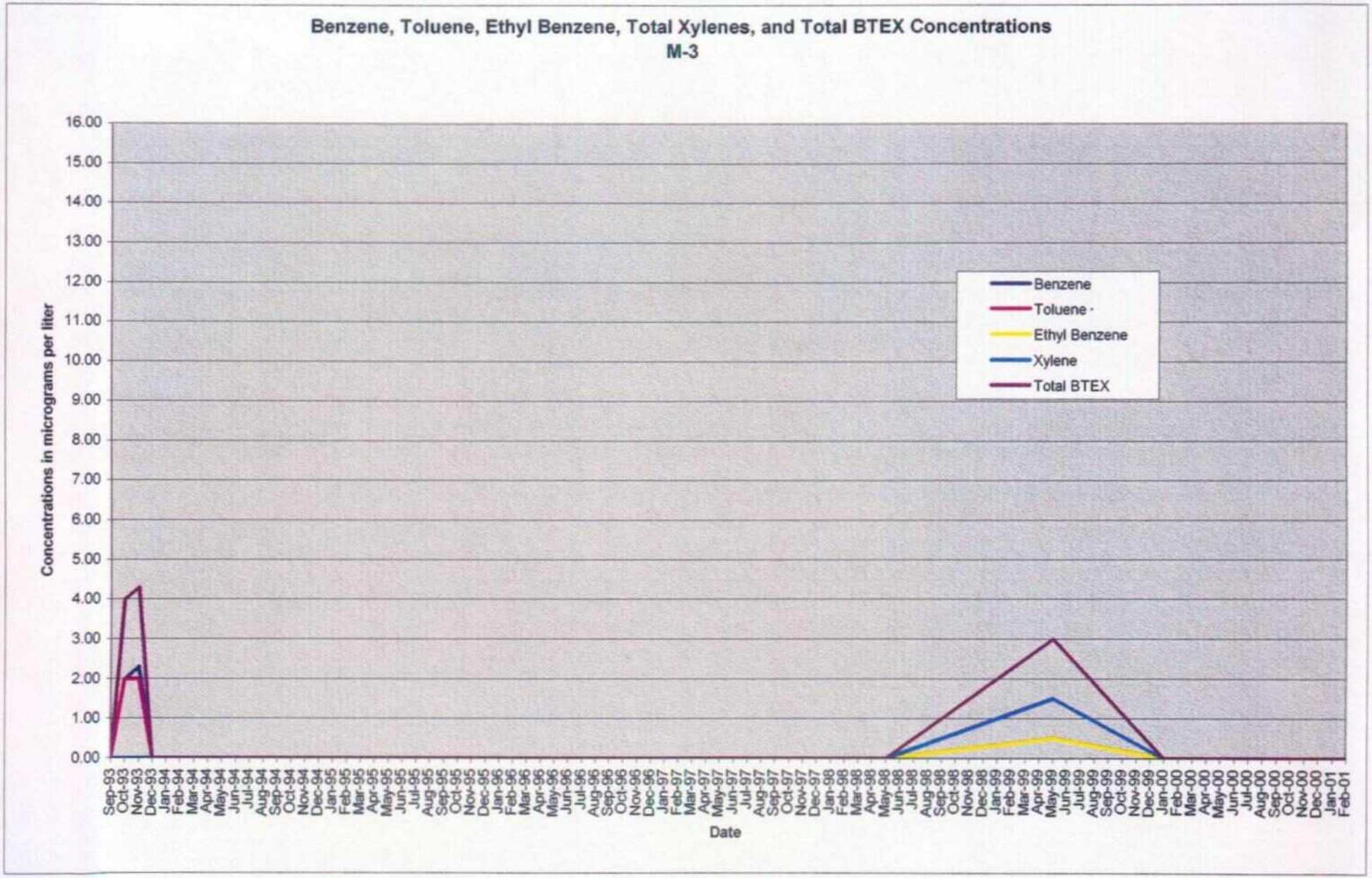


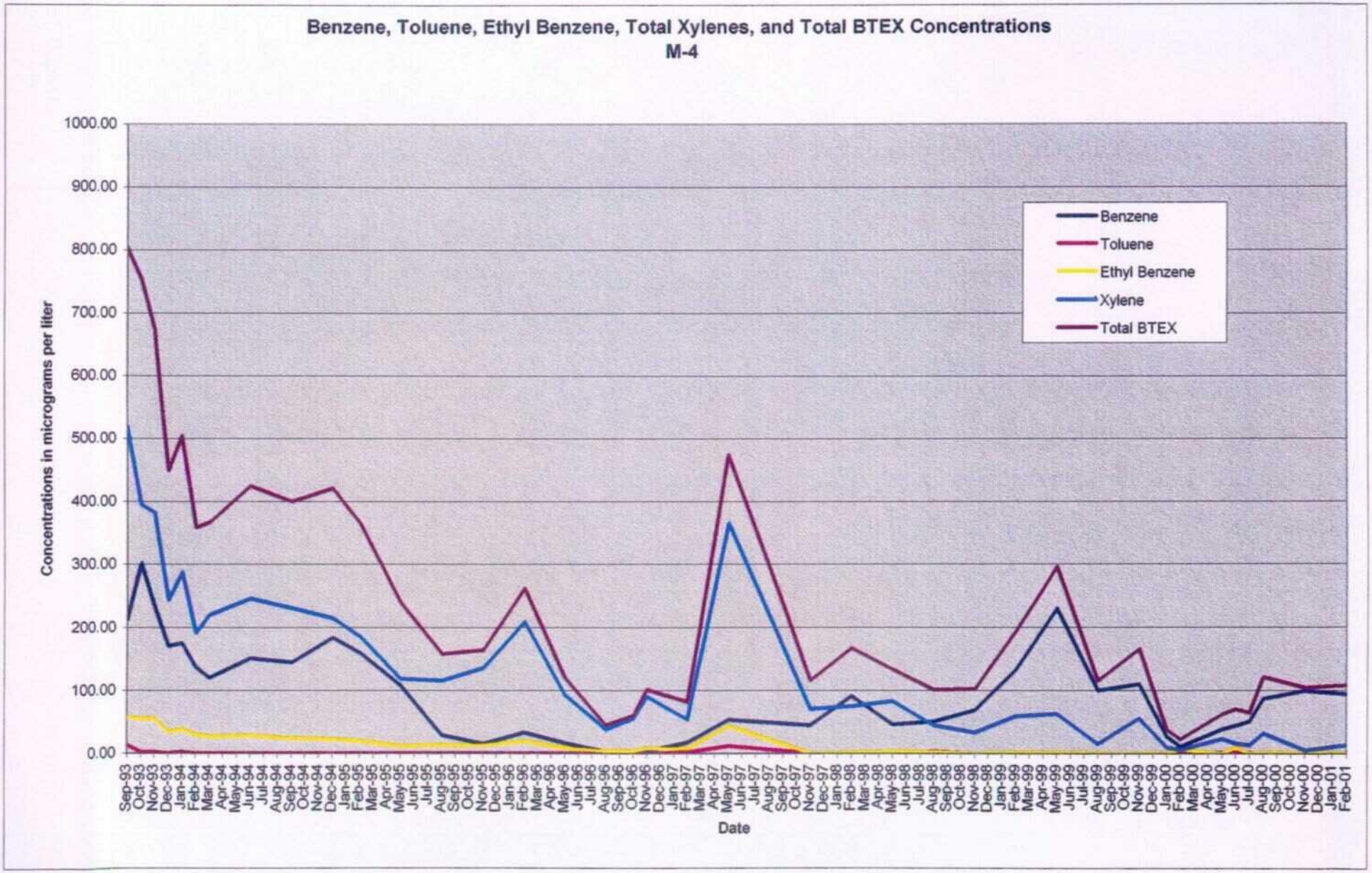

Benzene, Toluene, Ethyl Benzene, Total Xylenes, and Total BTEX Concentrations
R-5
Concentrations in micrograms per liter
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Benzene
Toluene
Ethyl Benzene
Xylene
Total BTEX
Date

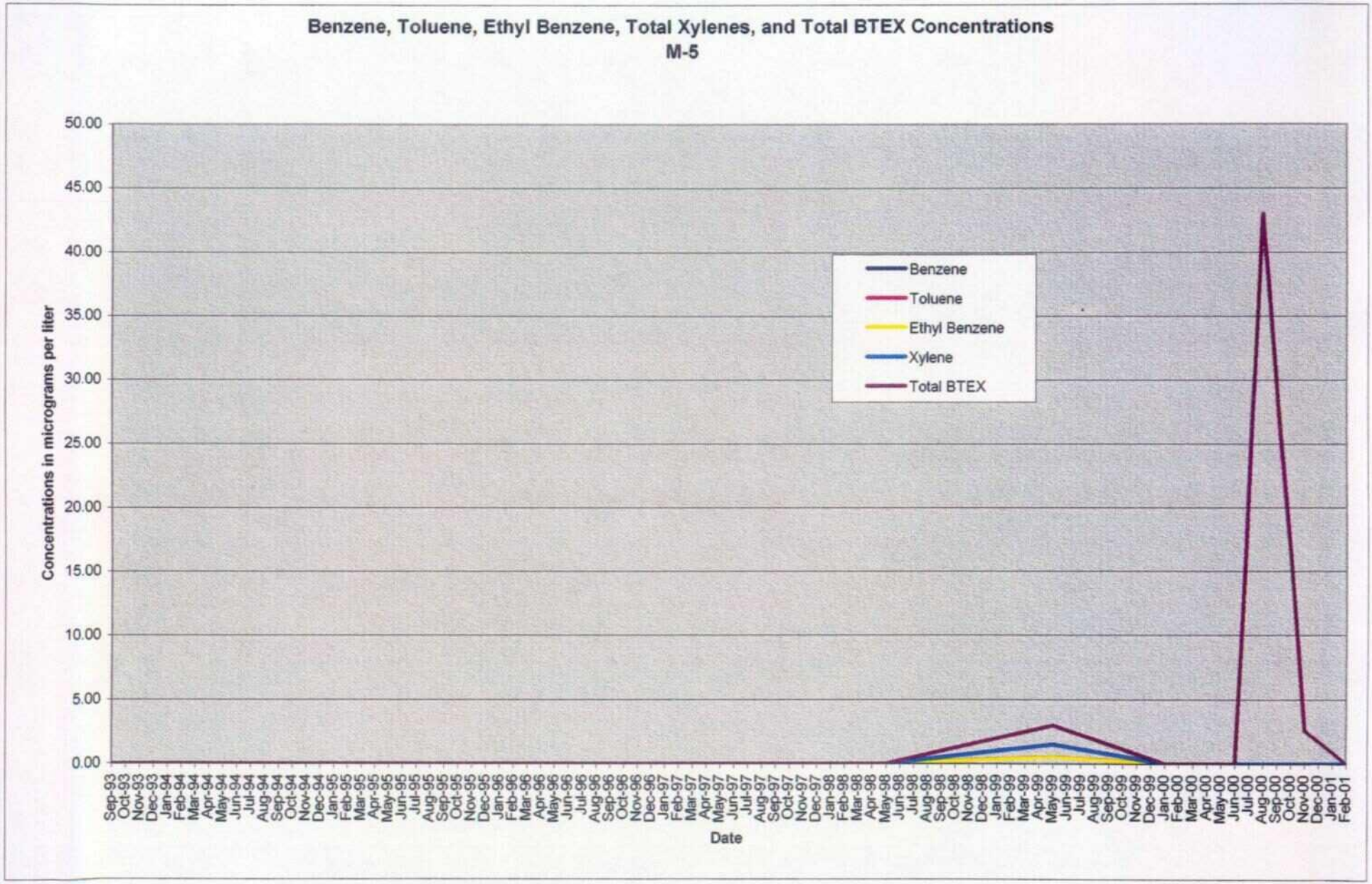

Benzene, Toluene, Ethyl Benzene, Total Xylenes, and Total BTEX Concentrations
R-6
Concentrations in micrograms per liter
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Jan-00
Feb-00
Mar-00
Apr-00
May-00
Jun-00
Jul-00
Aug-00
Sep-00
Oct-00
Nov-00
Dec-00
Jan-01
Feb-01
Date
Benzene
Toluene
Ethyl Benzene
Xylene
Total BTEX

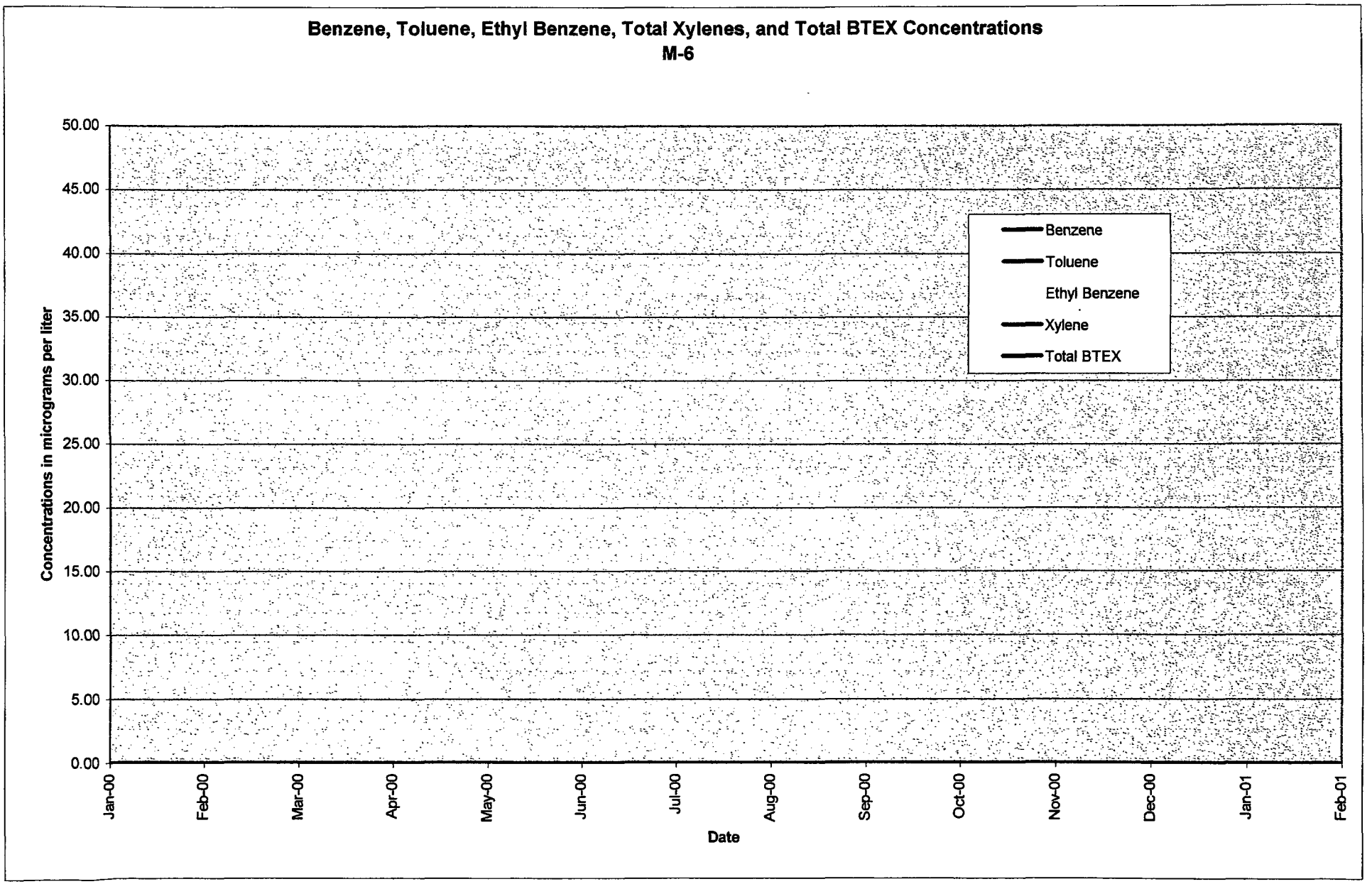

Benzene, Toluene, Ethyl Benzene, Total Xylenes, and Total BTEX Concentrations
M-1
Concentrations in micrograms per liter
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Benzene
Toluene
Ethyl Benzene
Xylene
Total BTEX
Date


Benzene, Toluene, Ethyl Benzene, Total Xylenes, and Total BTEX Concentrations
M-2
Concentrations in micrograms per liter
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Benzene
Toluene
Ethyl Benzene
Xylene
Total BTEX
Date


Benzene, Toluene, Ethyl Benzene, Total Xylenes, and Total BTEX Concentrations
M-3
Concentrations in micrograms per liter
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Benzene
Toluene
Ethyl Benzene
Xylene
Total BTEX
Date


Benzene, Toluene, Ethyl Benzene, Total Xylenes, and Total BTEX Concentrations
M-4
Concentrations in micrograms per liter
1000.00
900.00
800.00
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.00
Benzene
Toluene
Ethyl Benzene
Xylene
Total BTEX
Date


Benzene, Toluene, Ethyl Benzene, Total Xylenes, and Total BTEX Concentrations
M-5
Concentrations in micrograms per liter
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
Benzene
Toluene
Ethyl Benzene
Xylene
Total BTEX
Date


Benzene, Toluene, Ethyl Benzene, Total Xylenes, and Total BTEX Concentrations
M-6
Concentrations in micrograms per liter
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
Jan-00
Feb-00
Mar-00
Apr-00
May-00
Jun-00
Jul-00
Aug-00
Sep-00
Oct-00
Nov-00
Dec-00
Jan-01
Feb-01
Date
Benzene
Toluene
Ethyl Benzene
Xylene
Total BTEX

Appendix D – 2000 Groundwater Analytical Data

PHILIP ENVIRONMENTAL

Well Number JQ0001Mon

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS wells

Project Manager C, IRBy

Project No.

Client Company EPFS

Phase.Task No.

Site Name Jaquez wells

Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth to Well (feet) 15.29

Initial Depth to Water (feet) 5.11

Height of Water Column in Well (feet) 10

Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	10 x .6528	6.5	20
Gravel Pack			
Drilling Fluids			
Total			

Instruments

Serial No. (if applicable)

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

Water Disposal

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Project Volume Removed (gallons): Incremental	Project Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
1-19-00	10:30		✓							5	9.6	8.0 ~~8.0~~	300		Clear
1-19-00	10:~~40~~		✓							5	10.2	9.5	280		Clear /WAit 20 min For wate

Circle the date and time that the development criteria are met

Comments WAit 20 min For water To Come BACK IN To well., well Bailed dry At 10 GAL Took SAmple SAmple At 11:30

Developer's Signature(s) Date Reviewer Date

PHILIP ENVIRONMENTAL

Well Number JAQ001MOZ-1

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS wells JAQUEZ

Project Manager C. IRBY

Project No.

Client Company EPFS

Phase.Task No.

Site Name JAQUEZ

Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth to Well (feet) 15

Initial Depth to Water (feet) 4.21

Height of Water Column in Well (feet) 10.79

Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	10.79	7.04	20
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☑ pH Meter	
☐ DO Monitor	
☐ Conductivity Meter	
☐ Temperature Meter	
☐ Other	

Water Disposal

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Purged Volume (Casing Volumes): Increment	Purged Volume (Casing Volumes): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
1-19-00	2:30		✓							5	8.1	8.0	470		light GRAY
1-19-00	2:45		✓							5	8.1	7.8	470		light GRAY
1-19-00	2:55		✓							5	8.3	8.0	460		light GRAY
1-19-00	3:05		✓							5	8.1	8.4	460		light GRAY
															X

Circle the date and time that the development criteria are met.

Comments

Developer's Signature(s) Date Reviewer Date

PHILIP ENVIRONMENTAL

Well Number JQ0001m031

Serial No. WDPD-

WELL DEVELOPMENT AND PURGIN[illegible]ATA

Page 1 of 1

Project Name EPFS wells JAQUEZ

Project Manager C, IRBy

Project No.

Client Company EPFS

Phase.Task No.

Site Name

Site Address

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 15

Initial Depth to Water (feet) 4.99

Height of Water Column in Well (feet) 10.01

Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing		6.53458	19.6
Gravel Pack			
Drilling Fluids			
Total			

Instruments

Serial No. (If applicable)

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

Water Disposal

Methods of Development

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

☐ Other

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 (Gallons): Incremental	Water Volume Removed (Gallons): Cumulative	Purge Volume Removed (Gallons): Incremental	Purge Volume Removed (Gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
1-19-00	11:15		✓							5	11.	8.6	410		dark GRAY
1-19-00	11:30		✓							5	11.5	8.0	450		dark GRAY
1-19-00	11:45		✓							5	11.2	9.0	350		dark GRAY
1-19-00	12:00		✓							5	11.4	8.6	330		dark GRAY

Circle the date and time that the development criteria are met.

Comments

Developer's Signature(s) Date Reviewer Date

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/96

PHILIP ENVIRONMENTAL

Well Number JA0001M041

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Project Name EPFS Wells JAQUEZ Project Manager C. IRBY Project No.

Client Company EPFS Phase.Task No.

Site Name JAQUEZ Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth to Well (feet) 15.29

Initial Depth to Water (feet) 3.91

Height of Water Column in Well (feet) 11.38

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Gallons per Foot	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing		~~23~~ 17.75	23
Gravel Pack			
Drilling Fluids			
Total			

Instruments

Serial No. (if applicable)

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

Water Disposal

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Removed (gallons): Increment	Water Removed (gallons): Cumulative	Turbidity: Increment	Turbidity: Cumulative	Temperature (°C)	pH	Conductivity (mmho/cm)	Dissolved Oxygen (mg/L)	Comments
1-19-00	12.45		✓								11.5	8.6	630		Clear
1.19.00	1300		✓								12.2	8.6	550		Clear

Circle the date and time that the development criteria are met

Comments BAiled Dry At 10GAL Let Recharge TAKe SAmPle.

Developer's Signature(s) Kelly Paddock Date 1/19/00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number JQ0001MOS-1

Serial No. WDPD-

WELL DEVELOPMENT AND PURGIN DATA

Page 1 of 1

Project Name EPFS wells JAQuez

Project Manager C, IRBy

Project No.

Client Company EPFS

Phase.Task No.

Site Name JAQuez

Site Address

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 15

Initial Depth to Water (feet) 4.57

Height of Water Column in Well (feet) 10.43

Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	10.43	6.8	20
Gravel Pack			
Drilling Debris			
Total			

Instruments

Serial No. (if applicable)

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

Methods of Development

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

☐ Other

Water Disposal

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 (gallons)	Cumulative	Purged Volume Removed (gallons)	Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
1-19-00	1330		✓								11.5	8.0	390		LIGHT BROWN
1-19-00	1340		✓								11.8	8.0	390		Clear
1-19-00	1355		✓								12.1	8.1	410		Clear
1-19-00	1406		✓								11.5	8.0	340		clear

Circle the date and time that the development criteria are met

Comments

Developer's Signature(s) Kelly Padilla Date 1-19-00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number JAQUEZ MW6-1

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS wells JAQUEZ

Project Manager C, IRBY

Project No.

Client Company EPFS

Phase.Task No.

Site Name JAQUEZ

Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 18'

Initial Depth to Water (feet) 8.94

Height of Water Column in Well (feet) 9.06

Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well Cubic Feet	Water Volume in Well Gallons	Gallons to be Removed
Well Casing		5.9	18
Gravel Pack			
Drilling Fluids			
Total			

Instruments

Serial No. (if applicable)

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

Water Disposal

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Purged Volume Removed (gallons): Incremental	Purged Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
1-19-00	3:35		✓							5	12.6	8.1	720		BROWN, FINE SAND
1-19-00	3:45		✓							5	12.8	8.2	750		SAME
1-19-00	4:00		✓							5	12.8	8.2	620		SAME
1-19-00	4:15		✓							3	12.5	7.88	560		LIGHT BROWN

Circle the date and time that the development criteria are met

Comments

Developer's Signature(s) Kelly Padilla Date 1-19-00 Reviewer Date

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/96

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **001047**
January 25, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name EPFS JAQUEZ
Project Number (none)

Attention: CECIL IRBY

On 01/21/00 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.

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

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 001047
PROJECT #	: (none)	DATE RECEIVED	: 01/21/00
PROJECT NAME	: EPFS JAQUEZ	REPORT DATE	: 01/25/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JQ0001M0-1-1	AQUEOUS	01/19/00
02	JQ0001M0-3-1	AQUEOUS	01/19/00
03	JQ0001M0-4-1	AQUEOUS	01/19/00
04	JQ0001M0-5-1	AQUEOUS	01/19/00
05	JQ0001M0-2-1	AQUEOUS	01/19/00
06	JQ0001M0-6-1	AQUEOUS	01/19/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : (none)
PROJECT NAME : EPFS JAQUEZ

PINNACLE I.D.: 001047

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JQ0001M0-1-1	AQUEOUS	01/19/00	NA	01/24/00	1
02	JQ0001M0-3-1	AQUEOUS	01/19/00	NA	01/24/00	1
03	JQ0001M0-4-1	AQUEOUS	01/19/00	NA	01/24/00	1

PARAMETER	DET. LIMIT	UNITS	JQ0001M0-1-1	JQ0001M0-3-1	JQ0001M0-4-1
BENZENE	0.5	**UG/L**	< 0.5	**4.1**	**27**
TOLUENE	0.5	**UG/L**	< 0.5	**2.8**	< 0.5
ETHYLBENZENE	0.5	**UG/L**	< 0.5	**1.6**	< 0.5
TOTAL XYLENES	0.5	**UG/L**	< 0.5	**3.7**	**9.7**
SURROGATE:					
BROMOFLUOROBENZENE (%)			104	84	100
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.	: 001047
BLANK I. D.	: 012400	DATE EXTRACTED	: N/A
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 01/24/00
PROJECT #	: (none)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS 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 (%) 97
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : (none)
PROJECT NAME : EPFS JAQUEZ

PINNACLE I.D.: 001047

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JQ0001M0-5-1	AQUEOUS	01/19/00	NA	01/24/00	1
05	JQ0001M0-2-1	AQUEOUS	01/19/00	NA	01/24/00	1
06	JQ0001M0-6-1	AQUEOUS	01/19/00	NA	01/24/00	1

PARAMETER	DET. LIMIT	UNITS	JQ0001M0-5-1	JQ0001M0-2-1	JQ0001M0-6-1
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			102	104	97
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 #	: 001047-01	PINNACLE I.D.	: 001047
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: N/A
PROJECT #	: (none)	DATE ANALYZED	: 01/24/00
PROJECT NAME	: EPFS 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	23.0	115	22.8	114	1	(80 - 120)	20
TOLUENE	<0.5	20	20.3	102	20.1	101	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20	22.7	114	22.6	113	0	(80 - 120)	20
TOTAL XYLENES	<0.5	60	66.8	111	65.9	110	1	(80 - 120)	20

CHEST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

001047

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

COC Serial No. C 2481

Project Name EPFS JAQUEZ

Project Number Phase . Task

Samplers Kelly Padilla

Laboratory Name

Location

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BETEX	BETEX	BETEX	BETEX	BETEX	BETEX	Lab ID#	Comments
JQ0001MO1-1	1-19-00	11:30	water	2	X						-01	
JQ0001MO-3-1	1-19-00	12:15	water	2		X					-02	
JQ0001MO-4-1	1-19-00	1310	water	2			X				-03	
JQ0001MO-5-1	1-19-00	1410	water	2				X			-04	
JQ0001MO-2-1	1-19-00	3:15	water	2					X		-05	
JQ0001MO-6-1	1-19-00	4:25	water	2						X	-06	

Relinquished by:

Signature	Date	Time
Kelly Padilla	1-19-00	5:00 Pm

Received By:

Signature	Date	Time
Stacked Ref-y. Stanane Jaramillo	1-19-00 1/21/00	1410

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:

Rec'd @ 5°C

Bill to EPFS

PE-176 4/95

PHILIP ENVIRONMENTAL

Well Number JQ0001R01-L

Serial No. WQPD-

WELL DEVELOPMENT AND PURGIN[illegible]ATA

Page 1 of 1

Project Name JAQUEZ wells | Project Manager C, IRBY | Project No.

Client Company EPFS | Phase.Task No.

Site Name JAQUEZ | Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22

Initial Depth to Water (feet) 14.37

Height of Water Column in Well (feet) 14.37

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	14.37	7.63	15
Gravel Pack			
Drilling Fluids			
Total			

Instruments

Serial No. (if applicable)

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

Water Disposal

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Column Before and After (feet): Incremental	Water Column Before and After (feet): Cumulative	Purged Volume Before and After (gallons): Incremental	Purged Volume Before and After (gallons): Cumulative	Temperature (°C)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Comments
1-20-00	12:00		✓							5	15.5	8.9	730		light Gray order
1-20-00	12:10		✓							5	14.6	8.8	770		SAME
1-20-00	12:20		✓							5	14.0	8.0	740		SAME

Circle the date and time that the development criteria are met

Comments

Developer's Signature(s) Kelly Padilla Date 1-20-00 Reviewer Date

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/98

PHILIP ENVIRONMENTAL

Well Number JQ0001R02-1 ☐ Development ☐ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name JAQUEZ WELLS Project Manager C. IRBY Project No.

Client Company EPFS Phase.Task No.

Site Name JAQUEZ Site address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 24.11

Initial Depth to Water (feet) 15.21

Height of Water Column in Well (feet)

Diameter (inches): Well 4 Gravel Pack

Item	Water Column in Well (cubic feet)	(gallons)	Gallons to be Removed
Well Casing	15.21	8.9	20
Gravel Pack			
Drilling Fluid			
Total			

Instruments

	Serial No. (if applicable)
☑ pH Meter	
☐ DO Monitor	
☑ Conductivity Meter	
☑ Temperature Meter	
☐ Other	

Water Disposal

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Column Removed (feet or cu.)		Water Column Removed (gallons)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
							Incremental	Cumulative	Incremental	Cumulative					
1-20-00	12:45		✓								13.3	8.9	590		LIGHT GRAY ORDOR
1-20-00	1:00 PM		✓								13.5	7.8	580		SAME
1-20-00	1:10 PM		✓								14.0	8.9	480		BLACK ORDOR
1-20-00	1:15 PM		✓								13.7	8.2	450		LIGHT GRAY ORDOR

Circle the date and time that the development criteria are met.

Comments

Developer's Signature(s) Kelly Padilla Date 1-20-00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number JQ0001R03-1

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name Jaquez Wells

Project Manager C. IRBY

Project No.

Client Company EPFS

Phase.Task No.

Site Name Jaquez

Site Address

Development Criteria

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

Methods of Development

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

[ ] Other

Water Volume Calculation

Initial Depth of Well (feet) 22

Initial Depth to Water (feet) 14.05

Height of Water Column in Well (feet) ~~7.85~~ 7.95

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	22	7.95	15
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
~~[x]~~ pH Meter	
[ ] DO Monitor	
[x] Conductivity Meter	
[x] Temperature Meter	
[ ] Other	

Water Disposal

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 (Gallons): Incremental	Water Volume Removed (Gallons): Cumulative	Purge Volume Exceeded (Gallons): Incremental	Purge Volume Exceeded (Gallons): Cumulative	Temperature (°C)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Comments
1-20-00	10:00		✓							5	12.1	8.3	560		light Gray
1-20-00	10:10		✓							5	12.4	8.6	520		Clear
1-20-00	10:15		✓							5	12.5	7.8	430		light Gray

Circle the date and time that the development criteria are met

Comments

Developer's Signature(s) Kelly Padilla Date 1-20-00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number JQ0001R04-1

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name JAQUEZ Wells

Project Engineer C. IRBY

Project No.

Client Company EPFS

Phase.Task No.

Site Name JAQUEZ

Site Address

Development Criteria

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

Water Volume Calculation

Initial Depth to Well (feet) 22.17

Initial Depth to Water (feet) 13.51

Height of Water Column in Well (feet) 13.51

Diameter (inches) Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	13.51	8.66	16
Gravel Pack			
Drilling Fluids			
Total			

Instruments

Serial No. (if applicable)

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

Methods of Development

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

☐ Other

Water Disposal

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
1-20-00	11:05		✓						14.3	8.5	370		DARK GRAY
1-20-00	11:15		✓						14.6	8.6	380		SAME
1-20-00	11:20		✓						14.8	8.2	551		SAME

Circle the date and time that the development criteria are met

Comments

Developer's Signature(s) Kelly Padilla Date 1-20-00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number JQ 0001 R05-1

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name JAQUEZ WELLS

Project Developer C, IRBY

Project No.

Client Company EPFS

Phase.Task No.

Site Name JAQUEZ

Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 24.43

Initial Depth to Water (feet) 16.54

Height of Water Column in Well (feet) 7.89

Diameter (inches) of Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	7.89 16.54	5.1	15
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☑ pH Meter	
☐ DO Monitor	
☑ Conductivity Meter	
☑ Temperature Meter	
☐ Other	

Water Disposal

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Initial Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (Gallons): Incremental	Water Volume Removed (Gallons): Cumulative	Purge Volume Removed (Gallons): Incremental	Purge Volume Removed (Gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
1-20-00	9:10		✓					5			14.1	9.4	710		Clear
1-20-00	9:30		✓					5			12.6	7.9	810		CLEAR
								5							

Circle the date and time that the development criteria are met.

Comments BAILED DRY AT 10 GALS THEN LET RECHARGE TAKE SAMPLE

Developer's Signature(s) Kelly Padilla

Date 1-20-00

Reviewer

Date

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/96

PHILIP ENVIRONMENTAL

Well Number JQ-0001R06-1

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name JAQUEZ WELLS

Project Manager C. IRBY

Project No.

Client Company EPFS

Phase.Task No.

Site Name JAQUEZ

Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 21.91

Initial Depth to Water (feet) 15.61

Height of Water Column in Well (feet) 21.91

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	15.61	6.3	~~31.2~~
Gravel Pack			
Drilling Fluids			
Total			

Instruments

Serial No. (if applicable)

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

Water Disposal

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 (gallons): Estimated	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Estimated	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10-20-00	10:35		✓							~~2356~~	12.5	8.4	310		LIGHT BROWN SAND
10-20-00	10:45		✓							~~2036~~	13.0	8.4	290		SAME

Circle the date and time that the development criteria are met

Comments

Developer's Signature(s) Kelly Padilla

Date 1-20-00 Reviewer Date

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **001046**
January 25, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name JQ0001 R05-1
Project Number (none)

Attention: CECIL IRBY

On 01/21/00 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.

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

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 001046
PROJECT #	: (none)	DATE RECEIVED	: 01/21/00
PROJECT NAME	: JQ0001 R05-1	REPORT DATE	: 01/25/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JQ0001R05-1	AQUEOUS	01/20/00
02	JQ0001R03-1	AQUEOUS	01/20/00
03	JQ0001R06-1	AQUEOUS	01/20/00
04	JQ0001R04-1	AQUEOUS	01/20/00
05	JQ0001R01-1	AQUEOUS	01/20/00
06	JQ0001R02-1	AQUEOUS	01/20/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : (none)
PROJECT NAME : JQ0001 R05-1

PINNACLE I.D.: 001046

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JQ0001R05-1	AQUEOUS	01/20/00	NA	01/24/00	1
02	JQ0001R03-1	AQUEOUS	01/20/00	NA	01/24/00	1
03	JQ0001R06-1	AQUEOUS	01/20/00	NA	01/24/00	1

PARAMETER	DET. LIMIT	UNITS	JQ0001R05-1	JQ0001R03-1	JQ0001R06-1
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	5.2	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			100	95	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 RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : (none)
PROJECT NAME : JQ0001 R05-1

PINNACLE I.D.: 001046

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JQ0001R04-1	AQUEOUS	01/20/00	NA	01/24/00	100
05	JQ0001R01-1	AQUEOUS	01/20/00	NA	01/24/00	200
06	JQ0001R02-1	AQUEOUS	01/20/00	NA	01/24/00	250

PARAMETER	DET. LIMIT	UNITS	JQ0001R04-1	JQ0001R01-1	JQ0001R02-1
BENZENE	0.5	**UG/L**	**280**	**2500**	**1200**
TOLUENE	0.5	**UG/L**	**89**	**3800**	**2000**
ETHYLBENZENE	0.5	**UG/L**	**60**	**180**	< 130
TOTAL XYLENES	0.5	**UG/L**	**690**	**1900**	**1500**
SURROGATE:					
BROMOFLUOROBENZENE (%)			102	106	88
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.	: 001046
BLANK I. D.	: 012400	DATE EXTRACTED	: N/A
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 01/24/00
PROJECT #	: (none)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: JQ0001 R05-1		

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 (%)		97
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 #	: 001047-01	PINNACLE I.D.	: 001046
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: N/A
PROJECT #	: (none)	DATE ANALYZED	: 01/24/00
PROJECT NAME	: JQ0001 R05-1	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	23.0	115	22.8	114	1	(80 - 120)	20
TOLUENE	<0.5	20	20.3	102	20.1	101	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20	22.8	114	22.6	113	1	(80 - 120)	20
TOTAL XYLENES	<0.5	60	66.8	111	65.9	110	1	(80 - 120)	20

CHECKLIST NOTES:
N/A

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

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

Chain of Custody Record

001046

PHILIP ENVIRONMENTAL

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

COC Serial No. C 2482

Project Name JQ0001 RO5-1

Project Number Phase . Task

Samplers Kelly Padilla

Laboratory Name

Location

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX	BTEX	BTEX	BTEX	BTEX	BTEX	Lab ID #	Comments
JQ0001R05-1	1-20-00	9:35	WATER	2	X						-01	
JQ0001R03-1	1-20-00	10:20	WATER	2		X					-02	
JQ0001R06-1	1-20-00	10:50	WATER	2			X				-03	
JQ0001R04-1	1-20-00	11:25	WATER	2				X			-04	
JQ0001R01-1	1-20-00	12:30	WATER	2					X	X	-05	
JQ0001R02-1	1-20-00	1330	WATER	2						X	-06	

Relinquished by:

Signature	Date	Time
Kelly Padilla	1-20-00	1355

Received By:

Signature	Date	Time
Francine Jones	1/21/00	1410

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: Bill to EDFS

Rec'd @ 5°C

PE 176 4/95

PHILIP ENVIRONMENTAL

Well Number M-3

☐ Develop ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager CECIL IRBY Project No. 62800107

Client Company EL PASO FIELD SERVICES Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.25 TOR
Initial Depth to Water (feet) 5.50 TOR
Height of Water Column in Well (feet) 9.75
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	6.36		6.36 x 3
Gravel Pack			
Drilling Fluids			
Total			19.08

Instruments

	Serial No. (if applicable)
☒ pH Meter	EXTECH
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
2/24/00	1045		X								7.8	7.4	250		
2/24/00	1055		X								7.7	7.5	150		
2/24/00	1105		X								7.8	7.4	340		
2/24/00	1112		X								7.7	7.4	270		

Circle the date and time that the development criteria are met.

Comments WATER IS SLIGHT GRAY IN COLOR. LIGHT SHEEN ON TOP. SLIGHT ODOR.

Developer's Signature(s) Danny Padilla Date 2/24/00 Reviewer RT Date 3/10/00

PHILIP ENVIRONMENTAL

Well Number M-4 ☐ Develop ☒ Purging

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS QUARTERLY SAMPLING Project Manager CECIL IRBY Project No. 62800107

Client Company EL PASO FIELD SERVICES Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.45 TOR
Initial Depth to Water (feet) 4.05 TOR
Height of Water Column in Well (feet) 11.40
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	7.44		7.44 x 3
Gravel Pack			
Drilling Fluids			
Total			22.32

Instruments

	Serial No. (If applicable)
☒ pH Meter	EXTECH
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal KUTZ SEPARATOR

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
2/24/00	1010		X								9.2	7.5	1338		
2/24/00	1020		X								7.9	7.4	1446		

Circle the date and time that the development criteria are met.

Comments SLIGHTLY CLEAR. NO ODOR.

Developer's Signature(s) Danny Padilla Date 2/24/00 Reviewer RT Date 3/10/00

PINNACLE LABORATORIES

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

MAR 13

Pinnacle Lab ID number **002094**
March 09, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: KELLY PADILLA

On 02/29/00 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.

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

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 002094
PROJECT #	: 62800107	DATE RECEIVED	: 02/29/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 03/08/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	LIN-0002-MW1	AQUEOUS	02/24/00
02	146-0002-MW1	AQUEOUS	02/24/00
03	169-0002-MW1	AQUEOUS	02/25/00
04	STD-0002-MW1	AQUEOUS	02/25/00
05	HAM-0002-MW1	AQUEOUS	02/25/00
06	TNR-0002-MW2	AQUEOUS	02/28/00
07	JAQ-0002-MW4	AQUEOUS	02/24/00
08	JAQ-0002-MW3	AQUEOUS	02/24/00

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 : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 002094
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	LIN-0002-MW1	AQUEOUS	02/24/00	NA	03/02/00	20
02	146-0002-MW1	AQUEOUS	02/24/00	NA	03/02/00	50
03	169-0002-MW1	AQUEOUS	02/25/00	NA	03/02/00	20

PARAMETER	DET. LIMIT	UNITS	LIN-0002-MW1	146-0002-MW1	169-0002-MW1
BENZENE	0.5	UG/L	120	30	750
TOLUENE	0.5	UG/L	39	25	29
ETHYLBENZENE	0.5	UG/L	78	470	790
TOTAL XYLENES	0.5	UG/L	830	5000	1600
SURROGATE:					
BROMOFLUOROBENZENE (%)			105	102	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 RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 002094
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	STD-0002-MW1	AQUEOUS	02/25/00	NA	03/02/00	50
05	HAM-0002-MW1	AQUEOUS	02/25/00	NA	03/08/00	1
06	TNR-0002-MW2	AQUEOUS	02/28/00	NA	03/08/00	1

PARAMETER	DET. LIMIT	UNITS	STD-0002-MW1	HAM-0002-MW1	TNR-0002-MW2
BENZENE	0.5	UG/L	1300	130	2.6
TOLUENE	0.5	UG/L	1800	70	6.8
ETHYLBENZENE	0.5	UG/L	260	72	14
TOTAL XYLENES	0.5	UG/L	1700	190	58
SURROGATE:					
BROMOFLUOROBENZENE (%)			104	100	97
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 002094

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	JAQ-0002-MW4	AQUEOUS	02/24/00	NA	03/02/00	1
08	JAQ-0002-MW3	AQUEOUS	02/24/00	NA	03/02/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0002-MW4	JAQ-0002-MW3
BENZENE	0.5	**UG/L**	**11**	**30**
TOLUENE	0.5	**UG/L**	**< 0.5**	**21**
ETHYLBENZENE	0.5	**UG/L**	**5.6**	**2.3**
TOTAL XYLENES	0.5	**UG/L**	**5.5**	**9.4**
SURROGATE:				
BROMOFLUOROBENZENE (%)			101	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 RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 002094
BLANK I. D.	: 030100	DATE EXTRACTED	: N/A
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 03/01/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		103
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.	: 002094
BLANK I. D.	: 030200	DATE EXTRACTED	: N/A
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 03/02/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		101

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.	: 002094
BLANK I. D.	: 030800	DATE EXTRACTED	: N/A
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 03/08/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		97
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 #	: 030100	PINNACLE I.D.	: 002094
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: N/A
PROJECT #	: 62800107	DATE ANALYZED	: 03/01/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	21.8	109	21.9	110	0	(80 - 120)	20
TOLUENE	<0.5	20.0	20.4	102	20.0	100	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	22.2	111	22.0	110	1	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	62.1	104	62.9	105	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

002094

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

COC Serial No. C 2497

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 0301
Samplers KELLY PADILLA
Laboratory Name PINNACLE LABS
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Lab ID #	Comments
LIN-0002-MW1	2/24/00	1410	H_2O	2	X	01	94967
146-0002-MW1	2/24/00	1705	H_2O	2	X	02	LD146
169-0002-MW1	2/25/00	1350	H_2O	2	X	03	LD169
STD-0002-MW1	2/25/00	1545	H_2O	2	X	04	70449
HAM-0002-MW1	2/25/00	1630	H_2O	2	X	05	97213
TNR-0002-MW2	2/28/00	1020	H_2O	2	X	06	71676
JAQ-0002-MW4	2/24/00	1010	H_2O	2	X	07	CORN FIELD
JAQ-0002-MW3	2/24/00	1110	H_2O	2	X	08	CORN FIELD

Relinquished by:

Signature	Date	Time
Kelly Padilla	2-28-00	1135

Received By:

Signature	Date	Time
Francine Trujillo	2/29/00	1015

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: GREYHOUND

Airbill No. GLI 160 1665 04/9

Shipping and Lab Notes: SEND ORIGINAL ANALYTICAL RESULTS TO EL PASO FIELD SERVICES.
SEND A COPY OF THE RESULTS TO THE ADDRESS ABOVE.

Rec'd @ 14°C *No sample for PAH & NO3 - 2/29/00

8 4/95

FLIP ENVIRONMENTAL

Well Number M-1

[ ] Develop [X] Purge

WELL DEVELOPMENT AND PURGING DATA

Project Name EPFS Quarterly Sampling Project Manager S. Stallard To Project No.

Client Company Phase.Task No.

Site Name JAQUEZ M-1 Comfield Site Address

Development Criteria

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

Methods of Development

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

[ ] Other

Water Volume Calculation

Initial Depth of Well (feet) 15.35

Initial Depth to Water (feet) 5.86

Height of Water Column in Well (feet) 9.49

Diameter (inches): Well 1 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	9.49	6.78	18.58
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (If applicable)
[X] pH Meter	990805049
[ ] DO Monitor	
[X] Conductivity Meter	
[X] Temperature Meter	
[ ] Other	

Water Disposal

KUTE Separator Bloomfield, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
27-MAR-00	1140		X				1	5			16.9	7.76	260		clear
27-MAR-00	1150		X				2	12			15.0	8.64	240		
27-MAR-00	1200		X				3	15			14.1	8.29	230		
27-MAR-00	1205		X				4	17.5			14.0	8.21	230		
27-MAR-00	1210		X				5	20.0			13.9	8.19	230		

Circle the date and time that the development criteria are met

Comments Water is clear. No hydrocarbon odor. Collected BTEX sample at 1212.

Developer's Signature(s) Stephen Stallard Date 27-MAR-00 Reviewer Date

FILIP ENVIRONMENTAL

Well Number M-2 ☐ Development ☒ Purge

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Project Name EPFS Quarterly Sampling Project Manager S Stellavato Project No.

Client Company Phase.Task No.

Site Name Jaquez M-2 Cornfield Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.03
Initial Depth to Water (feet) 5.21
Height of Water Column in Well (feet) 9.82
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	9.82	61.11	19.23
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Water Disposal

Kutz Separator - Bloomfield, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Purge Volume Removed (gallons): Incremental	Purge Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
27-MAR-00	1240		X				1	5			12.1	7.73	500		Clear
27-MAR-00	1250		X				2	10			10.2	7.54	420		
27-MAR-00	1300		X				3	15			10.0	7.56	410		
27-MAR-00	1305		X				4	20			9.5	7.40	400		
27-MAR-00	1310		X				5	26			9.4	7.38	390		

Circle the date and time that the development criteria are met.

Comments Water was clear. Collected water sample for BTEX at 1312.

Developer's Signature(s) Stephen Stellavato Date 27-MAR-00 Reviewer Date

FLIP ENVIRONMENTAL

Well Number M-3

☐ Development ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS Quarterly Sampling Project Manager S. Stellavato Project No.

Client Company Phase.Task No.

Site Name JAQUEZ M-3 Cben Field Site Address

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 15.15
Initial Depth to Water (feet) 6.52
Height of Water Column in Well (feet) 8.63
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	8.63	5.43	16.90
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Methods of Development

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

Water Disposal

Kutz Separators, Bloomfield, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
27-MAR-00	1330		X				1	5			19.2	7.78	370		Cloudy gray
27-MAR-00	1335		X				2	10			16.3	7.78	310		↓
27-MAR-00	1340		X				3	15			11.7	7.50	270		dark gray
27-MAR-00	1345		X				4	20			13.8	7.80	270		↓
27 MAR 00	1350		X				5	25			13.9	7.80	270		dark gray

Circle the date and time that the development criteria are met

Comments Water was cloudy gray and [illegible] gray as well was purged.
Collected water sample at 1352 for [illegible]

Developer's Signature(s) Stefan Stellavato Date 27-MAR-00 Reviewer Date

Form A0101 Rev. 10/6/94 F:\NEWFORM\PE_A0101.DOT 1/31/96

FILIP ENVIRONMENTAL

Well Number M-4

☐ Development ☐ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS Quarterly Sampling Project Manager S. Stellavato Project No.

Client Company Phase.Task No.

Site Name JAQUEZ M4 Coalfield Site Address

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 15.36
Initial Depth to Water (feet) 11.89
Height of Water Column in Well (feet) 10.47
Diameter (inches): Well 1" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	1.4.71	1.83	20.50
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (If applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Methods of Development

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

Water Disposal Kutz Separator Bloomfield, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
27-MAR-00	1450		X				1	5			17.9	7.92	750		Clear
27-MAR-00	1455		X				2	10			14.1	8.12	730		
27-MAR-00	1500		X				3	15			14.1	8.05	680		
27-MAR-00	1505		X				4	20			13.9	8.06	680		
27-MAR-00	1510		X				5	25			15.8	8.07	680		

Circle the date and time that the development criteria are met

Comments Water is clear. Collected methane sample for BTEX at 1515.

Developer's Signature(s) Stephen Stellavato Date 27-MAR-00 Reviewer Date

ENSR ENVIRONMENTAL

Well Number M-5

☐ Development
☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS Quarterly Sampling Project Manager S. Stellavato Project No.

Client Company Phase.Task No.

Site Name JAQUEZ M5 Confield Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.06
Initial Depth to Water (feet) 6.06
Height of Water Column in Well (feet) 9.00
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	9.00	5.87	17.62
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Water Disposal

Kutz Separator, Bloomfield, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
27-MAR-00	1415		X				1	5			15.7	7.62	320		Clear
27-MAR-00	1420		X				2	10			13.5	7.60	280		↓
27-MAR-00	1425		X				3	15			11.0	7.62	290		
27-MAR-00	1430		X				4	20			13.9	7.61	280		

Circle the date and time that the development criteria are met.

Comments Water was clear. Collected 1 lb. for BTEX at 1435.

Developer's Signature(s) Stephen Stellavato Date 27-MAR-00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number M-6 ☐ Develop ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS Quarterly Sampling Project Manager Stephen Stellavato Project No.

Client Company Phase.Task No.

Site Name Jaquez Cornfield M-6 Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 17.94
Initial Depth to Water (feet) 9.27
Height of Water Column in Well (feet) 8.67
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	8.67	5.46	16.38
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Water Disposal

Kutz Separator Bloomfield, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
27-MAR-00	1015		X				1	5			19.5 c	8.16	3630		Cloudy brown
27-MAR-00	1025		X				2	10			16.7 c	7.74	1090		↓
27-MAR-00	1035		X				3	15			16.3 c	7.75	820		
27-MAR-00	1048		X				11	17.5			16.1 c	7.72	810		
27-MAR-00	1100		X				5	20			15.9 c	7.70	810		↓

Circle the date and time that the development criteria are met.

Comments Well was located between house and garage south of Citizens Ditch and is a flush mount. Water was cloudy brown. Collected BTEX sample at 1110.

Developer's Signature(s) Stephen Stellavato Date 27-MAR-00 Reviewer Date

PHILIP

Chain of Custody Record

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

COC Serial No. C 2533

Project Name ~~JAQUEZ~~ SJ 62 • EPNG Gomez #1

Project Number 62800107 Phase . Task

Samplers S. Stellavato

Laboratory Name Pinnacle Lab, Inc.

Location Albuquerque, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0003-M6	27-MAR-00	1115				
JAQ-0003-M1	27-MAR-00	1212				
JAQ-0003-M2	27-MAR-00	1310				
JAQ-0003-M3	27-MAR-00	1355				
JAQ-0003-M5	27-MAR-00	1433				
JAQ-0003-M4	27-MAR-00	1515				
JAQ-0003-TB	27-MAR-00	1530				

Relinquished by:

Signature	Date	Time

Received By:

Signature	Date	Time

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: [illegible] copy directly, [illegible] and a copy to [illegible]

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **003097**
April 03, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name SKS.EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: STEVE STELLAVATO

On 03/30/00 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.

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

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 003097
PROJECT #	: 62800107	DATE RECEIVED	: 03/30/00
PROJECT NAME	: SKS.EPFS QUARTERLY SAMPLING	REPORT DATE	: 04/03/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0003-M6	AQUEOUS	03/27/00
02	JAQ-0003-M1	AQUEOUS	03/27/00
03	JAQ-0003-M2	AQUEOUS	03/27/00
04	JAQ-0003-M3	AQUEOUS	03/27/00
05	JAQ-0003-M5	AQUEOUS	03/27/00
06	JAQ-0003-M4	AQUEOUS	03/27/00
07	JAQ-0003-TB	AQUEOUS	03/27/00

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 : PHILIP ENVIRONMENTAL PINNACLE I.D.: 003097
PROJECT # : 62800107
PROJECT NAME : SKS.EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0003-M6	AQUEOUS	03/27/00	NA	03/31/00	1
02	JAQ-0003-M1	AQUEOUS	03/27/00	NA	03/31/00	1
03	JAQ-0003-M2	AQUEOUS	03/27/00	NA	03/31/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0003-M6	JAQ-0003-M1	JAQ-0003-M2
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			100	106	104
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL PINNACLE I.D.: 003097
PROJECT # : 62800107
PROJECT NAME : SKS.EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0003-M3	AQUEOUS	03/27/00	NA	03/31/00	1
05	JAQ-0003-M5	AQUEOUS	03/27/00	NA	03/31/00	1
06	JAQ-0003-M4	AQUEOUS	03/27/00	NA	03/31/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0003-M3	JAQ-0003-M5	JAQ-0003-M4
BENZENE	0.5	UG/L	8.5	< 0.5	26
TOLUENE	0.5	UG/L	0.9	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	0.5	< 0.5	26
SURROGATE:					
BROMOFLUOROBENZENE (%)			102	103	103
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL PINNACLE I.D.: 003097
PROJECT # : 62800107
PROJECT NAME : SKS.EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	JAQ-0003-TB	AQUEOUS	03/27/00	NA	03/31/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0003-TB
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 (%) 103
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.	: 003097
BLANK I. D.	: 033100	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 03/31/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: SKS.EPFS QUARTERLY SAMPLING		

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 (%)		90
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 #	: 003097-02	PINNACLE I.D.	: 003097
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 03/31/00
PROJECT NAME	: SKS.EPFS QUARTERLY SAMPLING	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	20.4	102	20.6	103	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.1	101	20.3	102	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.9	110	22.1	111	1	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	63.4	106	64.3	107	1	(80 - 120)	20

CHEM NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

003097

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

COC Serial No. C 2533

Project Name ~~JAQUEZ~~ SKS • EPFS Quarterly Sampling

Project Number 62800107 Phase . Task .

Samplers S. STELLAVATO

Laboratory Name PINNACLE LAB, Inc

Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX	Lab ID #	Comments
JAQ-0003-M6	27-MAR-00	1110	H_2O	2	X	01	
JAQ-0003-M1	27-MAR-00	1212	H_2O	2	X	02	
JAQ-0003-M2	27-MAR-00	1312	H_2O	2	X	03	
JAQ-0003-M3	27-MAR-00	1352	H_2O	2	X	04	
JAQ-0003-M5	27-MAR-00	1435	H_2O	2	X	05	
JAQ-0003-M4	27-MAR-00	1515	H_2O	2	X	06	
JAQ-0003-TB	27-MAR-00	1530	H_2O	1	X	07	

Relinquished by:

Signature	Date	Time

Received By:

Signature	Date	Time
Francine Tanio	3/30/00	1015

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: Please invoice EPFS Directly.
Please send Results to Philip Services and a copy to EPFS.

Rec'd @ 4°C

PE-176 4/95

PHILIP ENVIRONMENTAL

Well Number R-1

☐ Development ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS Quarterly Sampling Project Manager T. Hellwate Project No. 62800107

Client Company

Site Name JAQUEZ R1 Site Address

Phase.Task No.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 21.96
Initial Depth to Water (feet) 16.11
Height of Water Column in Well (feet) 5.85
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well Cubic Feet	Water Volume in Well Gallons	Gallons to be Removed
Well Casing	4.76	35.6	15
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (If applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Water Disposal

Kuty Separator Bloomfield, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
29-MAR-00	1220		X				1	5			N/A	Analyzed for			Hallaw Product
29-MAR-00	1230		X				2	10			↓	↓	↓		↓
29-MAR-00	1235		X				3	15			↓	↓	↓		↓

Circle the date and time that the development criteria are met

Comments Product at 16.11 ft. [illegible] Image III on Conductivity due to the presence of FPH. Well purged 15 gallons [illegible] Sampled at 1240 for BTEX analysis.

Developer's Signature(s) Stph. Stf[illegible] Reviewer Date

FLIP ENVIRONMENTAL

Well Number R-2

☐ Development ☑ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS Quarterly Sampling Project Manager D. Stallard Project No.

Client Company Phase.Task No.

Site Name JAQUEZ R2 Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 12.12
Initial Depth to Water (feet) 15.09
Height of Water Column in Well (feet) 7.03
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	1.05	7.89	13.76
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Water Disposal Rusty Separator Bloomfield, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
29-MAR-00	1250		X				1	5			N/A	Analyzed for			yellow Product
29-MAR-00	1255		X				2	10			↓	↓	↓		↓
29-MAR-00	1300		X				3	15							

Circle the date and time that the development criteria are met

Comments Product at 15.01 feet, Did not collect temp, pH, or Conductivity due to the presence of FPH. Collected one sample at 1305 for BTEX analysis. Purged 15 gallons,

Developer's Signature(s) Stephen Stallard Date 29-MAR-00 Reviewer Date

WELL DEVELOPMENT AND PURGING DATA

Well Number R-3 ☐ Development ☒ Purge

Serial No. WDPD-

Page 1 of 1

Project Name EPFS Quarterly Sampling Project Manager S. Stellavato Project No.

Client Company Phase.Task No.

Site Name JAQUEZ R3 Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.20
Initial Depth to Water (feet) 16.02
Height of Water Column in Well (feet) 6.18
Diameter (inches): Well 11 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	6.18	4.03	12.10
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	

☐ Other

Water Disposal

Kuty Separator Bloomfield, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
29-MAR-00	1020		X				1	5			11.4	8.22	910		Clear • Hydrocarbon Odor
29-MAR-00	1030		X				2	7.5			13.1	7.67	780		dark gray, Strong odor
29-MAR-00	1035		X				3	10			13.1	7.64	610		dark gray, Strong odor
29-MAR-00	1040		X				4	12.5			13.0	7.62	600		dark gray, Strong odor

Circle the date and time that the development criteria are met.

Comments Water near dark gray to black. Strong Hydrocarbon odor with hydrocarbon sheen in purge water. Groundwater sample collected for BTEX analysis at 1045.

Developer's Signature(s) Stephen Stellavato Date 29-MAR-00 Reviewer Date

Form A0101 Rev. 10/6/94

* Well was pumped dry after removal of 12.5 gallons. Water sample after

F:\NEWFORM\PE_A0101.DOT 1/31/96

FLIP ENVIRONMENTAL

Well Number R-4

☐ Development ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS Quarterly Sampling Project Manager Stellavato Project No.

Client Company Phase.Task No.

Site Name Jaquez R4 Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.22
Initial Depth to Water (feet) 15.44
Height of Water Column in Well (feet) 6.78
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	6.78	4.42	13.28
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	

☐ Other

Water Disposal

Kutz Separator Bloomfield, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
29-MAR-00	1115		X				1	5			18.8	8.11	700		dark gray, hydrocarbon odor
29-MAR-00	1120		X				2	7.5			17.3	7.55	630		↓
29-MAR-00	1125		X				3	8.5			15.9	7.31	630		↓

Circle the date and time that the development criteria are met

Comments Well was purged dry. Collected sample at 1130 for BTEX analysis. Water was dark gray with strong hydrocarbon odor and light sheen.

Developer's Signature(s) Stephen Stellavato Date 29 MAR 00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number R-5 ☐ Development ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS Quarterly Sampling Project Manager S. Stellavato Project No. JAQUEZ Quarterly Sampl

Client Company Phase.Task No.

Site Name JAQUEZ R5 Site Address

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 24.18
Initial Depth to Water (feet) 18.05
Height of Water Column in Well (feet) 6.13
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	6.13	41.19	12.59
Gravel Pack			
Drilling Fluids			
Total			

Instruments

Serial No. (if applicable)

☒ pH Meter 990805049
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☐ Other

Water Disposal

Kutz Separator Bloomfield, NM.

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
29-MAR-00	0935		X				1	5			15.5	7.98	2490		Clear
29-MAR-00	0940		X				2	7.5			16.7	7.58	2880		Cloudy Brown
29-MAR-00	0945		X				3	10			16.2	7.10	3080		↓
29-MAR-00	0955		X				4	12.5			15.7	7.12	3000		↓

Circle the date and time that the development criteria are met.

Comments Well was going dry after 12.5 gallons purged. Collected GW sample for BTEX analysis at 1000.

Developer's Signature(s) Stephen Stellavato Date 29-MAR-00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number R-6 ☐ Development ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS Quarterly Sampling Project Manager S. Stellavato Project No. EPFS Quarterly Sampli

Client Company

Site Name Jaquez Meter Area Site Address

Phase.Task No.

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 21.94
Initial Depth to Water (feet) 17.52
Height of Water Column in Well (feet) 4.42
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	1.92	2.88	8.65
Gravel Pack			
Drilling Fluids			
Total			

Instruments

Serial No. (if applicable)

- ☒ pH Meter 990805049
- ☐ DO Monitor
- ☒ Conductivity Meter
- ☒ Temperature Meter
- ☐ Other

Methods of Development

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

☐ Other

Water Disposal

Kirtz Separator Bloomfield, NM.

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
29-MAR-00	0835		X				1	3			15.16	8.12	320		Cloudy Brown
29-MAR-00	0840		X				2	10			14.1	8.53	290		dark Brown
29-MAR-00	0845		X				3	7			13.2	8.63	320		dark Brown

Circle the date and time that the development criteria are met

Comments Well going dry. Must collect groundwater sample after 7 gallons purged. Collected Sample for BTEX analysis @ 0850.

Developer's Signature(s) Stephen Stellavato Date 29-MAR-00 Reviewer Date

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2534

Project Name EPFS Quarterly Sampling

Project Number 62800107 Phase . Task

Samplers S. Stellavato

Laboratory Name Pinnacle Lab, Inc.

Location Albuquerque, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0003-R4	29-MAR-95	0935	W			
JAQ-0003-R5	29-MAR-95	1040	W			
JAQ-0003-R3	29-MAR-95	1045	W			
JAQ-0003-R4	29-MAR-95	1130	W			
JAQ-0003-R1	29-MAR-95	1215	W			
JAQ-0003-R2	29-MAR-95	1305	W			

Relinquished by:

Signature	Date	Time

Received By:

Signature	Date	Time

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: Use Field Services Directly, results and a copy to

PE-176 4/95

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **003098**
April 03, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: STEVE STELLAVATO

On 03/30/00 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.

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

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 003098
PROJECT #	: 62800107	DATE RECEIVED	: 03/30/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 04/03/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0003-R6	AQUEOUS	03/29/00
02	JAQ-0003-R5	AQUEOUS	03/29/00
03	JAQ-0003-R3	AQUEOUS	03/29/00
04	JAQ-0003-R4	AQUEOUS	03/29/00
05	JAQ-0003-R1	AQUEOUS	03/29/00
06	JAQ-0003-R2	AQUEOUS	03/29/00

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 : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 003098
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0003-R6	AQUEOUS	03/29/00	NA	03/31/00	1
02	JAQ-0003-R5	AQUEOUS	03/29/00	NA	03/31/00	1
03	JAQ-0003-R3	AQUEOUS	03/29/00	NA	03/31/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0003-R6	JAQ-0003-R5	JAQ-0003-R3
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	3.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 0.5	33
SURROGATE:					
BROMOFLUOROBENZENE (%)			92	107	116
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 003098
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0003-R4	AQUEOUS	03/29/00	NA	03/31/00	20
05	JAQ-0003-R1	AQUEOUS	03/29/00	NA	03/31/00	50
06	JAQ-0003-R2	AQUEOUS	03/29/00	NA	03/31/00	50

PARAMETER	DET. LIMIT	UNITS	JAQ-0003-R4	JAQ-0003-R1	JAQ-0003-R2
BENZENE	0.5	UG/L	940	16000	6500
TOLUENE	0.5	UG/L	630	16000	9400
ETHYLBENZENE	0.5	UG/L	48	820	480
TOTAL XYLENES	0.5	UG/L	2000	12000	6600
SURROGATE:					
BROMOFLUOROBENZENE (%)			113	105	111
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.	: 003098
BLANK I. D.	: 033100	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 03/31/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		90
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 #	: 003097-02	PINNACLE I.D.	: 003098
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 03/31/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	20.4	102	20.6	103	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.1	101	20.3	102	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.9	110	22.1	111	1	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	63.4	106	64.3	107	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

Chain of Custody Record

003098

PHILIP ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2534

Project Name: EPFS Quarterly Sampling
Project Number: 62800107 Phase . Task
Samplers: S. Stellavato
Laboratory: Name Pinnacle Lab, Inc
Location: Albuquerque, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX	Lab ID #	Comments
JAQ-0003-R4	29-MAR-00	0850	H_2O	2	X	01	
JAQ-0003-R5	29-MAR-00	1000	H_2O	2	X	02	
JAQ-0003-R3	29-MAR-00	1045	H_2O	2	X	03	
JAQ-0003-R4	29-MAR-00	1130	H_2O	2	X	04	
JAQ-0003-R1	29-MAR-00	1240	H_2O	2	X	05	
JAQ-0003-R2	29-MAR-00	1305	H_2O	2	X	06	

Relinquished by:

Signature	Date	Time

Received By:

Signature	Date	Time
Stanane Sunie	3/30/00	1015

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: Please invoice El Paso Field Services Directly, Please Send Results to Philip Services and a copy to EPFS.

Rec'd @ 4°C

PE-176 4/95

PHILIP ENVIRONMENTAL

Well Number M-1 ☐ Development ☑ Purge

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS Quarterly Sampling Project Manager S. Stellavato Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.35
Initial Depth to Water (feet) 5.08
Height of Water Column in Well (feet) 10.27
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well Cubic Feet	Gallons	Gallons to be Removed
Well Casing	10.27	6.70	20.11
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Water Disposal

Kutz Separator Bloomfield, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4/27/00	1005		X				1	5			15.4	7.96	230		Clear
4/27/00	1010		X				2	10			14.2	8.13	220		↓
4/27/00	1015		X				3	15			13.9	6.96	220		
4/27/00	1020		X				11	20			13.9	6.95	220		

Circle the date and time that the development criteria are met

Comments BTEX sample collected at 1015 Water was clear.

Developer's Signature(s) Stephen Stellavato Date 4/27/00 Reviewer Date

WELL DEVELOPMENT AND PURGING DATA

Well Number M-Z

Serial No. WDPD-

Page 1 of 1

Project Name EPFS Quarterly Sampling — Project Manager S Stellavato — Project No. 62800107

Client Company EPFS — Phase.Task No. 0301

Site Name JAQUEZ — Site Address Blanco, NM

Development Criteria

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

Methods of Development

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

[ ] Other

Water Volume Calculation

Initial Depth of Well (feet) 15.03

Initial Depth to Water (feet) 4.80

Height of Water Column in Well (feet) 16.23

Diameter (inches): Well 4 Gravel Pack

Item	Water Column in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	10.13	1.1.1	20.03
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
[x] pH Meter	990805049
[ ] DO Monitor	
[x] Conductivity Meter	
[x] Temperature Meter	
[ ] Other	

Water Disposal

Kutz Separator Bloomfield, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Purge Time: Incremental	Purge Time: Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4/27/00	1030		X				1	5			16.5	7.82	390		Clear water
4/27/00	1035		X				2	10			14.9	6.76	380		
4/27/00	1040		X				3	15			13.2	7.20	370		
4/27/00	1045		X				4	20			13.0	7.26	360		
4/27/00	1047		X				5	22.5			12.9	7.24	350		

Circle the date and time that the development criteria are met

Comments BTEX sample collected at 1052. Odor noted.

Developer's Signature(s) Steph Stellavato — Date 4/27/00 — Reviewer _____ Date _____

POLIP ENVIRONMENTAL

Well Number M-3

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS QUARTERLY SAMPLING

Project Manager S. STELLAVATO

Project No. 62800107

Client Company EPFS

Phase.Task No. 0301

Site Name JAQUEZ

Site address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.15

Initial Depth to Water (feet) 4.75

Height of Water Column in Well (feet) 10.40

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	10.40	6.78	20.36
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Water Disposal

KUTZ SEPARATOR Bloomfield, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Purged Volume Removed (gallons): Incremental	Purged Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4/27/00	1205		X				1	5			13.5	7.62	440		Clear Water
4/27/00	1210		X				2	10			15.3	7.16	430		Clear Water
4/27/00	1215		X				3	15			15.3	7.30	420		gray color H_2O
4/27/00	1220		X				4	20			15.2	7.32	370		↓
4/27/00	1222		X				5	25.5			15.2	7.32	370		odor

Circle the date and time that the development criteria are met

Comments BTEX sample collected at 1225. Water is cloudy gray.

Developer's Signature(s) Stephen Stellavato Date 4/27/00 Reviewer _____ Date _____

ENVIRONMENTAL

Well Number M-4

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS Quarterly Sampling

Project Manager S. Stellavato

Project No. 62800107

Client Company EPFS

Phase.Task No. 0301

Site Name JAQUEZ

Site Address BLANCO, NM

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 15.36

Initial Depth to Water (feet) 3.64

Height of Water Column in Well (feet) 11.72

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	11.72	7.05	22.95
Gravel Pack			
Drilling Fluids			
Total			

Instruments

Serial No. (If applicable)

- [X] pH Meter 990805049
- [ ] DO Monitor
- [X] Conductivity Meter
- [X] Temperature Meter
- [ ] Other

Methods of Development

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

[ ] Other

Water Disposal

Kutz Separator Bloomfield, NM

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Time Purged (gallons): Incremental	Water Time Purged (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4/27/00	1235		X				1	3			19.5	7.76	790		Clear water
4/27/00	1240		X				2	10			18.1	7.70	770		
4/27/00	1245		X				3	15			17.3	7.42	746		
4/27/00	1250		X				4	20			16.4	7.86	710		
4/27/00	1255		X				5	25			16.1	7.84	720		

Circle the date and time that the development criteria are met

Comments BTEX sample collected at 1300. Water is clear. Slow recharge.

Developer's Signature(s) Stephen Stellavato Date 4/27/00 Reviewer _____ Date _____

FLIP ENVIRONMENTAL

Well Number MW-5

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS Quarterly Sampling

Project Manager S. Stellavato

Project No. 62800107

Client Company EPFS

Phase.Task No. 0301

Site Name JAQUEZ

Site Address Blanco, NM

Development Criteria

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

Methods of Development

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

[ ] Other

Water Volume Calculation

Initial Depth of Well (feet) 15.06

Initial Depth to Water (feet) 5.02

Height of Water Column in Well (feet) 10.04

Diameter (inches): Well ___ Gravel Pack ___

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	10.03	1.55	13.66
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
[x] pH Meter	990805049
[ ] DO Monitor	
[x] Conductivity Meter	
[x] Temperature Meter	
[ ] Other	

Water Disposal

Kutz Separator Bloomfield, NM

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Purged (gallons): Incremental	Water Volume Purged (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
4/27/00	1130		X				1	1			17.3	7.75	310		Clear Water
4/27/00	1140		X				2	3			16.3	8.28	290		
4/27/00	1145		X				3	6			14.8	7.79	280		
4/27/00	1150		X				4	10			14.3	7.76	270		

Circle the date and time that the development criteria are met

Comments BTEX sample collected at 1150. Water was clear

Developer's Signature(s) Stephen Stellavato Date 4/27/00 Reviewer ____ Date ____

ENVIRONMENTAL

Well Number M-6

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Project Name QUARTERLY GROUNDWATER SAMPLING Project Manager S. STELLAVATO Project No. 62800

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

- [ ] Other

Water Volume Calculation

Initial Depth of Well (feet) 17.94

Initial Depth to Water (feet) 8.16

Height of Water Column in Well (feet) 9.78

Diameter (inches): Well 4 Gravel Pack

Item	Water Column in Well (feet)	Gallons	Gallons to be Removed
Well Casing	9.78	6.38	19.15
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
[X] pH Meter	990805049
[ ] DO Monitor	
[X] Conductivity Meter	
[X] Temperature Meter	
[ ] Other	

Water Disposal

KUTZ SEPARATOR Bloomfield, NM.

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Purge Volume Removed (gallons): Incremental	Purge Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4/27/00	0850		X				1	5			14.6	8.69	730		Brown Water
4/27/00	0900		X				2	10			13.2	7.88	640		Brown Water
4/27/00	0905		X				3	15			12.6	7.69	670		" "
4/27/00	0910		X				4	20			12.5	7.64	670		" "

Circle the date and time that the development criteria are met

Comments BTEX sample collected at 0915. Water is brown. Flush-mount well.

Developer's Signature(s) Stephen Stellavato Date 4/27/00 Reviewer _____ Date _____

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2535

Project Name: EPFS Quarterly Sampling
Project Number: 62800107 Phase . Task: 0301
Samplers: S. Stellavato
Laboratory Name: Pinnacle Lab, Inc.
Laboratory Location: Albuquerque, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0004-M6	4/27/00	0715	W	2		
JAQ-0004-M1	4/27/00	1025	W	2		
JAQ-0004-M2	4/27/00	1052	W	2		
JAQ-0004-M5	4/27/00	1155	W	2		
JAQ-0004-M3	4/27/00	1225	W	2		
JAQ-0004-M4	4/27/00	1300	W	2		
JAQ-0004-R6	4/27/00	1345	W	2		
JAQ-0004-R5	4/27/00	1430	W	2		

Relinquished by:

Signature	Date	Time
Stephen Stellavato	4/28/00	

Received By:

Signature	Date	Time

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: El Paso Field Services directly. [illegible] services and a copy

PF 176 4/95

PULIP ENVIRONMENTAL

Well Number R-1 ☐ Development ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS QUARTERLY Sampling Project Manager S. STELLAVATO Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ SVE Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.09
Initial Depth to Water (feet) 14.13
Height of Water Column in Well (feet) 7.96
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	7.96	5.19	15.58
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Water Disposal

KUTZ Separator Bloomfield, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
4/28/00	1030		X				1	5			NOT	Collected			Product in well
4/28/00	1035		X				2	10							Clear with dark
4/28/00	1040		X				3	15							Product
4/28/00	1045		X				4	19.5			↓	↓	↓		↓

Circle the date and time that the development criteria are met

Comments BTEX sample collected at 1050. Water was clear with dark product. Did not take PH, temp., or Conductivity due to product in well.

Developer's Signature(s) Stephen Stellavato Date 4/28/00 Reviewer _____ Date _____

PHILIP ENVIRONMENTAL

Well Number R-2

☐ Development ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager S. STELLAVATO Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ SVE Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.12
Initial Depth to Water (feet) 12.92
Height of Water Column in Well (feet) 9.20
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Gal/ft Feet	Gallons	Gallons to be Removed
Well Casing	9.20	6.00	18.00
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (If applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Water Disposal

KUTZ SEPARATOR Bloomfield, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Probe Column Recovery (feet): Increment	Probe Column Recovery (feet): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4/28/00	0955		X				1	5			15.8	7.43	590		Clear water w/sheen
4/28/00	1060		X				2	10			15.6	7.42	630		
4/28/00	1065		X				3	15			15.4	7.26	600		
4/28/00	1010		X				4	20			14.9	7.25	590		

Circle the date and time that the development criteria are met.

Comments BTEX sample collected at 1015. Water was cloudy, sheen, HC odor.

Developer's Signature(s) Stephen Stellavato Date 4/28/00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number R-3 ☐ Development of ☒ Purge

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS Quarterly Sampling Project Manager S. Stellavato Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ SVE Site Address Blanco, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.20
Initial Depth to Water (feet) 13.86
Height of Water Column in Well (feet) 8.34
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	2.37	5.114	16.33
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Water Disposal

Kutz Separator Bloomfield, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4/28/00	0840		X				1	5			15.2	7.65	830		Clear water
4/28/00	0850		X				2	10			13.9	7.10	820		
4/28/00	0900		X				3	15			13.6	6.68	840		
4/28/00	0905		X				4	17.5			13.5	6.93	820		

Circle the date and time that the development criteria are met

Comments BTEX sample was collected at 0910. Water is clear with HC odor.

Developer's Signature(s) Stephen Stellavato Date 4/28/00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number R-4

☐ Development ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS Quarterly Sampling Project Manager S. Stellavato Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ SVE Site Address Blanco, NM

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 22.22
Initial Depth to Water (feet) 13.38
Height of Water Column in Well (feet) 8.84
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well Cubic Feet	Water Volume in Well Gallons	Gallons to be Removed
Well Casing	8.84	5.77	17.31
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other _____	

Methods of Development

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

☐ Other _____

Water Disposal

KUTZ Separator Bloomfield, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4/28/00	0925		X				1	5			15.1	6.86	690		Clear water w/sheen
4/28/00	0930		X				2	10			14.6	7.31	590		Cloudy gray w/sheen
4/28/00	0935		X				3	15			14.9	6.93	610		Dark gray water w/sheen
4/28/00	0940		X				4	17.5			14.9	6.96	620		Black water w/sheen

Circle the date and time that the development criteria are met

Comments BTEX sample and duplicate sample collected at 0915. Water is black with HC sheen. Strong odor.

Developer's Signature(s) Stephen Stellavato Date 4/28/00 Reviewer _____ Date _____

PULIP ENVIRONMENTAL

Well Number R-5

☐ Development ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS Quarterly Sampling Project Manager S Stellavato Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ SVE Site Address Blanco, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 21.48
Initial Depth to Water (feet) 17.17
Height of Water Column in Well (feet) 7.31
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	7.31	1.77	14.31
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (If applicable)
☒ pH Meter	990805049
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Water Disposal

KUTZ Separator Bloomfield, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
4/27/00	1410		X				1	2.5			19.9	7.93	1520		Cloudy brown H2O
4/27/00	1415		X				2	5.0			19.8	7.50	1370		
4/27/00	1420		X				3	10			19.4	7.47	1430		
4/27/00	1425		X				4	15			19.2	7.53	1460		

Circle the date and time that the development criteria are met

Comments BTEX sample collected at 1430. Water is cloudy brown.

Developer's Signature(s) Stephen Stellavato Date 11/27/00 Reviewer Date

FOLIP ENVIRONMENTAL

Well Number R-6

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Project Name EPFS Quarterly Sampling | Project Manager S. Stellavato | Project No. 62800107

Client Company EPFS | Phase.Task No. 0301

Site Name JAQUEZ SVE | Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

[ ] Other

Water Volume Calculation

Initial Depth of Well (feet) 21.91

Initial Depth to Water (feet) 15.85

Height of Water Column in Well (feet) 6.09

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	6.09	3.93	11.72
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
[x] pH Meter	990805049
[ ] DO Monitor	
[x] Conductivity Meter	
[x] Temperature Meter	
[ ] Other	

Water Disposal

KUTZ Separator Bloomfield, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4/27/00	1325		X				1	2.5			21.6	7.75	370		Cloudy Brown H_2O
4/27/00	1330		X				2	5.0			17.7	8.09	340		
4/27/00	1333		X				3	7.5			16.4	7.72	320		
4/27/00	1336		X				4	10			16.3	7.62	320		
4/27/00	1340		X				5	12.5			16.2	7.63	320		

Circle the date and time that the development criteria are met

Comments BTEX sample collected at 1345; Water is cloudy brown.

Developer's Signature(s) Stephen Stellavato Date 4/27/00 Reviewer Date

PHILIP

Chain of Custody Record

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

COC Serial No. C 2542

Project Name EPFS QUARTERLY Sampling
Project Number 62800107 Phase . Task 03??
Samplers S. STELLAVATO
Laboratory Name PINNACLE LAB, INC.
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0004-R3	4/28/00	0910	W			
JAQ-0004-DUP	4/28/00	--	W			
JAQ-0004-R4	4/28/00	0945	W			
JAQ-0004-R2	4/28/00	1015	W			
JAQ-0004-R1	4/28/00	1050	W			

Relinquished by:

Signature	Date	Time
Stephen Stellavato	4/28/00	1700

Received By:

Signature	Date	Time

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: Send Report to Blagg Field Services directly. Invoice and a copy to

PE 176 4/95

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **005001**
May 04, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON. NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: Steve Stellavato/LeAudra Stanley

On 04/29/00 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.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 005001
PROJECT #	: 62800107	DATE RECEIVED	: 04/29/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 05/04/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0004-M6	AQUEOUS	04/27/00
02	JAQ-0004-M1	AQUEOUS	04/27/00
03	JAQ-0004-M2	AQUEOUS	04/27/00
04	JAQ-0004-M5	AQUEOUS	04/27/00
05	JAQ-0004-M3	AQUEOUS	04/27/00
06	JAQ-0004-M4	AQUEOUS	04/27/00
07	JAQ-0004-R6	AQUEOUS	04/27/00
08	JAQ-0004-R5	AQUEOUS	04/27/00
09	JAQ-0004-R3	AQUEOUS	04/28/00
10	JAQ-0004-DUP	AQUEOUS	04/28/00
11	JAQ-0004-R4	AQUEOUS	04/28/00
12	JAQ-0004-R2	AQUEOUS	04/28/00
13	JAQ-0004-R1	AQUEOUS	04/28/00
14	TRIP BLANK	AQUEOUS	04/27/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 005001

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0004-M6	AQUEOUS	04/27/00	NA	05/01/00	1
02	JAQ-0004-M1	AQUEOUS	04/27/00	NA	05/01/00	1
03	JAQ-0004-M2	AQUEOUS	04/27/00	NA	05/01/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0004-M6	JAQ-0004-M1	JAQ-0004-M2
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			112	107	108
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 005001

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0004-M5	AQUEOUS	04/27/00	NA	05/01/00	1
05	JAQ-0004-M3	AQUEOUS	04/27/00	NA	05/01/00	1
06	JAQ-0004-M4	AQUEOUS	04/27/00	NA	05/01/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0004-M5	JAQ-0004-M3	JAQ-0004-M4
BENZENE	0.5	UG/L	< 0.5	3.5	24
TOLUENE	0.5	UG/L	< 0.5	2.8	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	1.8	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	2.8	11
SURROGATE:					
BROMOFLUOROBENZENE (%)			99	92	103
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 005001

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	JAQ-0004-R6	AQUEOUS	04/27/00	NA	05/01/00	1
08	JAQ-0004-R5	AQUEOUS	04/27/00	NA	05/01/00	1
09	JAQ-0004-R3	AQUEOUS	04/28/00	NA	05/01/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0004-R6	JAQ-0004-R5	JAQ-0004-R3
BENZENE	0.5	**UG/L**	**0.9**	**1.5**	< 0.5
TOLUENE	0.5	**UG/L**	< 0.5	< 0.5	1.0
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			104	113	94
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 005001
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	JAQ-0004-DUP	AQUEOUS	04/28/00	NA	05/02/00	10
11	JAQ-0004-R4	AQUEOUS	04/28/00	NA	05/02/00	10
12	JAQ-0004-R2	AQUEOUS	04/28/00	NA	05/02/00	20

PARAMETER	DET. LIMIT	UNITS	JAQ-0004-DUP	JAQ-0004-R4	JAQ-0004-R2
BENZENE	0.5	**UG/L**	**940**	**1000**	**4000**
TOLUENE	0.5	**UG/L**	**440**	**480**	**3500**
ETHYL BENZENE	0.5	**UG/L**	**27**	**29**	**87**
TOTAL XYLENES	0.5	**UG/L**	**1700**	**1800**	**1700**

SURROGATE:				
BROMOFLUOROBENZENE (%)		85	88	99
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 005001

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
13	JAQ-0004-R1	AQUEOUS	04/28/00	NA	05/02/00	1
14	TRIP BLANK	AQUEOUS	04/28/00	NA	05/02/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0004-R1	TRIP BLANK
BENZENE	0.5	**UG/L**	**240**	< 0.5
TOLUENE	0.5	**UG/L**	**360**	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**20**	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**340**	< 0.5
SURROGATE:				
BROMOFLUOROBENZENE (%)			91	91
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.	: 005001
BLANK I. D.	: 050100	DATE EXTRACTED	: N/A
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 05/01/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 005001
BLANK I. D.	: 050200	DATE EXTRACTED	: N/A
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 05/02/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		90
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 #	: 050100	PINNACLE I.D.	: 005001
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: N/A
PROJECT #	: 62800107	DATE ANALYZED	: 05/01/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	18.3	92	18.6	93	2	(80 - 120)	20
TOLUENE	<0.5	20.0	19.8	99	20.4	102	3	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.4	97	19.9	100	3	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	58.5	98	59.0	98	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

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 #	: 005001-03	PINNACLE I.D.	: 005001
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXRACTED	: N/A
PROJECT #	: 62800107	DATE ANALYZED	: 05/02/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	17.0	85	16.2	81	5	(80 - 120)	20
TOLUENE	<0.5	20.0	18.4	92	17.9	90	3	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	18.2	91	18.1	91	1	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	54.8	91	54.1	90	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

005-90

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2535

Project Name: EPFS Quarterly Sampling
Project Number: 62800107 Phase . Task: 0301
Samplers: S. Stellavato
Laboratory Name: Pinnacle Lab., Inc.
Laboratory Location: Albuquerque, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX	Comments
JAQ-0004-M6	4/27/00	0915	H_2O	2	X	-01
JAQ-0004-M1	4/27/00	1025	H_2O	2	X	-02
JAQ-0004-M2	4/27/00	1052	H_2O	2	X	-03
JAQ-0004-M5	4/27/00	1155	H_2O	2	X	-04
JAQ-0004-M3	4/27/00	1225	H_2O	2	X	-05
JAQ-0004-M4	4/27/00	1300	H_2O	2	X	-06
JAQ-0004-R6	4/27/00	1345	H_2O	2	X	-07
JAQ-0004-R5	4/27/00	1430	H_2O	2	X	-08

Relinquished by:

Signature	Date	Time
Stefan Stellavato	4/28/00	1500

Received By:

Signature	Date	Time
[illegible]	4/29/00	10:50 am

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: Please invoice El Paso Field Services directly.
Please send results to Philip Services and a copy to El Paso Field Services.

Temp = 3.8°C
Received on ice

PE-176 4/95

COC

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2542

Project Name EPFS QUARTERLY Sampling
Project Number 62800107 Phase . Task 0301.
Samplers S. STELLAVATO
Laboratory Name PINNACLE LAB, INC
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX	Comments
JAQ-0004-R3	4/28/00	0910	H_2O	2	X	-09
JAQ-0004-DUP	4/28/00	—	H_2O	2	X	-10
JAQ-0004-R4	4/28/00	0945	H_2O	2	X	-11
JAQ-0004-R2	4/28/00	1015	H_2O	2	X	-12
JAQ-0004-R1	4/28/00	1050	H_2O	2	X	-13
TRIP BLANK	4/27/00	—	H_2O	1		-14

Relinquished by:

Signature	Date	Time
Stephen Stellavato	4/28/00	1500

Received By:

Signature	Date	Time
[illegible]	10:50 am 4/29/00	

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: Please invoice El Paso Field Services directly. Please send results to Philip Services and a copy to El Paso Field Services.

temp = 3.8°C
Received on ice

PE-176 4/95

POLIP ENVIRONMENTAL

Well Number MW-01

☐ Development ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name QUARTERLY GROUNDWATER SAMPLING Project Manager S. SELL AVATO Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ SVE Site address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.35 TOC

Initial Depth to Water (feet) 4.14 TOC

Height of Water Column in Well (feet) 11.21

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	11.21	73.13 x 3	22.0
Gravel Pack			
Drilling Fluids			
Total			22.0

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Thickness Removed (feet/gallons): Incremental	Product Thickness Removed (feet/gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5/30/00	1145		X				5.5	5.5			24.1	7.72	298		very clear
"	1152		X				2.5	8.0			20.1	7.58	216		light brown
"															
"															

Circle the date and time that the development criteria are met

Comments Well bailed dry at 8 gallons. Sampled. Tested for BTEX at 1159

Developer's Signature(s) Jean Wagner Date 5/30/00 Reviewer SKS Date 6/2/00

POLIP ENVIRONMENTAL

Well Number MW-02

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name QUARTERLY GROUNDWATER SAMPLING Project Manager S. SELLANATO Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ SVE Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.03 TOR

Initial Depth to Water (feet) 3.03 TOR

Height of Water Column in Well (feet) 12.00

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	12.00	1.8843	23.4
Gravel Pack			
Drilling Fluids			
Total			23.4

Instruments

	Serial No. (If applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5/30/00	1226		X				4.5	4.5			23.8	7.20	564		very clear
"	1230		X				4.5	9			21.8	7.12	491		very slightly brown
"	1234		X				4.5	13.5			20.8	7.10	444		"
"	1238		X				4.5	18			18.9	7.12	404		"
"	1242		X				4.5	22.5			18.2	7.15	393		"
"	1245		X				1	23.5			18.2	7.15	390		"

Circle the date and time that the development criteria are met.

Comments SAMPLED FOR BTEX ~~AND~~ AT 1250

Developer's Signature(s) [signature] Date 5/30/00 Reviewer SKS Date 6/2/00

Form A0101 Rev. 10/6/94 F:\NEWFORM\PE_A0101.DOT 1/31/96

POLIP ENVIRONMENTAL

Well Number MW-03

Serial No. WDPD-

☐ Developed ☐ Purged

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name QUARTERLY GROUNDWATER SAMPLING | Project Manager S. STELLAVATO | Project No. 62800107

Client Company EPFS | Phase.Task No. 0301

Site Name JAQUEZ SVE | Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.15 TOR
Initial Depth to Water (feet) 7.10 TOR
Height of Water Column in Well (feet) 11.05
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	11.05	71.43	21.4
Gravel Pack			
Drilling Fluids			
Total			21.4

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Column Purged (gallons): Increment	Water Column Purged (gallons): Cumulative	Formation Water Purged (gallons): Increment	Formation Water Purged (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5/30/00	1356		X				4.5	4.5			26.6	7.16	422		grey, odor
"	1402		X				4.5	9			22.0	7.07	369		dark grey
"	1408		X				4.5	13.5			20.9	7.05	334		"
"	1414		X				4.5	18			20.6	7.03	319		black
"	1420		X				4	22			19.6	7.20	372		"

Circle the date and time that the development criteria are met.

Comments SAMPLED FOR BTEX + NITRATES AND PAH AT 1430

Developer's Signature(s) Jenn Wagner Date 5/30/00 Reviewer SKS Date 6/2/00

PLIP ENVIRONMENTAL

Well Number MW-04

☐ Developed ● Purged

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name QUARTERLY GROUNDWATER SAMPLING Project Manager S. SPILLANATO Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.34 TOR

Initial Depth to Water (feet) 2.57 TOR

Height of Water Column in Well (feet) 12.79

Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	12.77	8.35 × 3	25.0
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (Gallons): Incremental	Water Volume Removed (Gallons): Cumulative	Product Volume Removed (Gallons): Incremental	Product Volume Removed (Gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5/30/00	1454		X				5	5			22.7	8.03	731		clear
"	1500		X				5	10			21.8	7.82	599		
"	1502		X				1	11			19.4	7.91	557		LIGHT BROWN

Circle the date and time that the development criteria are met

Comments Well bailed dry at 11 gallons, Sampled for BTEX, Nitrates + PAH at 1509.

Developer's Signature(s) [signature] Date 5/30 Reviewer SKS Date 6/2/00

WELL DEVELOPMENT AND PURGING DATA

Well Number MW-25 — Development ● Purging

Serial No. WDPD-

Project Name QUARTERLY GROUNDWATER SAMPLING — Project Manager S. STELLAVATO — Project No. 62800107

Client Company EPFS — Phase.Task No. 0301

Site Name JAQUEZ — Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.06 TOR
Initial Depth to Water (feet) 3.69 TOR
Height of Water Column in Well (feet) 11.37
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic feet	Gallons	Gallons to be Removed
Well Casing	11.37	74.7.3	22.3
Gravel Pack			
Drilling Fluids			
Total			22.3

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Turbidity: Incremental	Turbidity: Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
5/30/00	1307		X				4.5	4.5			25.3	7.72	311		LIGHT BROWN
"	1312		X				4.5	9.0			22.9	7.52	281		"
"	1316		X				4.5	13.5			21.8	7.46	275		"
"	1322		X				4.5	18			19.0	7.55	267		MORE BROWN
"	1328		X				4.5	22.5			21.1	7.50	300		BROWN, MUCH SEDIMENT

Circle the date and time that the development criteria are met.

Comments SAMPLED FOR BTEX AT 1332

Developer's Signature(s) Jennifer Wagner Date 5/30/00 Reviewer SKS Date 6/2/00

P.LIP ENVIRONMENTAL

Well Number MW-6

Serial No. WDPD-

☐ Desalt ☐ Purge

WELL DEVELOPMENT AND PURGING DATA

Project Name QUARTERLY GROUNDWATER SAMPLING Project Manager S. STELLAVATO Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 17.92 TOR
Initial Depth to Water (feet) 7.29 TOR
Height of Water Column in Well (feet) 10.63
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	10.63	6.94 x 3	20.8
Gravel Pack			
Drilling Fluids			
Total			20.8

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5/30/00	1025		X				4	4			22.0	7.55	775		LIGHT BROWN
"	1035		X				4	8			19.4	7.84	756		"
"	1041		X				4	12			19.1	7.89	769		CLOUDY - LIGHT BROWN
"	1049		X				4	16			19.1	7.85	721		"
"	1055		X				4	20			19.6	7.94	760		"
"	1059		X				1	21			19.5	7.97	705		"

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX 1105. JOHN JAQUEZ DISCUSSED WITH ME THE IMPORTANCE OF REMEDIATING THE GARDEN AREA (CORN FIELD) NEAR THE HOUSE (ON MAP, THE LOT SECTION OF CORN FIELD.) QUICKLY! HIS CONCERN WAS DRASTIC AND WILL NOT WAIT MUCH LONGER TO SEE THIS AREA CLEANED.

Developer's Signature(s) [signature] Date 5/30/00 Reviewer SAS Date 6/2/00

PHILIP

Chain of Custody Record

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

COC Serial No. C 2563

Project Name EPFS QUARTERLY SAMPLING

Project Number 68800107 Phase . Task 02.01

Samplers J. CUAGNON

Laboratory Name PINNACLE LAB

Location ALBUQUERQUE, N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0005-MW01	5/30/00	1150				JAQUEZ M1
JAQ-0005-MW02	5/30/00	1250				JAQUEZ M2
JAQ-0005-MW03	5/30/00	1430				JAQUEZ M3
JAQ-0005-MW04	5/30/00	1510				JAQUEZ M4
JAQ-0005-MW05	5/30/00	1600				JAQUEZ M5
JAQ-0005-MW06	5/30/00	1700				JAQUEZ M6

Relinquished by:

Signature	Date	Time
Christopher Ingram		

Received By:

Signature	Date	Time

Samples Iced: ☒ Yes ☐ No

Carrier:

Airbill No. 6611006918610

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) NITRATES. — H_2SO_4
- ☐ Other (Specify)

Shipping and Lab Notes:

INVOICES DIRECTLY.
...AL SERVICES AND A
...ICES.

PE-176 4/95

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006015**
June 13, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICE CO.
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 06/02/00 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 analyses were performed by Severn Trent Laboratories, Inc., Pensacola, FL.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: ft

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006015
PROJECT #	: 62800107	DATE RECEIVED	: 06/02/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 06/13/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0005-MW01	AQUEOUS	05/30/00
02	JAQ-0005-MW02	AQUEOUS	05/30/00
03	JAQ-0005-MW03	AQUEOUS	05/30/00
04	JAQ-0005-MW04	AQUEOUS	05/30/00
05	JAQ-0005-MW05	AQUEOUS	05/30/00
06	JAQ-0005-MW06	AQUEOUS	05/30/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006015

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0005-MW01	AQUEOUS	05/30/00	NA	06/05/00	1
02	JAQ-0005-MW02	AQUEOUS	05/30/00	NA	06/05/00	1
03	JAQ-0005-MW03	AQUEOUS	05/30/00	NA	06/05/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0005-MW01	JAQ-0005-MW02	JAQ-0005-MW03
BENZENE	0.5	**UG/L**	< 0.5	< 0.5	**2.1**
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	**UG/L**	< 0.5	< 0.5	**0.9**
TOTAL XYLENES	0.5	**UG/L**	< 0.5	< 0.5	**2.2**
SURROGATE:					
BROMOFLUOROBENZENE (%)			96	111	109
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006015

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0005-MW04	AQUEOUS	05/30/00	NA	06/05/00	1
05	JAQ-0005-MW05	AQUEOUS	05/30/00	NA	06/05/00	1
06	JAQ-0005-MW06	AQUEOUS	05/30/00	NA	06/05/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0005-MW04	JAQ-0005-MW05	JAQ-0005-MW06
BENZENE	0.5	UG/L	38	< 0.5	< 0.5
TOLUENE	0.5	UG/L	1.1	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	23	< 0.5	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			111	107	103
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.	: 006015
BLANK I. D.	: 060500	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 06/05/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		108
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 #	: 006015-01	PINNACLE I.D.	: 006015
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 06/05/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	18.6	93	19.2	96	3	(80 - 120)	20
TOLUENE	<0.5	20.0	20.2	101	20.4	102	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.9	105	21.6	108	3	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	63.8	106	64.9	108	2	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

STL
Commited To *Your* Success

LOG NO: C0-06085
Received: 03 JUN 00
Reported: 09 JUN 00

Mr. MITCH RUBENSTEIN
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 006015, PHIL-EPFS QTRLY SAMPLING
Sampled By: Client
Code: 08560069

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
06085-1	006015-03	05-30-00/14:30
06085-2	006015-04	05-30-00/15:09

PARAMETER	06085-1	06085-2
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)		
Nitrate + Nitrite-N, mg/l	<0.1	<0.1
Nitrate-N, mg/l	<0.1	<0.1
Nitrite-N, mg/l	<0.1 R4	<0.1 R4
Analyst	WG	WG
Prep Date	06.03.00	06.03.00
Analysis Date	06.06.00	06.06.00
Batch ID	N3W39A	N3W39A
Prep Method	4500-NO3	4500-NO3
Dilution Factor	1	1

STL
Commited To *Your* Success

LOG NO: C0-06085
Received: 03 JUN 00
Reported: 09 JUN 00

Mr. MITCH RUBENSTEIN
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 006015, PHIL-EPFS QTRLY SAMPLING
Sampled By: Client
Code: 08560069

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
06085-1	006015-03	05-30-00/14:30
06085-2	006015-04	05-30-00/15:09

PARAMETER	06085-1	06085-2
Polynuclear Aromatic Hydrocarbons (8310)		
Acenaphthene, ug/l	<1.0	<1.0
Acenaphthylene, ug/l	<1.0	<1.0
Anthracene, ug/l	<1.0	<1.0
Benzo(a)anthracene, ug/l	<1.0	<1.0
Benzo(a)pyrene, ug/l	<1.0	<1.0
Benzo(b)fluoranthene, ug/l	<1.0	<1.0
Benzo(g,h,i)perylene, ug/l	<1.0	<1.0
Benzo(k)fluoranthene, ug/l	<1.0	<1.0
Chrysene, ug/l	<1.0	<1.0
Dibenzo(a,h)anthracene, ug/l	<1.0	<1.0
Fluoranthene, ug/l	<1.0	<1.0
Fluorene, ug/l	<1.0	<1.0
Indeno(1,2,3-cd)pyrene, ug/l	<1.0	<1.0
Naphthalene, ug/l	<1.0	<1.0
Phenanthrene, ug/l	<1.0	<1.0
Pyrene, ug/l	<1.0	<1.0
1-Methylnaphthalene, ug/l	<1.0	<1.0
2-Methylnaphthalene, ug/l	<1.0	<1.0
Surrogate - 2-Chloroanthracene	88 %	76 %
Analyst	SB	SB
Prep Date	06.05.00	06.05.00
Analysis Date	06.07.00	06.07.00
Batch ID	PAW136	PAW136
Prep Method	3520C	3520C
Dilution Factor	1	1

STL
Commited To *Your* Success

LOG NO: C0-06085
Received: 03 JUN 00
Reported: 09 JUN 00

Mr. MITCH RUBENSTEIN
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 006015, PHIL-EPFS QTRLY SAMPLING
Sampled By: Client
Code: 08560069

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
06085-3	Method Blank	
06085-4	Lab Control Standard % Recovery	
06085-5	Matrix Spike % Recovery	
06085-6	Matrix Spike Duplicate % Recovery	

PARAMETER	06085-3	06085-4	06085-5	06085-6
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)				
Nitrate + Nitrite-N, mg/l	<0.1	103 %	95 %	95 %
Nitrate-N, mg/l	<0.1	103 %	95 %	95 %
Nitrite-N, mg/l	<0.1	90 %	125 %	125 %
Analyst	WG	WG	WG	WG
Prep Date	06.03.00	06.03.00	06.03.00	06.03.00
Analysis Date	06.06.00	06.06.00	06.06.00	06.06.00
Batch ID	N3W39A	N3W39A	N3W39A	N3W39A
Prep Method	4500-NO3	4500-NO3	4500-NO3	4500-NO3
Dilution Factor	1	1	1	1

STL
Commited To *Your* Success

LOG NO: C0-06085
Received: 03 JUN 00
Reported: 09 JUN 00

Mr. MITCH RUBENSTEIN
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 006015, PHIL-EPFS QTRLY SAMPLING
Sampled By: Client
Code: 08560069

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
06085-3	Method Blank	
06085-4	Lab Control Standard % Recovery	
06085-5	Matrix Spike % Recovery	
06085-6	Matrix Spike Duplicate % Recovery	

PARAMETER	06085-3	06085-4	06085-5	06085-6
Polynuclear Aromatic Hydrocarbons (8310				
Acenaphthene, ug/l	<1.0	---	---	---
Acenaphthylene, ug/l	<1.0	60 %	52 %	61 %
Anthracene, ug/l	<1.0	---	---	---
Benzo(a)anthracene, ug/l	<1.0	---	---	---
Benzo(a)pyrene, ug/l	<1.0	---	---	---
Benzo(b)fluoranthene, ug/l	<1.0	---	---	---
Benzo(g,h,i)perylene, ug/l	<1.0	---	---	---
Benzo(k)fluoranthene, ug/l	<1.0	86 %	78 %	88 %
Chrysene, ug/l	<1.0	92 %	79 %	91 %
Dibenzo(a,h)anthracene, ug/l	<1.0	---	---	---
Fluoranthene, ug/l	<1.0	---	---	---
Fluorene, ug/l	<1.0	---	---	---
Indeno(1,2,3-cd)pyrene, ug/l	<1.0	---	---	---
Naphthalene, ug/l	<1.0	---	---	---
Phenanthrene, ug/l	<1.0	85 %	74 %	90 %
Pyrene, ug/l	<1.0	80 %	77 %	87 %
1-Methylnaphthalene, ug/l	<1.0	---	---	---
2-Methylnaphthalene, ug/l	<1.0	---	---	---
Surrogate - 2-Chloroanthracene	84 %	84 %	81 %	87 %
Analyst	SB	SB	SB	SB
Prep Date	06.05.00	06.05.00	06.05.00	06.05.00
Analysis Date	06.07.00	06.07.00	06.07.00	06.07.00
Batch ID	PAW136	PAW136	PAW136	PAW136
Prep Method	3520C	3520C	3520C	3520C
Dilution Factor	1	1	1	1

Commited To *Your* Success

LOG NO: C0-06085
Received: 03 JUN 00
Reported: 09 JUN 00

Mr. MITCH RUBENSTEIN
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 006015, PHIL-EPFS QTRLY SAMPLING
Sampled By: Client
Code: 08560069

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
06085-3	Method Blank	
06085-4	Lab Control Standard % Recovery	
06085-5	Matrix Spike % Recovery	
06085-6	Matrix Spike Duplicate % Recovery	

PARAMETER	06085-3	06085-4	06085-5	06085-6

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

Lance Larson, Project Manager

Final Page Of Report

Severn Trent Laboratories, Inc.
Pensacola, FL 32514
Tel: (850) 474-1001
Fax: (850) 478-2671

Committed to *Your* Success

Data Qualifiers for Final Report

STL-Pensacola Inorganic/Organic

J4	(For positive results)	Temperature limits exceeded (≤2°C or ≥ 6°C), non-reportable for NDPES compliance monitoring.
J6	(For positive results)	LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J9	(For positive results)	LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).	
J (description)	The analyte was positively identified, the quantitation is estimation	
R1	(For nondetects)	Temperature limits exceeded (≤2°C or ≥ 6°C); non-reportable for NDPES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NDPES compliance monitoring	
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance	
R4	Holding time exceeded, non-reportable for NDPES compliance monitoring.	
R5	Collection requirements not met, improper container used for sample	
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.	
R7	Internal standard area outside –50% to +100% of initial calibration midpoint standard.	
R8	Initial calibration or any calibration verification exceeds acceptance criteria.	
R10	Headspace >1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring	
R12	Analysis performed outside the 12-hour tune or not within tune criteria.	
R (description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria	
=	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (assume the STL-PN RL is at or above lowest calibration standard in the initial calibration curve).	
U	The reported value is ≤ Laboratory MDL (value for result will be the MDL, never below the MDL)	
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).	
B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND)	
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.	
–	Sample results were corrected due to contaminants in Fractionation Blank (a certification statement is required to be submitted with the final report for MA EPH and NC-Modified MA EPH)	
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).	
#	Elevated reporting limit due to insufficient sample size	
M	A matrix effect was present ([1]sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, [2]sample and/or MS/MSD chromatogram(s) had interfering peaks, [3]sample result was > 4 X spike added, [4]metals serial dilution was performed, or [5]metals post spike is < 40% R)	
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)	
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)	
D	Diluted out	
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.	
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.	
E	Compound concentration exceeds the upper calibration range of the instrument.	
S2	Incorrect sample amount was submitted to the laboratory for analysis	
S3	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.	

Normally used for Inorganics Only

R9	Not filtered and preserved at time of collection.
R11	Samples were filtered and preserved within 4 hours of collection.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
Q	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
NH	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
S1	The Method of Standard Additions (MSA) has been performed on this sample.

SEVERN TRENT LABORATORIES, INC. – PENSACOLA, FLORIDA
STATE CERTIFICATIONS

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental)

State of California, Department of Health Services, Laboratory ID No. 2338 (Hazardous Waste and Wastewater)

State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (Drinking Water, Hazardous Waste and Wastewater)

Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL)

Florida DOH Laboratory ID No. 81142 (Drinking Water), Laboratory ID No. E81010 (Hazardous Waste and Wastewater)

Florida, Radioactive Materials License No. G0733-1

Foreign Soil Permit, Permit No. S-37599

Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water)

State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. LA000017 (Drinking Water)

State of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Commonwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Hazardous Waste and Wastewater)

State of Michigan, Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, Laboratory ID No. 250599A (Wastewater)

State of New Jersey, Department of Environmental Protection & Energy, Laboratory ID No. 49006 (Wastewate and Hazardous Waster)

New York State, Department of Health, Laboratory ID No. 11503 (Wastewater and Solids/Hazardous Waste)

North Carolina Department of Environment & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 (Hazardous Waste and Wastewater by Reciprocity with Florida)

State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater by Reciprocity with FL and Solids/Hazardous Waste by Reciprocity with CA)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Tennessee Division of Underground Storage Tanks Approved Laboratory

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

State of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater)

West Virginia Division of Environmental Protection, Office of Water Resources, Laboratory ID No. 136 (Hazardous Waste and Wastewater by Reciprocity with FL)

American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 100704

Severn Trent Laboratories of Florida
PROJECT SAMPLE INSPECTION FORM

Lab Order #: C006085 Date Received: 6-3-00

1.	Was there a Chain of Custody?	(Yes)	No*		8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)**	(Yes)	No*	N/A
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*		9.	Is there sufficient volume for analysis requested?	(Yes)	No*	N/A (Can)
3.	Were samples received cold? (Criteria: 2° - 6°C: STL-SOP 1055)	(Yes)	No*	N/A	10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	(Yes)	No*	
4.	Were all samples properly labeled and identified?	(Yes)	No*		11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes*	No	(N/A)
5.	Did samples require splitting or compositing*? Req By: PM Client Other*	Yes*	(No)						
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*		12.	If sent, were matrix spike bottles returned?	Yes	No*	(N/A)
7.	Were all sample containers received intact?	(Yes)	No*		13.	Was Project Manager notified of problems? (initials: LLK)	(Yes)	No*	N/A

Airbill Number(s): 1Z8781684443663914 Shipped By: UPS

Cooler Number(s): Client Shipping Charges: N/A

Cooler Weight(s): N/A Cooler Temp(s) (°C): 2°C

CCK1 SN5812

(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

Two (4 ounce) Plastic bottles have H_2SO_4 as preservative. PH Taken samples are not preserved (PH 7).

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: LLK Date: 03-Jun-00 Logged By: LLK Date: 03-Jun-00

* *Note all Out-of-Control and/or questionable events on Comment Section of this form.*
If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"

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

* *According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).*

Pinnacle Laboratories, Inc. — **Interlab** — **Chain of Custody** — Date: 6/2 — Page: 1 of 1

Network Project Manager: Jacinta A. Tenorio

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

Samples were sent w/o paperwork

C006085

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
006015-03	5/30	1430	AQ	
-04	"	1509	"	

	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)		TOX	TOC	Gen Chemistry - TKN NO3		Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
006015-03								X								X							
-04								X								X							

PROJECT INFORMATION

PROJECT #: 006015
PROJ. NAME: PHL
QC LEVEL: (STD) IV
QC REQUIRED: MS MSD BLANK
TAT: (STANDARD) RUSH!!

SAMPLE RECEIPT

Total Number of Containers:
Chain of Custody Seals:
Received Intact?
Received Good Cond./Cold:
LAB NUMBER:

DUE DATE: 6/13
RUSH SURCHARGE: —
CLIENT DISCOUNT: —
SPECIAL CERTIFICATION REQUIRED: YES (NO)

COMMENTS:

SAMPLES SENT TO:

PENSACOLA - STL-FL
ESL - OR
STL - CT
ATEL - AZ
ATEL - MARION
ATEL - MELMORE
BARRINGER
WCAS
WOHL

RELINQUISED BY: 1.

Signature: Francine Trivitt 1815
Printed Name: Francine Trivitt Date: 6/2/00
Pinnacle Laboratories, Inc.

RECEIVED BY: 1.

Signature: Linda L. Kitt 0940
Printed Name: Linda L. Kitt Date: 6/3/00
Company: STL-FL

RELINQUISED BY: 2.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: 2

Signature: Time:
Printed Name: Date:
Company:

Chain of Custody Record

006015

PHILIP ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2563

Project Name EPFS QUARTERLY SAMPLING
Project Number 68800107 Phase . Task 0301
Samplers J. WAGNON
Laboratory Name PINNACLE LABS
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	BTEX	NITRATES	2,4	Lab ID	Comments
JAQ-0005-MW01	5/30/00	1159	H_2O	2	X			01	JAQUEZ M1
JAQ-0005-MW02	5/30/00	1250	H_2O	2	X			02	JAQUEZ M2
JAQ-0005-MW03	5/30/00	1430	H_2O	6	X	X	X	03	JAQUEZ M3
JAQ-0005-MW04	5/30/00	1509	H_2O	6	X	X	X	04	JAQUEZ M4
JAQ-0005-MW05	5/30/00	1332	H_2O	2	X			05	JAQUEZ M5
JAQ-0005-MW06	5/30/00	1105	H_2O	2	X			06	JAQUEZ M6

Relinquished by:

Signature	Date	Time
Jennifer Wagnon	6/1/00	0500

Received By:

Signature	Date	Time
Antonio Flores	6/2/00	1730

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) NITRATES H_2SO_4
- ☐ Other (Specify)

Carrier: GREYHOUND LINES
Airbill No. GLI 1606918610

Shipping and Lab Notes:
PLEASE INVOICE EL PASO FIELD SERVICES DIRECTLY.
PLEASE SEND RESULTS TO PHILIP SERVICES AND A COPY TO EL PASO FIELD SERVICES.
Rec'd @ 4.3°C

PHILIP ENVIRONMENTAL

Well Number R-1

☐ Developing ☒ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name QUARTERLY GROUNDWATER SAMPLING Project Manager J. SULLIVAN Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ SVE Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.09 TOR
Initial Depth to Water (feet) 13.57 TOR
Height of Water Column in Well (feet) 8.52
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	8.52	56.93	16.7
Gravel Pack			
Drilling Debris			
Total			16.7

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC EXTECH
☐ DO Monitor	
☒ Conductivity Meter	HYDAC EXTECH
☒ Temperature Meter	HYDAC EXTECH
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Turbidity (Visual Estimate)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
5/31/00	1509		X				3.5	3.5			NOT COLLECTED				water is clear to
"	1514		X				3.5	7							grey with
"	1519		X				3.5	10.5							product
"	1523		X				3.5	14							"
"	1527		X				3	17							"
															"

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX at 1532. Water was clear with product, which is why I did not take temp., pH, or conductivity.

Developer's Signature(s) Jason Vargo Date 5/31/00 Reviewer SKS Date 6/2/00

PHILIP ENVIRONMENTAL

Well Number R-2

Serial No. WOPD-

☐ Develop ☐ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name QUARTERLY GROUNDWATER SAMPLING Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ SVE Site address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.12 TOC
Initial Depth to Water (feet) 12.38 TOC
Height of Water Column in Well (feet) 9.74
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons Removed
Well Casing	9.74	1.36 x 3	19.1
Gravel Pack			
Drilling Fluids			
Total			19.1

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC EXTECH
☐ DO Monitor	
☒ Conductivity Meter	HYDAC EXTECH
☒ Temperature Meter	HYDAC EXTECH
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Turbidity Observations: Incremental	Turbidity Observations: Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5/31/00	1404		X				3.5	3.5			22.1	7.35	430		water has sheen
"	1413		X				3.5	7			19.2	7.25	440		grey, odor
"	1420		X				3.5	10.5			20.1	7.43	570		"
"	1428		X				3.5	14			18.0	7.58	320		"
"	1436		X				3.5	17.5			18.5	7.63	310		"
"			X				2	19.5			NOT COLLECTED				"

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX at 1443. Equipment #'s Temp, pH, cond. Not collected due to presence of Product.

Developer's Signature(s) [signature] Date 5/31/00 Reviewer SKS Date 6/2/00

PHILIP ENVIRONMENTAL

Well Number R-3

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name QUARTERLY GROUNDWATER SAMPLING Project Manager STELLAVATO Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ SVE Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.20 TOR

Initial Depth to Water (feet) 13.36 TOR

Height of Water Column in Well (feet) 8.84

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	8.84	5.77 x 3	17.3
Gravel Pack			
Drilling Disturb.			
Total			17.3

Instruments

	Serial No. (If applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Thickness (feet): Incremental	Product Thickness (feet): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5/31/00	1110		X				3.5	3.5			22.5	7.53	938		orange
"	1115		X				3.5	7			18.7	7.33	837		"
"	1121		X				3.5	10.5			18.0	7.22	882		orange-brown
"	1126		X				3.5	14			17.2	7.30	748		clear-orange
"	1131		X				3.5	17.5			18.0	7.29	571		black
"	1135		X				3	20.5			17.3	7.31	669		"

Circle the date and time that the development criteria are met.

Comments SKS ~~TESTED~~ SAMPLED FOR BTEX AT 1142.

Developer's Signature(s) Jean Wagner Date 5/31/00 Reviewer SKS Date 6/2/00

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/96

PHILIP ENVIRONMENTAL

Well Number R-4

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name QUARTERLY GROUNDWATER SAMPLING — Project Manager STELLA VIATO — Project No. 62800107

Client Company EPFS — Phase.Task No. 0301

Site Name JAQUEZ SVE — Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22' 22.70R

Initial Depth to Water (feet) 12.81 TOR

Height of Water Column in Well (feet) 9.41

Diameter (inches): Well 2" Gravel Pack

Item	Water Volume in Well Cubic Feet	Gallons	Gallons to be Removed
Well Casing	9.41	6.14×3	18.4
Gravel Pack			
Drilling Fluids			
Total			18.4

Instruments

	Serial No. (If applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Removed (gallons): Increment	Water Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
5/31/00	1206		X				3.5	3.5	23.8	6.80	579		grey to black
"	1211		X				3.5	7	20.6	6.82	529		Opaque grey
"	1217		X				3.5	10.5	20.5	7.00	741		black, product visible
"	1227		X				3.5	14	22.8	9.46	4430		"
"	1237		X				3.5	17.5	24.1	6.90	1087		"
"	1247		X				1	18.5	17.1	/	/		Water quality meter malfunctioned, did not get last gallon reading

Circle the date and time that the development criteria are met

Comments SKS ~~TESTED~~ FOR BTEX AT 1710. Water quality Meter malfunctioned. SAMPLED

Developer's Signature(s) [signature] Date 5/31/00 Reviewer _____ Date _____

PHILIP ENVIRONMENTAL

Well Number R-5

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name QUARTERLY GROUNDWATER SAMPLING Project Manager J. BELLANATO Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ SVE File Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 24.48 TOB

Initial Depth to Water (feet) 16.22 TOB

Height of Water Column in Well (feet) 8.26

Diameter (inches): Well 5" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	8.26	51.3	16.2
Gravel Pack			
Drilling Fluids			
Total			16.2

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Column Removed (cubic feet): Incremental	Water Column Removed (cubic feet): Cumulative	Gallons Removed (gallons): Incremental	Gallons Removed (gallons): Cumulative	Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
5/31/00	1028		X				3.5	3.5			22.4	7.92	752		clear
"	1033		X				3.5	7			19.8	7.69	745		light brown
"	1040		X				3	10			19.8	7.58	990		"

Circle the date and time that the development criteria are met

Comments Well bailed dry at 10 gallons. Sampled for BTEX at 1040.

Developer's Signature(s) [signature] Date 5/31/00 Reviewer SKS Date 6/2/00

POLIP ENVIRONMENTAL

Well Number R-6

Serial No. WDPD-

☐ Develop ☐ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name QUARTERLY GROUNDWATER SAMPLING Project Manager S. STELLAVATO Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ SVE Site Address BLANCO, NM

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 21.94 TOR
Initial Depth to Water (feet) 14.88 TOR
Height of Water Column in Well (feet) 7.06
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	7.06	44.3	13.8
Gravel Pack			
Drilling Fluids			
Total			13.8

Instruments

	Serial No. (If applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Methods of Development

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

☐ Other

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Purged (gallons): Incremental	Water Volume Purged (gallons): Cumulative	Purge Time (From Start of Bailing): Incremental	Purge Time (From Start of Bailing): Cumulative	Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5/31/00	950		X				3	3			20.0	7.85	355		clear
"	954		X				3	6			17.6	7.57	309		light brown
"	1002		X				2.5	8.5			18.9	7.45	325		brown, much sediment

Circle the date and time that the development criteria are met.

Comments Well bailed dry at 8.5 gal. Sampled for BTEX at 1007

Developer's Signature(s) Jean Wagner Date 5/31/00 Reviewer SKS Date 6/2/00

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2562

Project Name EPFS Quarterly Sampling

Project Number 6280017 Phase . Task 03

Samplers J. MAGNON

Laboratory Name FINNACLE LAB

Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAG-0005-R1	5/31/00	1530				JAGUEZ SVE R1
JAG-0005-R2	5/31/00	1535				JAGUEZ SVE R2
JAG-0005-R3	5/31/00	1537				JAGUEZ SVE R3
JAG-0005-R4	5/31/00	1540				JAGUEZ SVE R4
JAG-0005-R5	5/31/00	1542				JAGUEZ SVE R5
JAG-0005-R6	5/31/00	1545				JAGUEZ SVE R6
TRIP BLANK						

Relinquished by:

Signature	Date	Time
Quentin Livingston		

Received By:

Signature	Date	Time

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. 6471100691810

Shipping and Lab Notes: SAMPLES DIRECTLY TO PHILIPS AND PS

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006016**
June 07, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: Robert Thompson/LeAudra Stanley

On 06/02/00 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.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006016
PROJECT #	: 62800107	DATE RECEIVED	: 06/02/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 06/07/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0005-R1	AQUEOUS	05/31/00
02	JAQ-0005-R2	AQUEOUS	05/31/00
03	JAQ-0005-R3	AQUEOUS	05/31/00
04	JAQ-0005-R4	AQUEOUS	05/31/00
05	JAQ-0005-R5	AQUEOUS	05/31/00
06	JAQ-0005-R6	AQUEOUS	05/31/00
07	TRIP BLANK	AQUEOUS	05/31/00

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 : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 006016
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0005-R1	AQUEOUS	05/31/00	NA	06/05/00	20
02	JAQ-0005-R2	AQUEOUS	05/31/00	NA	06/05/00	50
03	JAQ-0005-R3	AQUEOUS	05/31/00	NA	06/05/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0005-R1	JAQ-0005-R2	JAQ-0005-R3
BENZENE	0.5	**UG/L**	**2300**	**2300**	**1.0**
TOLUENE	0.5	**UG/L**	**1000**	**3200**	**1.4**
ETHYLBENZENE	0.5	**UG/L**	**120**	**280**	**0.5**
TOTAL XYLENES	0.5	**UG/L**	**2000**	**3000**	**5.4**

SURROGATE:				
BROMOFLUOROBENZENE (%)		109	117	113
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006016

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0005-R4	AQUEOUS	05/31/00	NA	06/05/00	25
05	JAQ-0005-R5	AQUEOUS	05/31/00	NA	06/05/00	1
06	JAQ-0005-R6	AQUEOUS	05/31/00	NA	06/05/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0005-R4	JAQ-0005-R5	JAQ-0005-R6
BENZENE	0.5	**UG/L**	**960**	< 0.5	< 0.5
TOLUENE	0.5	**UG/L**	**980**	< 0.5	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**29**	< 0.5	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**1900**	< 0.5	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			110	102	109
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006016

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	TRIP BLANK	AQUEOUS	05/31/00	NA	06/05/00	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 (%) 88
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.	: 006016
BLANK I. D.	: 060500	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 06/05/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		108
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 #	: 006015-01	PINNACLE I.D.	: 006016
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 06/05/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	18.6	93	19.2	96	3	(80 - 120)	20
TOLUENE	<0.5	20.0	20.2	101	20.4	102	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.9	105	21.6	108	3	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	63.8	106	64.9	108	2	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

006016

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2562

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 0301.
Samplers J. WAGNON
Laboratory Name PINNACLE LABS
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	BTEX	Lab ID #	Comments
JAQ-0005-R1	5/31/00	1532	H_2O	2	X	01	JAQUEZ SVE R1
JAQ-0005-R2	5/31/00	1448	H_2O	2	X	02	JAQUEZ SVE R2
JAQ-0005-R3	5/31/00	1142	H_2O	2	X	03	JAQUEZ SVE R3
JAQ-0005-R4	5/31/00	1310	H_2O	2	X	04	JAQUEZ SVE R4
JAQ-0005-R5	5/31/00	1046	H_2O	2	X	05	JAQUEZ SVE R5
JAQ-0005-R6	5/31/00	1007	H_2O	2	X	06	JAQUEZ SVE R6
TRIP BLANK	5/31	—	"	1		07	

Relinquished by:

Signature	Date	Time
Jennifer L Wagner	6/2/00	0800

Received By:

Signature	Date	Time
Jeanine Jaramillo	6/2/00	1730

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: GREYHOUND LINES Airbill No. GLI 1606918610

Shipping and Lab Notes:
PLEASE INVOICE EL PASO FIELD SERVICES DIRECTLY.
PLEASE SEND RESULTS TO PHILIP SERVICES AND A COPY TO EL PASO FIELD SERVICES.
Rec'd @ 4.3c

176-4/95

FLIP ENVIRONMENTAL

Well Number M-01

☐ Devel ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ M-01 Site Address RURAL SAN JUAN CO.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.35 TOR
Initial Depth to Water (feet) 3.50 TOR
Height of Water Column in Well (feet) 11.85
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	11.85	7.7×3	23.2
Gravel Pack			
Drilling Fluids			
Total			23.2

Instruments

	Serial No. (If applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Fluids Volume Removed (gallons): Increment	Fluids Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
6/22/00	1116		X				4	4			25.7	8.03	258		CLEAR, NO ODOR
"	1121		X				3	7			24.3	7.87	231		"

Circle the date and time that the development criteria are met.

Comments Well bailed dry at seven gallons. Let recharge & sampled for BTEX at 1130

Developer's Signature(s) Jon Wagner Date 6/22/00 Reviewer RT Date 6/22/00

FLIP ENVIRONMENTAL

Well Number M-02

☐ Devel ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ M-02 Site Address RURAL SAN JUAN CO.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.03 TOR
Initial Depth to Water (feet) 3.42 TOR
Height of Water Column in Well (feet) 11.61
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	11.61	75.83	22.7
Gravel Pack			
Drilling Fluids			
Total			22.7

Instruments

	Serial No. (If applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
6/22/00	1148		X				4	4			27.1	7.31	370		CLEAR, NO ODOR
"	1151		X				4	8			23.0	7.08	453		"
"	1154		X				4	12			21.4	7.01	451		"
"	1157		X				4	16			20.1	7.00	465		"
"	1200		X				4	20			19.2	6.98	472		"
"	1203		X				3	23			18.4	7.13	462		"

Circle the date and time that the development criteria are met.

Comments Water is clear, no odor, no particles floating. Sampled for BTEX at 1207

Developer's Signature(s) Jenn Wagner Date 6/22/00 Reviewer RT Date 6/22/00

FLIP ENVIRONMENTAL

Well Number m-03

☐ Development ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ m-03 Site Address RURAL SAN JUAN CO.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.15 TOR
Initial Depth to Water (feet) 4.0 TOR
Height of Water Column in Well (feet) 11.15
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	11.15	1.28 x 3	21.8
Gravel Pack			
Drilling fluids			
Total			21.8

Instruments

	Serial No. (If applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
6/22/00	1344		X				4	4			26.8	8.07	249		SLIGHTLY CLOUDY
"	1349		X				4	8			21.8	7.83	272		"
"	1354		X				4	12			19.8	8.94	270		"SLIGHT HC ODOR
"	1358		X				4	16			19.4	10.38	278		"
"	1405		X				4	20			20.4	11.08	380		"
"	1409		X				2	22			19.4	11.50	397		"

Circle the date and time that the development criteria are met.

Comments Water is light brown + cloudy with a very slight HC odor. Sampled for BTEX at 1413 (and miners)

Developer's Signature(s) Jan Wagner Date 6/22/00 Reviewer RT Date 6/22/00

Form A0101 Rev. 10/6/94

F:\NEWFOR

FLIP ENVIRONMENTAL

Well Number M-04 ☐ Develop ☒ Purge

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ M-04 Site Address RURAL SAN JUAN CO.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.36 TOR
Initial Depth to Water (feet) 2.58 TOR
Height of Water Column in Well (feet) 12.78
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	12.78	8.3463	25.0
Gravel Pack			
Drilling Fluids			
Total			25.0

Instruments

	Serial No. (If applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KLITZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
6/22/00	1307		X				5	5			27.8	7.69	523		CLEAR
"	1312		X				5	10			24.7	7.71	477		CLOUDY - LT. BROWN
"	1315		X				1	11			22.2	7.75	466		"

Circle the date and time that the development criteria are met.

Comments Well bailed dry at 11 gal. Let recharge and sampled for BTEX and nitrates at 1323

Developer's Signature(s) Jim Wagner Date 6/22/00 Reviewer RT Date 6/22/00

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/96

FLIP ENVIRONMENTAL

Well Number m-05

☐ Devel ☒ Purgi

WELL DEVELOPMENT AND PURGIN[illegible]TA

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ m-05 Site Address RURAL SAN JUAN CO.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.06 TOR
Initial Depth to Water (feet) 3.66 TOR
Height of Water Column in Well (feet) 11.4
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	11.4	74.4 x 3	22.32
Gravel Pack			
Drilling Fluids			
Total			22.32

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
6/22/00	1227		X				4	4			25.5	7.94	277		CLEAR NO ODOR
"	1230		X				4	8			21.3	7.59	311		"
"	1234		X				4	12			19.9	7.50	303		BIT CLOUDY-LT. BROWN
"	1237		X				4	16			17.7	7.49	304		"
"	1241		X				3	19			19.4	7.46	322		

Circle the date and time that the development criteria are met.

Comments Well bailed dry at 19 feet. Let recharge & sampled for BTEX at 1245

Developer's Signature(s) Jean Wagner Date 6/22/00 Reviewer RT Date 6/22/00

4

FLIP ENVIRONMENTAL

Well Number M-06

☐ Devel ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPES QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPES Phase.Task No. 0301

Site Name JAQUEZ M-06 Site Address RURAL SAN JUAN CO.

Development Criteria

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

Methods of Development

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

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 17.94 TOR
Initial Depth to Water (feet) 6.71 TOR
Height of Water Column in Well (feet) 11.23
Diameter (inches): Well 4 Gravel Pack ____

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	11.23	7.33 x 3	21.9
Gravel Pack			
Drilling Fluids			
Total			21.9

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other _____	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
6/22/00	1017		X				4	4			20.9	7.38	847		CLOUDY, LIGHT BROWN
"	1023		X				4	8			19.2	7.20	831		"
"	1028		X				4	12			18.9	7.30	820		"
"	1032		X				4	16			18.4	7.49	757		"
"	1037		X				4	20			19.5	7.74	713		CLOUDY, MUCH SEDIMENT
"	1041		X				2	22			18.8	7.70	697		"

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX at 1041 / water is turbid with light brown sediment

Developer's Signature(s) Jenna Wagner Date 6/22/00 Reviewer RT Date 6/22/00

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2561

Project Name EPES QUARTERLY SAMPLING

Project Number 62800107 Phase . Task 03[illegible]

Samplers J. WAGNON

Laboratory Name PINNACLE LABS

Laboratory Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0006-M10	6/22/00	1047	[illegible]	[illegible]		JAQUEZ M-10
JAQ-0006-M1	6/22/00	1130	[illegible]	[illegible]		JAQUEZ M-1
JAQ-0006-M2	6/22/00	1207	[illegible]	[illegible]		JAQUEZ M-2
JAQ-0006-M5	6/22/00	1245	[illegible]	[illegible]		JAQUEZ M-5
JAQ-0006-M4	6/22/00	1323	[illegible]	[illegible]		JAQUEZ M-4
JAQ-0006-M3	6/22/00	1413	[illegible]	[illegible]		JAQUEZ M-3

Relinquished by:

Signature	Date	Time
Jon Wagnon	6/23/00	

Received By:

Signature	Date	Time

Samples Iced: ☒ Yes ☐ No

Carrier: [illegible]

Airbill No. 6LI1600691853 3

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) _____

Shipping and Lab Notes:

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006089**
July 03, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON. NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 06/23/00 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.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006089
PROJECT #	: 62800107	DATE RECEIVED	: 06/23/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 07/03/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0006-M6	AQUEOUS	06/22/00
02	JAQ-0006-M1	AQUEOUS	06/22/00
03	JAQ-0006-M2	AQUEOUS	06/22/00
04	JAQ-0006-M5	AQUEOUS	06/22/00
05	JAQ-0006-M4	AQUEOUS	06/22/00
06	JAQ-0006-M3	AQUEOUS	06/22/00

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 : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 006089
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0006-M6	AQUEOUS	06/22/00	NA	06/27/00	1
02	JAQ-0006-M1	AQUEOUS	06/22/00	NA	06/27/00	1
03	JAQ-0006-M2	AQUEOUS	06/22/00	NA	06/27/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0006-M6	JAQ-0006-M1	JAQ-0006-M2
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			108	104	113
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006089

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0006-M5	AQUEOUS	06/22/00	NA	06/27/00	1
05	JAQ-0006-M4	AQUEOUS	06/22/00	NA	06/27/00	1
06	JAQ-0006-M3	AQUEOUS	06/22/00	NA	06/27/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0006-M5	JAQ-0006-M4	JAQ-0006-M3
BENZENE	0.5	UG/L	< 0.5	44	0.6
TOLUENE	0.5	UG/L	< 0.5	1.6	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	6.9	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	16	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			104	114	108
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.	: 006089
BLANK I. D.	: 062700	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 06/27/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		109
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 #	: 062700	PINNACLE I.D.	: 006089
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 06/27/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	17.9	90	17.7	89	1	(80 - 120)	20
TOLUENE	<0.5	20.0	21.0	105	19.8	99	6	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.8	109	21.4	107	2	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	66.6	111	64.5	108	3	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

STL
Commited To *Your* Success

LOG NO: C0-06697
Received: 24 JUN 00
Reported: 29 JUN 00

Mr. MITCH RUBENSTEIN
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 006089,PHIL-EPFS
Sampled By: Client
Code: 151800629

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
06697-1	006089-05	06-22-00/13:23
06697-2	006089-06	06-22-00/14:13

PARAMETER	06697-1	06697-2
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)		
Nitrate + Nitrite-N, mg/l	<0.1	0.14
Nitrate-N, mg/l	<0.1	0.14
Nitrite-N, mg/l	<0.1	<0.1
Dilution Factor	1	1
Prep Date	06.24.00	06.24.00
Analysis Date	06.28.00	06.28.00
Batch ID	N3W44A	N3W44A
Prep Method	4500-NO3	4500-NO3
Analyst	WG	WG

STL
Commited To *Your* Success

LOG NO: C0-06697
Received: 24 JUN 00
Reported: 29 JUN 00

Mr. MITCH RUBENSTEIN
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 006089,PHIL-EPFS
Sampled By: Client
Code: 151800629

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
06697-3	Method Blank	
06697-4	Lab Control Standard % Recovery	
06697-5	Matrix Spike % Recovery	
06697-6	Matrix Spike Duplicate % Recovery	

PARAMETER	06697-3	06697-4	06697-5	06697-6
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)				
Nitrate + Nitrite-N, mg/l	<0.1	105 %	107 %	106 %
Nitrate-N, mg/l	<0.1	105 %	107 %	106 %
Nitrite-N, mg/l	<0.1	95 %	95 %	100 %
Dilution Factor	1	1	1	1
Prep Date	06.24.00	06.24.00	06.24.00	06.24.00
Analysis Date	06.28.00	06.28.00	06.28.00	06.28.00
Batch ID	N3W44A	N3W44A	N3W44A	N3W44A
Prep Method	4500-NO3	4500-NO3	4500-NO3	4500-NO3
Analyst	WG	WG	WG	WG

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

Lance Larson, Project Manager

Final Page Of Report

Severn Trent Laboratories, Inc.
Pensacola, FL 32514
Tel: (850) 474-1001
Fax: (850) 478-2671

Committed to *Your* Success

Data Qualifiers for Final Report

STL-Pensacola Inorganic/Organic

J4	(For positive results)	Temperature limits exceeded (≤2°C or ≥ 6°C), non-reportable for NDPES compliance monitoring.
J6	(For positive results)	LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J9	(For positive results)	LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).	
J (description)	The analyte was positively identified, the quantitation may be an estimation	
R1	(For nondetects)	Temperature limits exceeded (≤2°C or ≥ 6°C); non-reportable for NDPES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NDPES compliance monitoring	
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance	
R4	Holding time exceeded, non-reportable for NDPES compliance monitoring.	
R5	Collection requirements not met, improper container used for sample	
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.	
R7	Internal standard area outside –50% to +100% of calibration verification standard.	
R8	Initial calibration or any calibration verification exceeds acceptance criteria.	
R10	Headspace >1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring	
R12	Analysis performed outside the 12-hour tune or not within tune criteria.	
R (description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria	
F	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (assume the STL-PN RL is at or above lowest calibration standard in the initial calibration curve).	
U	The reported value is ≤ Laboratory MDL (value for result will be the MDL, never below the MDL)	
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).	
B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).	
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.	
	Sample results were corrected due to contaminants in Fractionation Blank (a certification statement is required to be submitted with the final report for MA EPH and NC-Modified MA EPH)	
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).	
#	Elevated reporting limit due to insufficient sample size	
M	A matrix effect was present ([1]sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, [2]sample and/or MS/MSD chromatogram(s) had interfering peaks, [3]sample result was > 4 X spike added, [4]metals serial dilution was performed, or [5]metals post spike is < 40% R)	
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)	
N/C*	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)	
D	Diluted out (surrogate or spike due to sample dilution)	
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.	
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.	
1 pt	The compound has been quantitated against a one point calibration.	
E	Compound concentration exceeds the upper calibration range of the instrument.	
S2	Incorrect sample amount was submitted to the laboratory for analysis	

Normally used for Inorganics Only

S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
R9	Not filtered and preserved at time of collection.
R11	Samples were filtered and preserved within 4 hours of collection.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
Q	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
H	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
I8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
	The Method of Standard Additions (MSA) has been performed on this sample.

SEVERN TRENT LABORATORIES, INC. – PENSACOLA, FLORIDA
STATE CERTIFICATIONS

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental)

State of California, Department of Health Services, Laboratory ID No. 2338 (Hazardous Waste and Wastewater)

State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (Drinking Water, Hazardous Waste and Wastewater)

Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL)

Florida DOH Laboratory ID No. 81142 (Drinking Water), Laboratory ID No. E81010 (Hazardous Waste and Wastewater)

Florida, Radioactive Materials License No. G0733-1

Foreign Soil Permit, Permit No. S-37599

Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water)

State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. LA000017 (Drinking Water)

of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

ionwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Hazardous Waste and Wastewater)

State of Michigan, Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, Laboratory ID No. 250599A (Wastewater,

State of New Jersey, Department of Environmental Protection & Energy, Laboratory ID No. 49006 (Wastewate and Hazardous Waster)

New York State, Department of Health, Laboratory ID No. 11503 (Wastewater and Solids/Hazardous Waste)

North Carolina Department of Environment & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 (Hazardous Waste and Wastewater by Reciprocity with Florida)

State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater by Reciprocity with FL and Solids/Hazardous Waste by Reciprocity with CA)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Tennessee Division of Underground Storage Tanks Approved Laboratory

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater)

Virginia Division of Environmental Protection, Office of Water Resources, Laboratory ID No. 136 (Hazardous Waste and Wastewater by Reciprocity with FL)

American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 100704

Severn Trent Laboratories of Florida
PROJECT SAMPLE INSPECTION FORM

Lab Order #: C006697 Date Received: 6-24-00

1.	Was there a Chain of Custody?	(Yes)	No*		8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)*+	(Yes)	No*	N/A
2.	Was Chain of Custody properly filled out and relinquished?	Yes	(No*)		9.	Is there sufficient volume for analysis requested?	(Yes)	No*	N/A *(Can)*
3.	Were samples received cold? (Criteria: 2° - 6°C: STL-SOP 1055)	(Yes)	No*	N/A	10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	(Yes)	No*	
4.	Were all samples properly labeled and identified?	(Yes)	No*		11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes*	No	(N/A)
5.	Did samples require splitting or compositing*? Req By: PM Client Other*	Yes*	(No)						
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*		12.	If sent, were matrix spike bottles returned?	Yes	No*	(N/A)
7.	Were all sample containers received intact?	(Yes)	No*		13.	Was Project Manager notified of problems? (initials:_____)	Yes	No*	(N/A)

Airbill Number(s): 12 873 165 44 4402 8564 Shipped By: UPS

Cooler Number(s): CLIENT Shipping Charges: _____

Cooler Weight(s): 15# Cooler Temp(s) (°C): 6°C (CCR10)

(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

MULTIPLE PROJECT SHIPMENT

2. # OF CONTAINERS NOT FILLED OUT

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: JC Date: 6-24-00 Logged By: LLK Date: 24-Jun-00

* *Note all Out-of-Control and/or questionable events on Comment Section of this form.*

♦ *If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"*

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

★ *According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).*

Pinnacle Laboratories, Inc. — **Interlab Chain of Custody** — Date: 6/23 Page: 1 of

Network Project Manager: Jacinta A. Tenorio

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

C006697

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)	NITRATE/NITRITE	TOX	TOC	Gen Chemistry		Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
006089-05	6/22	1325	AQ						X																			
006089-06	6/22	1413	AQ						X																			

TCH HOLD TIMES

PROJECT INFORMATION	SAMPLE RECEIPT	SAMPLES SENT TO		RELINQUISED BY: 1.	RELINQUISED BY: 2.
PROJECT #: 006089	Total Number of Containers	PENSACOLA - STL-FL	X	Signature: Time: 14:15	Signature: Time:
PROJ. NAME:	Chain of Custody Seals	ESL - OR		Printed Name: Date: 6/23	Printed Name: Date:
QC LEVEL: (STD.) IV	Received Intact?	STL - CT		Pinnacle Laboratories, Inc.	Company
QC REQUIRED: (MS) MSD (BLANK)	Received Good Cond./Cold	ATEL - AZ		RECEIVED BY: 1.	RECEIVED BY: 2.
TAT: (STANDARD) RUSH!!	LAB NUMBER:	ATEL - MARION		Signature: Time: 0950	Signature: Time:
DUE DATE: 7/10	COMMENTS	ATEL - MELMORE		Printed Name: Date: T. Corrigan 6-24-00	Printed Name: Date:
RUSH SURCHARGE:		BARRINGER		Company STL-PNS	Company
CLIENT DISCOUNT:		WCAS			
SPECIAL CERTIFICATION REQUIRED: YES NO		WOHL			

PL I ID # 6089

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2561

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 0301 .
Samplers J. WAGNON
Laboratory Name PINNACLE LABS
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Type of Analysis and Bottle: NITRATES	Comments
JAQ-0006-M6	6/22/00	1047	H2O	2	X		JAQUEZ M-6 -01
JAQ-0006-M1	6/22/00	1130	H2O	2	X		JAQUEZ M-1 -02
JAQ-0006-M2	6/22/00	1207	H2O	2	X		JAQUEZ M-2 -03
JAQ-0006-M5	6/22/00	1245	H2O	2	X		JAQUEZ M-5 -04
JAQ-0006-M4	6/22/00	1323	H2O	4	X	X	JAQUEZ M-4 -05
JAQ-0006-M3	6/22/00	1413	H2O	4	X	X	JAQUEZ M-3 -06

Relinquished by:

Signature	Date	Time
Jesse Wagnon	6/22/00	1619

Received By:

Signature	Date	Time
[signature]	6/23	9:40 AM

Samples Iced: ☒ Yes ☐ No

Carrier: GREYHOUND LINES Airbill No. 6LI160691853 3

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) _____

Shipping and Lab Notes:

on ice 4.3°C

PHILIP ENVIRONMENTAL

Well Number R-1

☐ Develop ☒ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ R-1 Site Address RURAL SAN JUAN CO.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.09 TOR
Initial Depth to Water (feet) 13.23 TOR
Height of Water Column in Well (feet) 8.86
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	8.86	5.78 x 3	17.4
Gravel Pack			
Drilling Fluids			
Total			17.4

Instruments

	Serial No. (If applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
6/26/00											NO PARAMETERS TAKEN, PRODUCT IN WELL				

Circle the date and time that the development criteria are met.

Comments Water is black w/ Heavy HC oder + Significant Sheen. Sampled for BTEX at 1427

Developer's Signature(s) Jason Wagner Date 6/26/00 Reviewer RT Date 7/5/00

Form A0101 Rev. 10/6/94 F:\NEWFORM\PE_A0101.DOT 1/31/96

FLIP ENVIRONMENTAL

Well Number R-2

☐ Develop ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ R-2 Site Address RURAL SAN JUAN CO.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.12 TOR
Initial Depth to Water (feet) 12.05 TOR
Height of Water Column in Well (feet) 10.07
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	10.07	6.5743	19.7
Gravel Pack			
Drilling Fluids			
Total			19.7

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
6/26/00											NO PARAMETERS TAKEN; PRODUCT IN WELL				
											↓	↓	↓		

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX at 1345 Water is grey with significant sheen.

Developer's Signature(s) Jean Wagner Date 6/26/00 Reviewer RT Date 7/5/00

FLIP ENVIRONMENTAL

Well Number R-3

☐ Develo ☒ Purgi

WELL DEVELOPMENT AND PURGIN DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ R3 Site Address RURAL SAN JUAN CO.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.20 TOR
Initial Depth to Water (feet) 12.00 TOR
Height of Water Column in Well (feet) 10.2
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	10.2	6.6 x 3	19.9
Gravel Pack			
Drilling Fluids			
Total			19.9

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
6/26/00	1139		X				4	4			21.8	7.65	924		CLEAR W/ ORANGE-BROWN FLOATING SED.
"	1144		X				4	8			19.5	7.10	958		"
"	1149		X				4	12			18.6	7.43	865		"
"	1154		X				4	16			19.0	7.93	675		SLIGHTLY GREY
"	1159		X				4	20			19.5	7.77	743		"

Circle the date and time that the development criteria are met.

Comments Well is "boiling" in purge bucket water is orange in sampling cup, water is as stated under "comment" column above. Sampled for BTEX at 1204

Developer's Signature(s) Jean Wagner Date 6/26/00 Reviewer RT Date 7/5/00

FILIP ENVIRONMENTAL

Well Number R-4

☐ Development ☒ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPES QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPES Phase.Task No. 0301

Site Name JAQUEZ Site Address RURAL SAN JUAN CO.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.22 TOR
Initial Depth to Water (feet) 12.40 TOR
Height of Water Column in Well (feet) 9.82
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	9.82	6.41	19.2
Gravel Pack			
Drilling Fluids			
Total			19.2

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
6/20/00	1227		X				4	4			25.7	7.82	504		GREY, CLOUDY, HC ODOR, SHEEN
"	1233		X				4	8			23.4	7.19	508		" "
"	1239		X				4	12			23.2	7.16	581		" "
"	1242		X				4	16			23.4	7.20	733		" "
"	1252		X				4	20			22.7	7.30	873		" "

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX at 1256

Developer's Signature(s) Jason Wagner Date 6/20/00 Reviewer RT Date 7/5/00

FLIP ENVIRONMENTAL

Well Number R-5

☐ Develop ☒ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ R-5 Site Address RURAL SAN JUAN CO.

Development Criteria

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

Methods of Development

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

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 24.48 TOR
Initial Depth to Water (feet) 15.28 TOR
Height of Water Column in Well (feet) 9.2
Diameter (inches): Well 4 Gravel Pack ____

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	9.2	6.01 x 3	18.01
Gravel Pack			
Drilling Fluids			
Total			18.01

Instruments

	Serial No. (If applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other _____	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
6/26/00	1059		X				4	4			23.5	7.77	757		CLEAR, VERY LT. BROWN
"	1105		X				4	8			23.4	7.59	796		"
"	1111		X				4	12			21.8	7.78	1046		CLOUDY, LT. BROWN

Circle the date and time that the development criteria are met.

Comments Well bailed dry at 12 gallons. Let recharge and sampled for BTEX at 1120.

Developer's Signature(s) Jean Wagner Date 6/26/00 Reviewer RT Date 7/5/00

PHILIP ENVIRONMENTAL

Well Number R-6

☐ Developme
☒ Purging

WELL DEVELOPMENT AND PURGING F

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ R-6 Site Address RURAL SAN JUAN CO.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 21.94 TOR
Initial Depth to Water (feet) 13.52 TOR
Height of Water Column in Well (feet) 8.42
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	8.42	5.5 x 3	16.5
Gravel Pack			
Drilling Fluids			
Total			16.5

Instruments

	Serial No. (If applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
6/26/00	1030		X				4	4			20.2	7.19	399		LT. BROWN, CLEAR, NO ODOR
"	1036		X				2.5	6.5			19.6	7.10	395		"

Circle the date and time that the development criteria are met.

Comments Well bailed dry at 6.5 gallons, let recharge & sampled for BTEX at 1046

Developer's Signature(s) Jenn Wagner Date 6/26/00 Reviewer RT Date 7/5/00

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2592

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 03.01
Samplers J. WAGNON
Laboratory Name PINNACLE LABS
Location ALBUQUERQUE NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
TRIP BLANK	6/26/00	1535	Water	1		
JAQ-0006-R6	6/26/00	1040	Soil	1		JAQUEZ SVE R6
JAQ-0006-R5	6/26/00	1220	Soil	1		JAQUEZ SVE R5
JAQ-0006-R4	6/26/00	1250	Soil	1		JAQUEZ SVE R4
JAQ-0006-R3	6/26/00	1304	Soil	1		JAQUEZ SVE R3
JAQ-0006-R2	6/26/00	1315	Soil	1		JAQUEZ SVE R2
JAQ-0006-R1	6/26/00	1327	Soil	1		JAQUEZ SVE R1

Relinquished by:

Signature	Date	Time
Jean Wagnon		

Received By:

Signature	Date	Time

Samples Iced: ☒ Yes ☐ No

Carrier: Airbill No. 6LI 1006918599

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) _____

Shipping and Lab Notes:

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006098**
June 30, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 06/27/00 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.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006098
PROJECT #	: 62800107	DATE RECEIVED	: 06/27/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 06/30/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	TRIP BLANK	AQUEOUS	06/26/00
02	JAQ-0006-R6	AQUEOUS	06/26/00
03	JAQ-0006-R5	AQUEOUS	06/26/00
04	JAQ-0006-R4	AQUEOUS	06/26/00
05	JAQ-0006-R3	AQUEOUS	06/26/00
06	JAQ-0006-R2	AQUEOUS	06/26/00
07	JAQ-0006-R1	AQUEOUS	06/26/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006098

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	TRIP BLANK	AQUEOUS	06/26/00	NA	06/28/00	1
02	JAQ-0006-R6	AQUEOUS	06/26/00	NA	06/28/00	1
03	JAQ-0006-R5	AQUEOUS	06/26/00	NA	06/28/00	1

PARAMETER	DET. LIMIT	UNITS	TRIP BLANK	JAQ-0006-R6	JAQ-0006-R5
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 0.5	< 0.5

SURROGATE:				
BROMOFLUOROBENZENE (%)		101	105	105
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 006098
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0006-R4	AQUEOUS	06/26/00	NA	06/28/00	5
05	JAQ-0006-R3	AQUEOUS	06/26/00	NA	06/28/00	1
06	JAQ-0006-R2	AQUEOUS	06/26/00	NA	06/28/00	25

PARAMETER	DET. LIMIT	UNITS	JAQ-0006-R4	JAQ-0006-R3	JAQ-0006-R2
BENZENE	0.5	**UG/L**	**950**	< 0.5	**1300**
TOLUENE	0.5	**UG/L**	**1000**	< 0.5	**1300**
ETHYLBENZENE	0.5	**UG/L**	**43**	< 0.5	**79**
TOTAL XYLENES	0.5	**UG/L**	**2500**	< 0.5	**1100**
SURROGATE:					
BROMOFLUOROBENZENE (%)			117	102	113
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006098

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	JAQ-0006-R1	AQUEOUS	06/26/00	NA	06/28/00	25

PARAMETER	DET. LIMIT	UNITS	JAQ-0006-R1
BENZENE	0.5	**UG/L**	**2400**
TOLUENE	0.5	**UG/L**	**690**
ETHYLBENZENE	0.5	**UG/L**	**150**
TOTAL XYLENES	0.5	**UG/L**	**2000**

SURROGATE:
BROMOFLUOROBENZENE (%) 112
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.	: 006098
BLANK I. D.	: 062800	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 06/28/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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

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 #	: 006098-02	PINNACLE I.D.	: 006098
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 06/28/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	18.2	91	17.1	86	6	(80 - 120)	20
TOLUENE	<0.5	20.0	21.4	107	19.8	99	8	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.5	108	20.8	104	3	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	65.9	110	63.2	105	4	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

006098

COC Serial No. C 2592

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 0301
Samplers J. WAGNON
Laboratory Name PINNACLE LABS
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Lab ID#	Comments
TRIP BLANK	6/26/00	1525	H2O	1	X	01	
JAQ-0006-R10	6/26/00	1046	H2O	2	X	02	JAQUEZ SVE R10
JAQ-0006-R5	6/26/00	1120	H2O	2	X	03	JAQUEZ SVE R5
JAQ-0006-R4	6/26/00	1256	H2O	2	X	04	JAQUEZ SVE R4
JAQ-0006-R3	6/26/00	1204	H2O	2	X	05	JAQUEZ SVE R3
JAQ-0006-R2	6/26/00	1345	H2O	2	X	06	JAQUEZ SVE R2
JAQ-0006-R1	6/26/00	1427	H2O	2	X	07	JAQUEZ SVE R1

Relinquished by:

Signature	Date	Time
Jenni Wagnon	6/26/00	1600

Received By:

Signature	Date	Time
Francine Jaramillo	6/27/00	0920

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: GREYHOUND LINES

Airbill No. 6LI 1606918599

Shipping and Lab Notes:

Rec'd @ 4.2°C

PHILIP ENVIRONMENTAL

Well Number M-03 ☐ Develop ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ M-03 Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.15 TOR
Initial Depth to Water (feet) 3.41 TOR
Height of Water Column in Well (feet) 11.74
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	11.74	7.7x3	23
Gravel Pack			
Drilling Fluids			
Total			23

Instruments

	Serial No. (If applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
7/25/00	1408		X				4	4			23.9	7.74	354		CLEAR, NO ODOR
"	1412		X				4	8			22.3	7.64	382		SLIGHTLY CLOUDY
"	1417		X				4	12			22.9	7.68	389		" "
"	1421		X				4	16			21.5	7.78	368		" "
"	1425		X				4	20			20.7	7.57	354		" "
"	1432		X				4	24			20.9	7.71	376		GREY, CLOUDY

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX at 1445

Developer's Signature(s) [signature] Date 7/25/00 Reviewer RT Date 8/3/00

PHILIP ENVIRONMENTAL

Well Number M-04

☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.36 TOR
Initial Depth to Water (feet) 2.15 TOR
Height of Water Column in Well (feet) 13.21
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	13.21	8.6 x 3	25.8
Gravel Pack			
Drilling Fluids			
Total			25.8

Instruments

	Serial No. (if applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
7/25/00	1323		X				5	5	~~5~~	~~5~~	27.2	7.86	526		CLEAR, NO ODOR
"	1329		X				5	10			24.5	7.83	509		"
	1333		X				1	11			21.6	7.84	545		"

Circle the date and time that the development criteria are met.

Comments Bailed dry at 11 gallons. Let recharge and sampled for BTEX at 1343.

Developer's Signature(s) Jenn Wagner Date 7/25/00 Reviewer RT Date 8/3/00

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2598

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 330
Samplers J. WAGNON
Laboratory Name PINNACLE LAB
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0001-MW03	7/25/00	1445				JAQUEZ MW03
JAQ-0001-MW04	7/25/00	1323				JAQUEZ MW04

Relinquished by:

Signature	Date	Time
[illegible]	[illegible]	

Received By:

Signature	Date	Time

Samples Iced: ☑ Yes ☐ No

Carrier:

Airbill No. 6471610651101

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) _____

Shipping and Lab Notes:

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **007079**
August 03, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 07/28/00 Pinnacle Laboratories, 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.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 007079
PROJECT #	: 62800107	DATE RECEIVED	: 07/28/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 08/03/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0007-MW03	NON-AQ	07/25/00
02	JAQ-0007-MW04	NON-AQ	07/25/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 007079

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0007-MW03	AQUEOUS	07/25/00	NA	08/01/00	1
02	JAQ-0007-MW04	AQUEOUS	07/25/00	NA	08/01/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0007-MW03	JAQ-0007-MW04
BENZENE	0.5	**UG/L**	< 0.5	**51**
TOLUENE	0.5	**UG/L**	< 0.5	**0.6**
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**1.1**	**13**
SURROGATE:				
BROMOFLUOROBENZENE (%)			97	107
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

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.	: 007079
BLANK I. D.	: 080100	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 08/01/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		95
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 #	: 007079-01	PINNACLE I.D.	: 007079
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 08/01/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	17.3	87	16.7	84	4	(80 - 120)	20
TOLUENE	<0.5	20.0	21.3	107	20.1	101	6	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	23.0	115	21.9	110	5	(80 - 120)	20
TOTAL XYLENES	1.1	60.0	70.4	116	66.9	110	5	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

007079

Chain of Custody Record

PHILIP ENVIRONMENTAL

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

COC Serial No. C 2598

Project Name EPFS QUARTERLY SAMPLING

Project Number 62800107 Phase . Task 0301

Samplers J. WAGNON

Laboratory Name PINNACLE LABS

Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Lab ID	Comments
JAQ-0001-MW03	7/25/00	1445	H_2O	2	X	01	JAQUEZ MW03
JAQ-0001-MW04	7/25/00	1343	H_2O	2	X	02	JAQUEZ MW04

Relinquished by:

Signature	Date	Time
J. Wagnon	7/28/00	1024

Received By:

Signature	Date	Time
Francine Jimmie	7/28/00	1040

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: GREYHOUND LINES

Airbill No. 6677606651101

Shipping and Lab Notes:

Rec'd @ 7.1°C

PHILIP ENVIRONMENTAL

Well Number R-1

☐ Developing ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.09 TOR
Initial Depth to Water (feet) 13.13 TOR
Height of Water Column in Well (feet) 8.96
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	3.916	5.8 x 3	17.5
Gravel Pack			
Drilling Fluids			
Total			17.5

Instruments

	Serial No. (if applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
											PRODUCT IN WELL, NO				
											PARAMETERS				
												TAKEN			
											↓	↓	↓		

Circle the date and time that the development criteria are met.

Comments Water is grey, clear, with black particulates. Product is clear, HC odor with sheen. Bailed 18 gal and sampled at 1107.

Developer's Signature(s) Jean Wagner Date 7/26/00 Reviewer RT Date 8/3/00

PHILIP ENVIRONMENTAL

Well Number R-2

☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.12 TOR
Initial Depth to Water (feet) 12.0 TOR
Height of Water Column in Well (feet) 10.12
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	10.12	6.643	19.8
Gravel Pack			
Drilling Fluids			
Total			19.8

Instruments

	Serial No. (if applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
											PRODUCT IN WELL; NO PARAMETERS TAKEN				
											↓	↓	↓		

Circle the date and time that the development criteria are met.

Comments Well baled dry at 13 gal. let recharge and Sampled for BTEX at 1149, Water is grey-clear with clear product and HC odor.

Developer's Signature(s) Jason Wagner Date 7/20/00 Reviewer RT Date 8/3/00

PHILIP ENVIRONMENTAL

Well Number R-3

☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.20 TOR
Initial Depth to Water (feet) 12.85 TOR
Height of Water Column in Well (feet) 9.35
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	9.35	6.1 x 3	18.3
Gravel Pack			
Drilling Fluids			
Total			18.3

Instruments

	Serial No. (If applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
7/20/00	1212		X				4	4			21.8	6.90	1144		CLEAR - SLIGHTLY YELLOW
"	1216		X				4	8			20.9	6.86	1172		CLEAR
"	1220		X				4	12			21.0	6.91	1178		"
"	1224		X				4	16			20.4	7.09	1182		"
"	1229		X				3	19			19.1	7.15	1105		"

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX at 1235

Developer's Signature(s) Jason Wagner Date 7/20/00 Reviewer RT Date 8/3/00

PHILIP ENVIRONMENTAL

Well Number R-4 ☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.22 TOR
Initial Depth to Water (feet) 12.40 TOR
Height of Water Column in Well (feet) 9.82
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	9.82	6.4 x 3	19.2
Gravel Pack			
Drilling Fluids			
Total			19.2

Instruments

	Serial No. (If applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
7/26/00	934		X				4	4			25.8	7.06	521		COLORLESS, CLOUDY, SHEEN
"	941		X				4	8			22.9	7.08	569		CLOUDY, GREY, SLIGHT ODOR
"	955		X				4	12			23.6	7.19	618		"
"	1001		X				4	16			21.0	7.21	782		BLACK, CLOUDY, ODOR
"	1007		X				4	20			19.5	7.32	862		" "

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX at 1015

Developer's Signature(s) Jenn Wagner Date 7/26/00 Reviewer RT Date 8/3/00

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2608

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 0301 .
Samplers J. WAGNON
Laboratory Name PINNACLE LABS
Location ALBUQUERQUE NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0007-R2	7/26/00	1149	W			JAQEZ R2
JAQ-0007-R3	7/26/00	1235	W			JAQEZ R3
JAQ-0007-R4	7/26/00	1015	W			JAQEZ R4
JAQ-0007-R1	7/26/00	1107	W			JAQEZ R1
TRIP BLANK	7/26/00	1240	W			

Relinquished by:

Signature	Date	Time
Jason Wagnon	7/	

Received By:

Signature	Date	Time

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. FLI 1600661665 110

Shipping and Lab Notes:

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **007078**
August 03, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 07/28/00 Pinnacle Laboratories, 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.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 007078
PROJECT #	: 62800107	DATE RECEIVED	: 07/28/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 08/03/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0007-R2	AQUEOUS	07/26/00
02	JAQ-0007-R3	AQUEOUS	07/26/00
03	JAQ-0007-R4	AQUEOUS	07/26/00
04	JAQ-0007-R1	AQUEOUS	07/26/00
05	TRIP BLANK	AQUEOUS	07/26/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 007078

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0007-R2	AQUEOUS	07/26/00	NA	07/31/00	50
02	JAQ-0007-R3	AQUEOUS	07/26/00	NA	07/31/00	1
03	JAQ-0007-R4	AQUEOUS	07/26/00	NA	07/31/00	20

PARAMETER	DET. LIMIT	UNITS	JAQ-0007-R2	JAQ-0007-R3	JAQ-0007-R4
BENZENE	0.5	**UG/L**	**3600**	< 0.5	**520**
TOLUENE	0.5	**UG/L**	**3200**	< 0.5	**400**
ETHYL BENZENE	0.5	**UG/L**	**150**	< 0.5	**50**
TOTAL XYLENES	0.5	**UG/L**	**2300**	< 0.5	**1600**
SURROGATE:					
BROMOFLUOROBENZENE (%)			104	88	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 RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 007078

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0007-R1	AQUEOUS	07/26/00	NA	07/31/00	50
05	TRIP BLANK	AQUEOUS	07/26/00	NA	07/31/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0007-R1	TRIP BLANK
BENZENE	0.5	**UG/L**	**4900**	< 0.5
TOLUENE	0.5	**UG/L**	**2900**	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**150**	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**3100**	< 0.5

SURROGATE:			
BROMOFLUOROBENZENE (%)		105	96
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.	: 007078
BLANK I. D.	: 073100	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 07/31/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BR( )FLUOROBENZENE (%)		101
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 #	: 007071-10	PINNACLE I.D.	: 007078
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 07/31/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	16.9	85	16.6	83	2	(80 - 120)	20
TOLUENE	<0.5	20.0	20.1	101	19.8	99	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.6	108	20.6	103	5	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	66.2	110	63.2	105	5	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

007078

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

COC Serial No. C 2608

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 0301.
Samplers J. WAGNON
Laboratory Name PINNACLE LABS
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Lab ID#	Comments
JAQ-0007-R2	7/26/00	1149	H20	2	X	01	JAQUEZ R2
JAQ-0007-R3	7/26/00	1235	H20	2	X	02	JAQUEZ R3
JAQ-0007-R4	7/26/00	1015	H20	2	X	03	JAQUEZ R4
JAQ-0007-R1	7/26/00	1107	H20	2	X	04	JAQUEZ R1
TRIP BLANK	7/26/00	1240	H20	1	X	05	

Relinquished by:

Signature	Date	Time
Jennifer Wagnon	7/28/00	1024

Received By:

Signature	Date	Time
Francine Jaramillo	1640	7/28/00

Samples Iced: ☑ Yes ☐ No

Carrier: GREYHOUND LINES

Airbill No. 8LE1600669665 1

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) _____

Shipping and Lab Notes:

Rec'd @ 4.1°

PHILIP ENVIRONMENTAL

Well Number MW-01

☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS QUARTERLY SAMP. Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.38 TOR

Initial Depth to Water (feet) 4.5 TOR

Height of Water Column in Well (feet) 10.88

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	10.9	71.3	71.3
Gravel Pack			
Drilling Fluids			
Total			21.3

Instruments

	Serial No. (if applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
8/22/00	1126		X				4	4			22.5	7.83	370		CLEAR, NO ODOR
"	1136		X				4	8			22.9	7.52	340		" "
"	1151		X				4	12			24.7	7.51	300		" "
"	1206		X				2.5	14.5			24.2	7.45	286		" "

Circle the date and time that the development criteria are met.

Comments Well bailed dry @ 1206, sampled for BTEX at 1207

Developer's Signature(s) [signature] Date 8/22/00 Reviewer Date

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/96

PHILIP ENVIRONMENTAL

Well Number MW2 ☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMP. Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

☑ (3) to 5 Casing Volumes of Water Removal
☑ Stabilization of Indicator Parameters
☐ Other

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.12 TOR
Initial Depth to Water (feet) 3.49 TOR
Height of Water Column in Well (feet) 11.63
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	11.63	76.63	22.8
Gravel Pack			
Drilling Fluids			
Total			22.8

Instruments

	Serial No. (if applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
8/22/00	1228		X				4	4			21.3	7.83	430		CLEAR, NO ODOR
"	1235		X				4	8			23.6	7.80	403		"
"	1239		X				4	12			22.4	7.38	392		"
"	1242		X				4	16			21.3	7.41	387		"
"	1246		X				4	20			22.0	7.25	393		"
"	1250		X				4	24			22.0	7.28	390		"

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX

Developer's Signature(s) [signature] Date 8/22/00 Reviewer _____ Date _____

PHILIP ENVIRONMENTAL

Well Number M3

☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS QUARTERLY SAMP. Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

☑ (3) to 5 Casing Volumes of Water Removal
☑ Stabilization of Indicator Parameters
☐ Other

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.18' TOB
Initial Depth to Water (feet) 3.00' TOB
Height of Water Column in Well (feet) 12.18
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	12.18	8.09	24
Gravel Pack			
Drilling Fluids			
Total			24

Instruments

	Serial No. (if applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
8/22/00	1418		X				5	5			21.0	7.95	4.01		CLEAR, SLIGHT SHEEN ODOR
"	1422		X				5	10			21.9	7.61	374		"
"	1425		X				5	15			19.9	7.12	346		"
"	1431		X				5	20			19.5	7.35	341		"
"			X				4	24			19.5	7.33	336		"

Circle the date and time that the development criteria are met.

Comments Sampled for [illegible]

Developer's Signature(s) [signature] Date Reviewer Date

PHILIP ENVIRONMENTAL

Well Number MW4

☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMP. Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

☑ (3) to 5 Casing Volumes of Water Removal
☑ Stabilization of Indicator Parameters
☐ Other

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.38' TOR
Initial Depth to Water (feet) 1.9' TOR
Height of Water Column in Well (feet) 13.48'
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	13.12	8.33	41.65
Gravel Pack			
Drilling Fluids			
Total			32.4

Instruments

	Serial No. (if applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
8/22/00	1344		X				5	5			30.3	8.11	647		CLEAR NO ODOR
"	1349		X				2	7			23.1	7.88	589		"
"	1400		X				2	9			24.0	7.81	714		LT BROWN, CLOUDY

Circle the date and time that the development criteria are met.

Comments Bailed dry at 9 gal. Sampled for BTEX and Nitrates

Developer's Signature(s) Jennifer Kilgore Date 8/22/2000 Reviewer _____ Date _____

F:\NEWFORM\PE_A0101.DOT 1/31/96

PHILIP ENVIRONMENTAL

Well Number MW5 ☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS QUARTERLY SAMP. Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.05 TOR

Initial Depth to Water (feet) 3.80 TOR

Height of Water Column in Well (feet) 11.25

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	11.25	7.3 x 3	22
Gravel Pack			
Drilling Fluids			
Total			22

Instruments

	Serial No. (if applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
8/22/00	1307		X				4	4			21.8	7.87	400		CLEAR, NO ODOR
"	1312		X				4	8			23.1	7.79	398		"
"	1316		X				4	12			20.3	7.52	360		"
"	1320		X				4	16			21.3	7.47	395		"
"	1324		X				4	20			20.1	7.44	406		"
"	1328		X				4	24			21.9	7.38	429		"

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX + MTBE.

Developer's Signature(s) [signature] Date 8/22/00 Reviewer _____ Date _____

PHILIP ENVIRONMENTAL

Well Number MW6

☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMP. Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

☑ (3) to 5 Casing Volumes of Water Removal
☑ Stabilization of Indicator Parameters
☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 17.11 TOC
Initial Depth to Water (feet) 4.35 TOC
Height of Water Column in Well (feet) 11.56
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume In Well: Cubic Feet	Water Volume In Well: Gallons	Gallons to be Removed
Well Casing	11.56	7.53	22.6
Gravel Pack			
Drilling Fluids			
Total			22.6

Instruments

	Serial No. (If applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Methods of Development

Pump: ☐ Centrifugal ☐ Submersible ☐ Peristaltic
Bailer: ☑ Bottom Valve ☐ Double Check Valve ☐ Stainless-steel Kemmerer
☐ Other

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
8/22/00	1451		X				4	4			23.3	7.3	1055		TURBID, BROWN
"	1502		X				4	8			21.7	7.16	962		"
"	1507		X				4	12			20.2	7.21	853		"
"	1513		X				4	16			19.1	7.32	692		"
"	1518		X				4	20			17.7	7.37	646		"
"			X				3	23			17.6	7.40	607		"

Circle the date and time that the development criteria are met.

Comments Sampled @ 1526

Developer's Signature(s) Ina Wagner Date 8/22/00 Reviewer Date

F:\NEWFORM\PE_A0101.DOT 1/31/96

PHILIP

Chain of Custody Record

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

COC Serial No. C 2642

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 0301 .
Samplers J. WAGNON
Laboratory Name PINNACLE
Location ALBUQUERQUE NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0008-M1	8/22/00	1207				JAQUEZ M WELLS
JAQ-0008-M2	8/22/00	1250				"
JAQ-0008-M3	8/22/00	1431				"
JAQ-0008-M4	8/22/00	1450				"
JAQ-0008-M5	8/22/00	1329				"
JAQ-0008-M6	8/22/00	1521				"
DUP. JAQ-0008-M1D	8/22/00	1207	H2O			

Relinquished by:

Signature	Date	Time
Jean Wagnon	8/ 1	

Received By:

Signature	Date	Time

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: [illegible]

Airbill No. 6CI16069185 7

Shipping and Lab Notes:

PE-176 4/95

PINNACLE LABORATORIES

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

SEP 2 8 2000

Pinnacle Lab ID number **008085**
September 26, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 08/24/00 Pinnacle Laboratories, 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 BTEX analyses were performed by Pinnacle Laboratories, Inc., Albuquerque, NM

All other analyses were performed by Environmental Services Laboratory, Inc., Portland, OR.

The samples were received with insufficient time to perform speciated nitrate in-hold time.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 008085
PROJECT #	: 62800107	DATE RECEIVED	: 08/24/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 09/26/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0008-M1	AQUEOUS	08/22/00
02	JAQ-0008-M2	AQUEOUS	08/22/00
03	JAQ-0008-M3	AQUEOUS	08/22/00
04	JAQ-0008-M4	AQUEOUS	08/22/00
05	JAQ-0008-M5	AQUEOUS	08/22/00
06	JAQ-0008-M6	AQUEOUS	08/22/00
07	TRIP BLANK	AQUEOUS	08/22/00
08	JAQ-0008-M1D	AQUEOUS	08/22/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 008085

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0008-M1	AQUEOUS	08/22/00	NA	08/25/00	1
02	JAQ-0008-M2	AQUEOUS	08/22/00	NA	08/25/00	1
03	JAQ-0008-M3	AQUEOUS	08/22/00	NA	08/25/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0008-M1	JAQ-0008-M2	JAQ-0008-M3
BENZENE	0.5	**UG/L**	< 0.5	< 0.5	**0.6**
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	**UG/L**	< 0.5	< 0.5	**2.2**
SURROGATE:					
BROMOFLUOROBENZENE (%)			98	93	103
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 008085

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0008-M4	AQUEOUS	08/22/00	NA	08/25/00	1
05	JAQ-0008-M5	AQUEOUS	08/22/00	NA	08/25/00	1
06	JAQ-0008-M6	AQUEOUS	08/22/00	NA	08/25/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0008-M4	JAQ-0008-M5	JAQ-0008-M6
BENZENE	0.5	**UG/L**	**87**	**43**	< 0.5
TOLUENE	0.5	**UG/L**	**0.5**	< 0.5	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**1.2**	< 0.5	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**32**	< 0.5	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			108	100	103
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 008085
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	TRIP BLANK	AQUEOUS	08/22/00	NA	08/25/00	1
08	JAQ-0008-M1D	AQUEOUS	08/22/00	NA	08/25/00	1

PARAMETER	DET. LIMIT	UNITS	TRIP BLANK	JAQ-0008-M1D
BENZENE	0.5	UG/L	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5
ETHYL BENZENE	0.5	UG/L	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 0.5

SURROGATE:

BROMOFLUOROBENZENE (%)		106	96
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.	: 008085
BLANK I. D.	: 082500	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 08/25/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		101
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 #	: 082500	PINNACLE I.D.	: 008085
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 08/25/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	18.6	93	18.7	94	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.2	101	19.2	96	5	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.7	104	20.3	102	2	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	61.9	103	61.1	102	1	(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

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

September 01, 2000

Jacinta A. Tenorio
Pinnacle Laboratories
2709-D Pan American Fwy NE
Albuquerque, NM 87107
TEL: 505-344-3777
FAX (505) 344-4413

RE: 008085/PHIL

Order No.: 0008142

Dear Jacinta A. Tenorio,

Environmental Services Laboratory received 2 samples on 8/25/00 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Nitrate (EPA 353.3)

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 test results, please feel free to call.

Sincerely,

Nichole Karl

Nichole Karl
Project Manager

Keith Hunter

Technical Review

Environmental Services Laboratory

Date: *01-Sep-00*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	008085-03
Lab Order:	0008142	**Tag Number:**	
Project:	008085/PHIL	**Collection Date:**	8/22/00
Lab ID:	0008142-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE		**EPA 353.3**				Analyst: **gvs**
Nitrogen, Nitrate	ND	0.0500		mg/L	1	8/29/00

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: *01-Sep-00*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	008085-04
Lab Order:	0008142	**Tag Number:**	
Project:	008085/PHIL	**Collection Date:**	8/22/00
Lab ID:	0008142-02A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE		**EPA 353.3**				Analyst: **gvs**
Nitrogen, Nitrate	1.66	0.300		mg/L	6	8/29/00

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: *01-Sep-00*

CLIENT: Pinnacle Laboratories
Work Order: 0008142
Project: 008085/PHIL

QC SUMMARY REPORT
Method Blank

Sample ID: **MBlank** Batch ID: **01 NITRATE-** Test Code: **EPA 353.3** Units: mg/L Analysis Date **8/29/00** Prep Date:

Client ID: **0008142** Run ID: **HIT MAN_000829A** SeqNo: **50823**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate	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: *01-Sep-00*

CLIENT: Pinnacle Laboratories
Work Order: 0008142
Project: 008085/PHIL

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS	Batch ID: 01 NITRATE-	Test Code: EPA 353.3	Units: mg/L	Analysis Date 8/29/00	Prep Date:
Client ID:	0008142	Run ID: HIT MAN_000829A		SeqNo: 50824	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate	.288	0.05	0.3	0	96.0%	85	115	0			

Sample ID: LCSD	Batch ID: 01 NITRATE-	Test Code: EPA 353.3	Units: mg/L	Analysis Date 8/29/00	Prep Date:
Client ID:	0008142	Run ID: HIT MAN_000829A		SeqNo: 50825	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate	.295	0.05	0.3	0	98.3%	85	115	0.288	2.4%	20	

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: 8/24 Page: 1 of 1

Network Project Manager: Jacinta A. Tenorio

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

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)		TOX	TOC	Gen Chemistry	Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
													Total NO_3													
008085-03	8/22	1434	AQ	01									X													
-04	"	1402	"	02									X													

PROJECT INFORMATION

PROJECT #: 008085
PROJ. NAME: PHIL
QC LEVEL: (STD) IV
QC REQUIRED: MS MSD BLANK
TAT: (STANDARD) RUSH!!
DUE DATE: 9/7
RUSH SURCHARGE: —
CLIENT DISCOUNT: —
SPECIAL CERTIFICATION REQUIRED: YES (NO)

SAMPLE RECEIPT

Total Number of Containers	
Chain of Custody Seals	
Received Intact?	
Received Good Cond./Cold	
LAB NUMBER: 0008142	

COMMENTS:

SAMPLES SENT TO:

PENSACOLA - STL-FL	
ESL - OR	X
STL - CT	
ATEL - AZ	
ATEL - MARION	
ATEL - MELMORE	
BARRINGER	
WCAS	
WOHL	

RELINQUISED BY: 1.
Signature: Francine Tonvio Time: 1730
Printed Name: Francine Tonvio Date: 8/24/00
Company: Pinnacle Laboratories, Inc.

RECEIVED BY: 1.
Signature: Nichole Karl Time: 9:30
Printed Name: Nichole Karl Date: 8/25
Company:

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

008085

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2642

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 0301.
Samplers J. WAGNON
Laboratory Name PINNACLE
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	NITRATES				Lab ID #							Comments
JAQ-0008-M1	8/22/00	1207	H2O	2	X					01							JAQUEZ MWELLS
JAQ-0008-M2	8/22/00	1252	H2O	2	X					02							"
JAQ-0008-M3	8/22/00	1434	H2O	3	X	X				03							"
JAQ-0008-M4	8/22/00	1402	H2O	3	X	X				04							"
JAQ-0008-M5	8/22/00	1329	H2O	2	X					05							"
JAQ-0008-M6	8/22/00	1526	H2O	2	X					06							"
Trip Blank	8/22/00	1207	"	1	X					07							
JAQ-0008-MID	8/22/00	1207	"	1	X					08							"

Relinquished by:

Signature	Date	Time
Jenn Wagnon	8/23/00	1530

Received By:

Signature	Date	Time
Francine Trimio	8/24/00	0930

Samples Iced: ☑ Yes ☐ No

Carrier: GREYHOUND LINES

Airbill No. 6LI6069185 T7

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) _____

Shipping and Lab Notes:

Rec'd @4°c

PHILIP ENVIRONMENTAL

Well Number R1

☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING

Serial No. WDPD-

Page 1 of 1

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 22.09' TDR
Initial Depth to Water (feet) 12.78' TDR
Height of Water Column in Well (feet) 9.31
Diameter (inches): Well 4" Gravel Pack _____

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	9.31	6.1 x 3	18.2
Gravel Pack			
Drilling Fluids			
Total			18.2

Instruments

	Serial No. (if applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Methods of Development

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

Water Disposal

KUTZ SEPARETOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
8/23/00	1401		X					3			19.5	4.63	1870		CLEAR, HC ODOR, SLIGHT
"	1408		X				3	6			24.0	4.46	1583		" SHEEN
"	1412		X				3	9			21.5	4.20	1482		"
"	1417		X				3	12			22.8	4.11	1402		"
"	1421		X				3	15			19.9	4.05	1682		GREY W/BLACK
"	1426		X				3.5	18.5			20.1	4.00	1553		" PARTICULATES

Circle the date and time that the development criteria are met.

Comments Sampled for full suite

Developer's Signature(s) Jenn Wagner Date 8/23/00 Reviewer _____ Date _____

PHILIP ENVIRONMENTAL

Well Number R2

☐ Development ☒ Purging

WELL DEVELOPMENT AND PURGING

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.12' TOR
Initial Depth to Water (feet) 11.54' TOR
Height of Water Column in Well (feet) 10.58
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	10.58	69.3	20.7
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
8/23/00	1243		X								DID NOT TAKE PARAMETERS; PRODUCT IN WELL.				
↓	1300		↓								↓	↓	↓	↓	

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX and TPH. Water is grey-clear with oily sheen and clear [illegible]

Developer's Signature(s) Jenn Wagner Date 8/23/00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number R3

☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING

Serial No. WDPD-

Page 1 of 1

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.20' TOR
Initial Depth to Water (feet) 12.31' TOR
Height of Water Column in Well (feet) 9.89
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	9.89	[illegible]	19.3
Gravel Pack			
Drilling Fluids			
Total			19.3

Instruments

	Serial No. (if applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
8/23/00	1158		X				4	4			22.2	3.88	1099		CLEAR W/ RED PARTICULATE
"	1203		X				7	[illegible]			22.3	3.94	1156		"
"	1208		X				4	12			20.3	3.78	1094		"
"	1212		X				4	16			20.4	3.77	1114		"
"	1217		X				4	20			19.8	3.75	1041		CLEAR

Circle the date and time that the development criteria are met

Comments Sampled for BTEX and TPH

Developer's Signature(s) Jean Wagner Date 8/23/00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number R4 ☐ Developing ☑ Purging

WELL DEVELOPMENT AND PURGING

Serial No. WDPD-

Page 1 of 1

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.22 TOR
Initial Depth to Water (feet) 12.00
Height of Water Column in Well (feet) 10.22
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	10.22	[illegible]	20.0
Gravel Pack			
Drilling Fluids			
Total			20.0

Instruments

	Serial No. (if applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
8/23/00	1316		X								ALL Parameters taken,				
											[illegible]		in well		
	1336														

Circle the date and time that the development criteria are met.

Comments PRODUCT FROM 11.9[illegible] TO [illegible] PRODUCT) Sampled BTEX at 1336.
Water is black with yellow. [illegible] HC ODOR

Developer's Signature(s) Jenn Wagner Date 8/23/00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number R5 ☐ Developm ☑ Purging

WELL DEVELOPMENT AND PURGING

Serial No. WDPD-

Page 1 of 1

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

☑ ~~10~~ 5 to 5 Casing Volumes of Water Removal
☑ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

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

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 24.48 TOR
Initial Depth to Water (feet) 15.17 TOR
Height of Water Column in Well (feet) 9.31
Diameter (inches): Well 4 Gravel Pack ____

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	9.31	6.1 x 3	18.2
Gravel Pack			
Drilling Fluids			
Total			18.2

Instruments

	Serial No. (if applicable)
☑ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other _____	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
8/23/00	1126		X				4	4			22.7	4.85	703		SLIGHTLY TURB. BROWN
"	1131		X				4	8			22.4	4.32	615		"
"	1136		X				2.5	10.5			21.9	4.26	650		"

Circle the date and time that the development criteria are met.

Comments Bailed dry at 10.5 gal. Let recharge. Sampled at 1140.

Developer's Signature(s) Jason Wagner Date 8/23/00 Reviewer _____ Date _____

PRIP ENVIRONMENTAL

Well Number RL ☐ Develop ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS QUARTERLY SAMPLING Project Manager R. THOMPSON Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name JAQUEZ Site Address BLANCO, NM

Development Criteria

☑ 10 to 5 Casing Volumes of Water Removal
☑ Stabilization of Indicator Parameters
☐ Other

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 21.94' TOR
Initial Depth to Water (feet) 12.38' TOR
Height of Water Column in Well (feet) 9.56
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	9.56	6.3 x 3	18.7
Gravel Pack			
Drilling Fluids			
Total			18.7

Instruments

	Serial No. (if applicable)
☐ pH Meter	HYDAC
☐ DO Monitor	
☑ Conductivity Meter	HYDAC
☑ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD, NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
8/23/00	1053		X				4	4			21.7	7.26	408		SLIGHTLY TURBID, BROWN
"	1100		X				4	8			24.0	6.81	400		"
"	1108		X				5	13			23.4	5.95	372		"

Circle the date and time that the development criteria are met.

Comments Bailed dry at 13 gal. Let recover & Sampled for BTEX at 1115.

Developer's Signature(s) Jenn Wagner Date 8/23/00 Reviewer Date

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2641

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 0301 .
Samplers J. WAGNON
Laboratory Name PINNACLE
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAP-0008-R1	8/23/00	1435	W			JAQUEZ RWELLS
JAP-0008-R2	8/23/00	1300	W			"
JAP-0008-R3	8/23/00	1230	W			"
JAP-0008-R4	8/23/00	1330	W			"
JAP-0008-R5	8/23/00	1145	W			"
JAP-0008-R6	8/23/00	1115	W			"

Relinquished by:

Signature	Date	Time
Jon Wagnon	8/23/00	

Received By:

Signature	Date	Time

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. 6CI1600691857

Shipping and Lab Notes:

PE-176 4/95

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **008084**
August 28, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 08/24/00 Pinnacle Laboratories, 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.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 008084
PROJECT #	: 62800107	DATE RECEIVED	: 08/24/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 08/28/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0008-R1	AQUEOUS	08/22/00
02	JAQ-0008-R2	AQUEOUS	08/22/00
03	JAQ-0008-R3	AQUEOUS	08/22/00
04	JAQ-0008-R4	AQUEOUS	08/22/00
05	JAQ-0008-R5	AQUEOUS	08/22/00
06	JAQ-0008-R6	AQUEOUS	08/22/00

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 : PHILIP ENVIRONMENTAL PINNACLE I.D.: 008084
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0008-R1	AQUEOUS	08/23/00	NA	08/25/00	20
02	JAQ-0008-R2	AQUEOUS	08/23/00	NA	08/25/00	20
03	JAQ-0008-R3	AQUEOUS	08/23/00	NA	08/25/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0008-R1	JAQ-0008-R2	JAQ-0008-R3
BENZENE	0.5	**UG/L**	**2500**	**1600**	< 0.5
TOLUENE	0.5	**UG/L**	**1400**	**1500**	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**180**	**82**	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**2200**	**1100**	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			108	101	113
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 008084

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0008-R4	AQUEOUS	08/23/00	NA	08/25/00	20
05	JAQ-0008-R5	AQUEOUS	08/23/00	NA	08/25/00	1
06	JAQ-0008-R6	AQUEOUS	08/23/00	NA	08/25/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0008-R4	JAQ-0008-R5	JAQ-0008-R6
BENZENE	0.5	**UG/L**	**1500**	< 0.5	< 0.5
TOLUENE	0.5	**UG/L**	**1800**	< 0.5	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**110**	< 0.5	**2.6**
TOTAL XYLENES	0.5	**UG/L**	**1800**	< 0.5	**13**
SURROGATE:					
BROMOFLUOROBENZENE (%)			99	104	103
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.	: 008084
BLANK I. D.	: 082500	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 08/25/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BR( )FLUOROBENZENE (%)		101
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 #	: 082500	PINNACLE I.D.	: 008084
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 08/25/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	18.6	93	18.7	94	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.2	101	19.2	96	5	(80 - 120)	20
ETHYL BENZENE	<0.5	20.0	20.7	104	20.3	102	2	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	61.9	103	61.1	102	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

008084

COC Serial No. C 2641

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 0301 .
Samplers J. WAGNON
Laboratory Name PINNACLE
Laboratory Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	BTEX 8021	Lab ID #	Comments
JAQ-0008-R1	8/23/00	1435	H2O	2	X	01	JAQUEZ RWELLS
JAQ-0008-R2	8/23/00	1300	H2O	2	X	02	"
JAQ-0008-R3	8/23/00	1220	H2O	2	X	03	"
JAQ-0008-R4	8/23/00	1336	H2O	2	X	04	"
JAQ-0008-R5	8/23/00	1140	H2O	2	X	05	"
JAQ-0008-R6	8/23/00	1115	H2O	2	X	06	"

Relinquished by:

Signature	Date	Time
Jennifer Wagnon	8/23/00	1530

Received By:

Signature	Date	Time
Jaquez Jones	8/24/00	0930

Samples Iced: ☑ Yes ☐ No

Carrier: GREYHOUND LINES

Airbill No. 6LI160691857

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) _____

Shipping and Lab Notes:

Rec'd @ 4°c

PHILIP ENVIRONMENTAL

Well Number M-01

☐ Develop ☑ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WOPD-

Project Name EPFS Quarterly Sampling Project Manager R Thompson Project No. 72800107

Client Company El paso Field Services Phase.Task No. 0301

Site Name JAQUEZ Gas Com E #1 Site Address Waterco N.M.

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 15.36
Initial Depth to Water (feet) 3.88
Height of Water Column in Well (feet) 11.48
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	11.48	2.49 X 3	22.47
Gravel Pack			
Drilling Fluids			
Total			22.47

Instruments

	Serial No. (If applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Methods of Development

Pump: ☐ Centrifugal ☐ Submersible ☐ Peristaltic
Bailer: ☑ Bottom Valve ☐ Double Check Valve ☐ Stainless-steel Kemmerer
☐ Other

Water Disposal

Kutz Seperator Bloomfield N.M.

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Field Volume Removed (gallons): Increment	Field Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
11-17-00	1127		X				4.5	4.5			7.5	5.81	334		Clear no odor
	1134		X				4.5	9			8.0	5.60	325		no change
	1240						4.5	13.5						2.85	
							4.5	18							
							4.5	22.5							

Circle the date and time that the development criteria are met.

Comments After Bailing Approx 8.5 gals Bailed well Dry Let Recover collected BTex Sample 1227

Developer's Signature(s) Chris A. Hill Date 11-17-00 Reviewed R Thompson Date 11/21/00

PHILIP ENVIRONMENTAL

Well Number M 02

☐ Development ☐ Purging

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS Quarterly Sampling

Project Manager R Thompson

Project No. 62800107

Client Company El Paso Field Services

Phase.Task No. 0301

Site Name Jaquez

Site Address Blanco NM

Development Criteria

☑ 3 to 5 Casing Volumes of Water Removal

☑ Stabilization of Indicator Parameters

☐ Other

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.09

Initial Depth to Water (feet) 3.75

Height of Water Column in Well (feet) 11.34

Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Qty in Feet	Gallons	Gallons to be Removed
Well Casing	11.34	7.40 x 3	22.2
Gravel Pack			
Drilling Fluids			
Total			22.2

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal

Enviro Separator Bloomfield

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Purged Volume Removed (gallons): Incremental	Purged Volume Removed (gallons): Cumulative	Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
11-17-00	1012		X				4.5	4.5			12.0	6.24	503		Clear no odor
	1017		X				4.5	9			9.9	6.08	538		" "
	1027		X				4.5	13.5			8.5	5.96	523		" "
	1031		X				4.5	18			10.6	5.78	542		" "
	1036		X				4.5	22.5			11.3	5.73	552		no change
	1057													0.54	

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX 1046

Developer's Signature(s) Chris A. Williams Date 11-17-00 Reviewer JW Date 11/21/00

PHILIP ENVIRONMENTAL

Well Number M-03

☐ Developing ☐ Purging

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS Quarterly Sampling

Project Manager Thompson

Project No. 628 00107

Client Company El Paso Field Services

Phase.Task No. 0301

Site Name Jaquez

Site Address Blanco NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.13
Initial Depth to Water (feet) 3.62
Height of Water Column in Well (feet) 11.51
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	11.51	75.13	22.53
Gravel Pack			
Drilling Fluids			
Total			22.53

Instruments

	Serial No. (If applicable)
☐ pH Meter	Hydac
☐ DO Monitor	
☐ Conductivity Meter	Hydac
☐ Temperature Meter	Hydac
☐ Other	

Water Disposal

Kurtz Seperator Bloomfield NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Column Removed (feet): Increment	Product Column Removed (feet): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
11-17-00	1159		X				4.5	5			10.2	5.86	347		Cloudy Rotten egg odor
	1205		X				4.5	1			9.4	5.79	383		" "
	1209		X				4.5	13.5			9.1	5.76	358		" "
	1216		X				4.5	18			9.6	5.79	361		" "
	1220		X				4.75	22.75			9.6	5.72	340		no Charge
	1245													1.24	

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX 1231

Developer's Signature(s) [signature] Date [illegible] Reviewed [signature] Date 11/21/00

PHILIP ENVIRONMENTAL

Well Number M - 04 ☐ Developed ☑ Purging

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EDFS Quarterly Sampling Project Manager K Thompson Project No. 62800107

Client Company El Paso Field Services Phase.Task No. 0301

Site Name Jaquez GAS Com. E # 1 Site Address Blanco, NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.31
Initial Depth to Water (feet) 2.72
Height of Water Column in Well (feet) 12.65
Diameter (inches): Well 5" Gravel Pack

Item	Water Volume in Well Cubic Feet	Water Volume in Well Gallons	Gallons to be Removed
Well Casing	12.32	8.3[illegible]	24.75
Gravel Pack			
Drilling Fluids			
Total			71.[illegible]

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal

K-TZ Separator

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Water phase	Product Volume Removed (gallons): Product phase	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
11-17-00	1345		X				5	5			12.6	5.94	2.310		Cloudy no odor
	1351		X				6.25	11			13.1	5.66	2.980		no change
	1452													3.87	

Circle the date and time that the development criteria are met.

Comments Bailed Approximately 15 gallons Recovered Sampled For BTEX 7435

Developer's Signature(s) Chris A. Williams Date 11/17/00 Reviewer [signature] Date 11/21/00

PHILIP ENVIRONMENTAL

Well Number M 05

☐ Developing ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS quarterly Sampling Project Manager R Thompson Project No. 62800107

Client Company El Paso Field Services Phase.Task No. 0301

Site Name Jaquez Gas Com E #1 Site Address Blanco NM

Development Criteria

☑ 3 to 5 Casing Volumes of Water Removal

☑ Stabilization of Indicator Parameters

☐ Other

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.06

Initial Depth to Water (feet) 3.65

Height of Water Column in Well (feet) 11.41

Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	11.41	7.943	23.32
Gravel Pack			
Drilling Fluids			
Total			23.32

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal

Kurtz Seperator Bloomfield NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Incremental	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
11-17-00	1411		X								9.9	5.80	1410		Cloudy No Odor
	1416		X								10.0	5.62	1400		" "
	1421		X								10.2	5.59	1200		" "
	1426		X								10.4	5.48	1150		" "
	1431		X								10.3	5.46	1190		No Change
	1459													4.47	

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX 1459

Developer's Signature(s) Chris A. Pitts Date 11/17/00 Reviewer R Winn Date 11/21/00

PHILIP ENVIRONMENTAL

Well Number M 05 M-06 ☐ Develop ☑ Purging

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EpFS Quarterly Sampling | Project Manager R Thompson | Project No. 62800107

Client Company El Paso Field Services | Phase,Task No. 0301

Site Name Jaquez Gas Com E #1 | Site Address Bloomfield NM

Development Criteria

☑ 3 to 5 Casing Volumes of Water Removal

☑ Stabilization of Indicator Parameters

☐ Other

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 12.86

Initial Depth to Water (feet) 6.88

Height of Water Column in Well (feet) 10.98

Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	10.96	7.76 x 3	23.28
Gravel Pack			
Drilling Fluids			
Total			23.28

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal

K-T-C Seperator Bloomfield NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
11-17-00	1533		X				5.25	5.25			9.0	5.78	1160		cloudy Brown no odor
	1535		X				2.25	8.50			10.6	5.55	1210		" "
	1539		X				4.25	12.25			10.2	5.49	1210		" "
	1543		X				4.25	17			10.2	5.45	1170		" "
	1548		X				5.50	22.50			10.0	5.58	1090		no Change
	1609													0.88	

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX AT 1600

Developer's Signature(s) [signature] Date 11/21/00

Reviewed [signature] Date 11/21/00

PHILIP

Chain of Custody Record

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

COC Serial No. C 2786

Project Name EPNG Gwerrill Samples

Project Number 62900107 Phase . Task 03.1

Samplers C. Maez

Laboratory Name PINNACLE

Location ALBQ NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAG-0011-M01	11-17-00	1227				JAG LOG # C1 (70995)
JAG-0011-M02	11-17-00	1041				1 1
JAG-0011-M03	11-17-00	1331				1 1
JAG-0011-M04	11-17-00	1435				1 1
JAG-0011-M05	11-17-00	1515				1 1
JAG-0011-M06	11-17-00	1600				1 1

Relinquished by:

Signature	Date	Time
Chris A Maez		

Received By:

Signature	Date	Time

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) HCl
- ☐ Other (Specify) _____

Carrier: _____ Airbill No. GLI 106919996

Shipping and Lab Notes:

11 Gwerrill Samples

PINNACLE LABORATORIES

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

RECEIVED
DEC 11 2000

Pinnacle Lab ID number **011074**
December 08, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/SCOTT POPE

On 11/21/00 Pinnacle Laboratories, 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 analyses were performed by Pinnacle Laboratories, Inc., Albuquerque, NM.

In order to meet hold-time specifications samples were run as Total Nitrates .

All other analyses were performed by Enviromental Services Laboratory, Inc., Portland, OR.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 011074
PROJECT #	: 62800107	DATE RECEIVED	: 11/21/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 12/08/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
011074-01	JAQ-0011-M 01	AQUEOUS	11/17/00
011074-02	JAQ-0011-M 02	AQUEOUS	11/17/00
011074-03	JAQ-0011-M 03	AQUEOUS	11/17/00
011074-04	JAQ-0011-M 04	AQUEOUS	11/17/00
011074-05	JAQ-0011-M 05	AQUEOUS	11/17/00
011074-06	JAQ-0011-M 06	AQUEOUS	11/17/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 011074

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0011-M 01	AQUEOUS	11/17/00	NA	11/21/00	1
02	JAQ-0011-M 02	AQUEOUS	11/17/00	NA	11/21/00	1
03	JAQ-0011-M 03	AQUEOUS	11/17/00	NA	11/21/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0011-M 01	JAQ-0011-M 02	JAQ-0011-M 03
BENZENE	0.5	**UG/L**	< 0.5	< 0.5	**1.1**
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYL BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	**UG/L**	< 0.5	< 0.5	**3.4**
SURROGATE:					
BROMOFLUOROBENZENE (%)			117	117	120
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 011074

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0011-M 04	AQUEOUS	11/17/00	NA	11/21/00	1
05	JAQ-0011-M 05	AQUEOUS	11/17/00	NA	11/21/00	1
06	JAQ-0011-M 06	AQUEOUS	11/17/00	NA	11/21/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0011-M 04	JAQ-0011-M 05	JAQ-0011-M 06
BENZENE	0.5	**UG/L**	**99**	**2.6**	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**0.5**	< 0.5	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**5.0**	< 0.5	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			119	118	119
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.	: 011074
BLANK I. D.	: 112100	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 11/21/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		112
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 #	: 011057-26	PINNACLE I.D.	: 011074
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 11/21/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	20.3	102	19.2	96	6	(80 - 120)	20
TOLUENE	<0.5	20.0	21.0	105	19.9	100	5	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	22.0	110	21.2	106	4	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	63.9	107	61.6	103	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

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

December 04, 2000

Jacinta A. Tenorio
Pinnacle Laboratories
2709-D Pan American Fwy NE
Albuquerque, NM 87107
TEL: 505-344-3777
FAX (505) 344-4413

RE: 011074/PHIL

Order No.: 0011122

Dear Jacinta A. Tenorio,

Environmental Services Laboratory received 2 samples on 11/22/00 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Nitrate/Nitrite (EPA 353.3)

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 test results, please feel free to call.

Sincerely,

Nichole Karl

Nichole Karl
Project Manager

Keith Hunter

Technical Review

Environmental Services Laboratory

Date: *04-Dec-00*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	011074-03
Lab Order:	0011122	**Tag Number:**	
Project:	011074/PHIL	**Collection Date:**	11/17/00
Lab ID:	0011122-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE/NITRITE		**EPA 353.3**				Analyst: **gvs**
Nitrogen, N+N	ND	0.0500		mg/L	1	12/1/00

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: *04-Dec-00*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	011074-04
Lab Order:	0011122	**Tag Number:**	
Project:	011074/PHIL	**Collection Date:**	11/17/00
Lab ID:	0011122-02A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE/NITRITE		**EPA 353.3**				Analyst: **gvs**
Nitrogen, N+N	2.66	0.375		mg/L	7.5	12/1/00

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: *04-Dec-00*

CLIENT: Pinnacle Laboratories
Work Order: 0011122
Project: 011074/PHIL

QC SUMMARY REPORT
Method Blank

Sample ID: **MBlank** Batch ID: **01 N+N-12/4/** Test Code: **EPA 353.3** Units: mg/L Analysis Date **12/1/00** Prep Date:

Client ID: **0011122** Run ID: **HIT MAN_001201B** SeqNo: **60279**

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: *04-Dec-00*

CLIENT: Pinnacle Laboratories
Work Order: 0011122
Project: 011074/PHIL

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS**	Batch ID: **01 N+N-12/4/**	Test Code: **EPA 353.3**	Units: mg/L	Analysis Date **12/1/00**	Prep Date:
Client ID:	**0011122**	Run ID: **HIT MAN_001201B**		SeqNo: **60280**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, N+N	.274	0.05	0.3	0	91.3%	85	115	0			

Sample ID: **LCSD**	Batch ID: **01 N+N-12/4/**	Test Code: **EPA 353.3**	Units: mg/L	Analysis Date **12/1/00**	Prep Date:
Client ID:	**0011122**	Run ID: **HIT MAN_001201B**		SeqNo: **60281**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, N+N	.293	0.05	0.3	0	97.7%	85	115	0.274	6.7%	20	

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: 11/21 Page: 1 of 1

Network Project Manager: Jacinta A. Tenorio

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

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)		TOX	TOC	Gen Chemistry:	Total NO3/NO2	Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
011074-03	11/17	1231	AQ	01									X															
-04	"	1435	"	02									X															

PROJECT INFORMATION				SAMPLE RECEIPT	
PROJECT #:	011074			Total Number of Containers	
PROJ. NAME:	PHTC			Chain of Custody Seals	
QC LEVEL:	(STD.)	IV		Received Intact?	
QC REQUIRED?	MS	MSD	BLANK	Received Good Cond./Cold	
TAT:	(STANDARD)	RUSH!!		LAB NUMBER:	011122
DUE DATE:	12/8			COMMENTS:	
RUSH SURCHARGE:	—				
CLIENT DISCOUNT:	—				
SPECIAL CERTIFICATION REQUIRED?			(NO)		

SAMPLES SENT TO:	
PENSACOLA - STL-FL	
ESL - OR	X
STL - CT	
ATEL - AZ	
ATEL - MARION	
ATEL - MELMORE	
BARRINGER	
ENVIRO TEST LABS	
WCAS	
WOHL	

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Francine Tenorio Time: 1730	Signature: Time:
Printed Name: Francine Tenorio Date: 11/21/00	Printed Name: Date:
Company: Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2**
Signature: Nichole Karl Time: 10:00	Signature: Time:
Printed Name: Nichole Karl Date: 11/22	Printed Name: Date:
Company	Company

PHILIP ENVIRONMENTAL

Chain of Custody Record

011074

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2786

Project Name EPFS quarterly Sampling
Project Number 62800107 Phase . Task 0301
Samplers C. Maez
Laboratory Name PINNACLE
Location ALBQ NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	BTEX 802.1	NITRATES	Lab ID#	Comments
JAq-0011-M01	11-17-00	1227	H_2O	2	X		01	JAquez G.C. # C1 (G0995)
JAq-0011-M02	11-17-00	1046	H_2O	2	X		02	11 11
JAq-0011-M03	11-17-00	1231	H_2O	4	X	X	03	11 11
JAq-0011-M04	11-17-00	1435	H_2O	4	X	X	04	11 11
JAq-0011-M05	11-17-00	1445	H_2O	2	X		05	11 11
JAq-0011-M06	11-17-00	1602	H_2O	2	X		06	11 11

Relinquished by:

Signature	Date	Time
Chris A Maez	11-20-00	1630

Received By:

Signature	Date	Time
Ramona Jimio	11/21/00	1015

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) H_2Cl_2
- ☐ Other (Specify)

Carrier: Greyhound

Airbill No. GLI/60691996

Shipping and Lab Notes:

FAX Results on all JAquez Samples

Rec'd @ 3.5°C

176 4/95

FILIP ENVIRONMENTAL

Well Number R 01

Serial No. WDPD-

☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS quarterly Sampling

Project Manager R. Thompson

Project No. 620 00107

Client Company El Paso Field Services

Phase.Task No. 0301

Site Name Jaquez G.C. #C1 (70995)

Site Address Bloomfield N.M.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.09
Initial Depth to Water (feet) 13.66
Height of Water Column in Well (feet) 8.43
Diameter (inches): Well ____ Gravel Pack ____

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	8.43	55.013	16.5
Gravel Pack			
Drilling Fluids			
Total			16.5

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal

Knight Separator Bloomfield N.M.

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Purge Volume Removed (gallons): Incremental	Purge Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
11-20-00	1305		X				3.5	3.5			15.2	5.48	1540		Cloud of Black Flakes Oily Sheen product odor
	1309						3.5	7			15.4	5.39	1670		" "
	1315						3.5	10.5			15.0	5.85	1570		" "
	1320						3.5	14			14.9	5.79	1450		" "
	1325						3.5	17.5			14.8	5.83	1230		No Change
	1440													0.16	

Circle the date and time that the development criteria are met.

Comments Sample for BTEX 1330

Developer's Signature(s) Chris A. Williams Date 11-20-00 Reviewer [signature] Date 11/21/00

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/94

FOLIP ENVIRONMENTAL

Well Number R-02

☐ Development ☐ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS quarterly sampling Project Manager R Thompson Project No. 628 00107

Client Company El paso field services Phase.Task No. 0301

Site Name JAquez G C #C1 (70995) Site Address Blanco N.M.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.12
Initial Depth to Water (feet) 12.51
Height of Water Column in Well (feet) 9.61
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	9.61	62.83	18.81
Gravel Pack			
Drilling Fluids			
Total			18.81

Instruments

	Serial No. (If applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal

1-TE Seperator Bloomfield NM

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Aqueous	Product Volume Removed (gallons): Organic	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
11-20-00	1127		X				4	4			11.8	5.32	930		Clear product
	1134		X				4	8			12.9	5.98	1010		Cloudy product
	1142		X				4	12			12.2	5.83	786		No Change
	1152		X				4	16			12.2	5.65	584		Grey product
	1202		X				4	20			13.1	5.48	582		No Change
	1248													0.40	

Circle the date and time that the development criteria are met.

Comments Bailed well Dry Approximately 12 gallons LET Recover 10 minutes in BeTween 16 gallons and 20 LET Recover collected BTex Sample @ 1202

Developer's Signature(s) Chris A Mac Date 11-20-00 Reviewer J Wells Date 11/21/00

Form A0101 Rev. 10/8/94 F:\NEWFORM\PE_A0101.DOT 1/31/96

FILIP ENVIRONMENTAL

Well Number R 03

☐ Devel ☑ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS quarterly Sampling Project Manager R. Thompson Project No. 628 00107

Client Company EL Paso Field services Phase.Task No. 0301

Site Name Aquer GAS com. #C1 (70995) Site address Blanco N.M

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.20
Initial Depth to Water (feet) 13.45
Height of Water Column in Well (feet) 8.75
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	8.75	1.743	12.13
Gravel Pack			
Drilling Fluids			
Total			17.13

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal

Kurtz Separator Bloomfield N.M

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 (gallons): Incremental	Water Volume Removed (gallons): Cumulative	Temperature Removed (gallons): Incremental	Temperature Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
11-20-00	10 31		X				3.5	3.5			10.3	5.96	949		Cloudy Orange in Clr Slight Rotten Egg Odor
	10 39		X				3.5	7			12.2	5.54	1040		" "
	10 45		X				3.5	10.5			11.9	5.40	1020		" "
	10 49		X				3.5	14			12.2	5.27	977		Cloudy Orange Tint Slight Rotten egg odor
	10 53		X				3.5	17.5			12.2	5.39	907		No Change
	12 19													1.21	

Circle the date and time that the development criteria are met.

Comments SAmpled for BTEX 10 SI

Developer's Signature(s) Chris A Miller Date 11-20-00 Reviewer [signature] Date 11/21/00

FILIP ENVIRONMENTAL

Well Number R-04

☐ Devel ☑ Purge

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS quarterly Sampling Project Manager R. Thompson Project No. 62800107

Client Company El paso Field Services Phase.Task No. 0301

Site Name Jaquez GC. #C1 (70995) Site Address Bloomfield NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 22.22
Initial Depth to Water (feet) 12.92
Height of Water Column in Well (feet) 9.3
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	9.3	60.2 x 3	18.21
Gravel Pack			
Drilling Fluids			
Total			18.21

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal

Kurz Seperator Bloomfield NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
11-20-00	1344		X				3.75	3.75			12.0	5.76	429		Slight Gray product
	1349		X				3.75	7.50			12.9	5.67	436		" "
	1354		X				3.75	11.25			13.5	5.63	426		" "
	1359		X				3.75	15			13.6	5.47	488		Slight black product
	1406		X				3.75	17.75			13.1	5.55	504		no Change
	1445													0.36	

Circle the date and time that the development criteria are met.

Comments Level To product 1286 Collected Water Sample 1613

Developer's Signature(s) Chris A Gray Date 11-20-00 Reviewed J. Winn Date 11/21/00

Form A0101 Rev. 10/6/94 F:\NEWFORM\PE_A0101.DOT 1/31/96

FILIP ENVIRONMENTAL

Well Number R-05

☐ Devel ☑ Purge

WELL DEVELOPMENT AND PURGIN[illegible]TA

Page 1 of 1

Serial No. WOPD-

Project Name EPFS quarterly Sampling Project Manager R. Thompson Project No. 62800107

Client Company Phase.Task No. 0301

Site Name Jaquez G.C. #C1 (70995) Site Address Blanco, N.M.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 24.48

Initial Depth to Water (feet) 13.77

Height of Water Column in Well (feet) 8.71

Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	8.71	5.9 X 3	17.04
Gravel Pack			
Drilling Fluids			
Total			17.04

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal: Lrz Separator

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Pre-Set Volume Removed (gallons): Increment	Pre-Set Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
11-20-00	0853		X				3.5	3.5			9.8	6.51	533		Clear no odor
	0859		X				3	6			10.0	6.09	573		Cloudy
	0906		X				3	9			9.7	5.76	907		cloudy Brown no odor
	1229						3	12						1.60	
							3	15							

Circle the date and time that the development criteria are met.

Comments After Bailing Approximately 9.5 gallons Bailed well Dry Let Recover collected BTex Samples 0930

Developer's Signature(s) Chris A. Mallon Date 11-20-00 Reviewer J. Wells Date 11/21/00

PHILIP ENVIRONMENTAL

Well Number R-06 ☐ Devel ☐ Purge

WELL DEVELOPMENT AND PURGING DATA

Serial No. WOPD-

Project Name EPFS quarterly Sampling Project Manager R. Thompson Project No. 62800107

Client Company El Paso Field Services Phase.Task No. 0301

Site Name Jaquez G.C. #C1 (70995) Site Address Blanco N.M.

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 21.94
Initial Depth to Water (feet) 14.27
Height of Water Column in Well (feet) 7.67
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Gallons	Gallons to be Removed
Well Casing	1.61	5.013	15
Gravel Pack			
Drilling Fluids			
Total			15

Instruments

	Serial No. (If applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal

TZ Seperator Bloomfield NM

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 (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
11 20 00	0953		X				5	5			10.2	5.59	310		Clear No odor
	0957						5	10			10.6	6.25	295		Cloudy No Change
	1240						5	15						6.70	

Circle the date and time that the development criteria are met.

Comments After Bailing approximately 15 gallons well Dry Let Recover Collected BTex Samples 1030

Developer's Signature(s) Chris A. Off Date 11-20-00 Reviewed L. Wells Date 11/21/00

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2787

Project Name EPFS quarterly Sampling
Project Number 62800107 Phase . Task 03.1.1
Samplers C. Mace
Laboratory Name PINNACLE
Location ALBQ NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAG-0011-R 01	11-20-00	1330				JAG-0011-R-01 (26995)
JAG-0011-R 02	11-20-00	1107				" "
JAG-0011-R 03	11-20-00	1057				" "
JAG-0011-R 04	11-20-00	1413				" "
JAG-0011-R 05	11-20-00	0930				" "
JAG-0011-R 06	11-20-00	1030				" "

Relinquished by:

Signature	Date	Time
Chris A Mace		

Received By:

Signature	Date	Time

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) $HgCl_2$
- ☐ Other (Specify) _____

Carrier:

Airbill No. GLT1400691999 6

Shipping and Lab Notes:

Standard Samples

PE-176 4/96

PINNACLE LABORATORIES

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

RECEIVED
DEC - 4 2000

Pinnacle Lab ID number **011075**
November 28, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/SCOTT POPE

On 11/21/00 Pinnacle Laboratories, 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.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: ft

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 011075
PROJECT #	: 62800107	DATE RECEIVED	: 11/21/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 11/28/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0011-R 01	AQUEOUS	11/20/00
02	JAQ-0011-R 02	AQUEOUS	11/20/00
03	JAQ-0011-R 03	AQUEOUS	11/20/00
04	JAQ-0011-R 04	AQUEOUS	11/20/00
05	JAQ-0011-R 05	AQUEOUS	11/20/00
06	JAQ-0011-R 06	AQUEOUS	11/20/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 011075

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0011-R 01	AQUEOUS	11/20/00	NA	11/21/00	50
02	JAQ-0011-R 02	AQUEOUS	11/20/00	NA	11/21/00	20
03	JAQ-0011-R 03	AQUEOUS	11/20/00	NA	11/21/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0011-R 01	JAQ-0011-R 02	JAQ-0011-R 03
BENZENE	0.5	**UG/L**	**3500**	**770**	< 0.5
TOLUENE	0.5	**UG/L**	**2700**	**1300**	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**210**	**170**	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**2900**	**1500**	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			120	128*	117
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
* = High surrogate due to 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 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 011075

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0011-R 04	AQUEOUS	11/20/00	NA	11/21/00	25
05	JAQ-0011-R 05	AQUEOUS	11/20/00	NA	11/21/00	1
06	JAQ-0011-R 06	AQUEOUS	11/20/00	NA	11/21/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0011-R 04	JAQ-0011-R 05	JAQ-0011-R 06
BENZENE	0.5	**UG/L**	**590**	< 0.5	< 0.5
TOLUENE	0.5	**UG/L**	**580**	< 0.5	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**110**	< 0.5	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**1800**	**0.9**	**0.5**
SURROGATE:					
BROMOFLUOROBENZENE (%)			119	119	117
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.	: 011075
BLANK I. D.	: 112100	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 11/21/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		112
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 #	: 011057-26	PINNACLE I.D.	: 011075
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 11/21/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	20.3	102	19.2	96	6	(80 - 120)	20
TOLUENE	<0.5	20.0	21.0	105	19.9	100	5	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	22.0	110	21.2	106	4	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	63.9	107	61.6	103	4	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

011075

COC Serial No. C 2787

Project Name EpFS quarterly Sampling
Project Number 628 00107 Phase . Task 0301
Samplers C. Maez
Laboratory Name PINNACLE
Location ALBQ N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Lab ID #	Comments
JAQ-0011-R 01	11-20-00	1330	H_2O	2	X	01	JAQuez & C HCl (76995)
JAQ-0011-R 02	11-20-00	1207	H_2O	2	X	02	" "
JAQ-0011-R 03	11-20-00	1059	H_2O	2	X	03	" "
JAQ-0011-R 04	11-20-00	1283	H_2O	2	X	04	" "
JAQ-0011-R 05	11-20-00	0930	H_2O	2	X	05	" "
JAQ-0011-R 06	11-20-00	1030	H_2O	2	X	06	" "

Relinquished by:

Signature	Date	Time
Chris A. Maez	11-20-00	1630

Received By:

Signature	Date	Time
Francine Jaime	11/21/00	1015

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) H_5Cl_2
- ☐ Other (Specify)

Carrier: Greyhound
Airbill No. GLI 60691 9996

Shipping and Lab Notes:

Fax Results on all JAquez Samples

Rec'd @ 3.5°C

PHILIP ENVIRONMENTAL

Well Number M-01

Serial No. WOPD-

WELL DEVELOPMENT AND PURGE DATA

Page 1 of 1

Project Name EPFS quarterly Sampling

Project Manager R Thompson

Project No 62800107

Client Company El Paso Field Services

Phase.Task No. 0301

Site Name Jaquez

City/State Blanco N.M.

Development Criteria

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

Water Column Calculation

Initial Depth to Water (feet) 15.36

Initial Depth to Well Bottom (feet) 4.30

Height of Water Column in Well (feet) 11.06

Diameter of Well 4" Gallons per Foot

Item	Depth to Water (feet)	Time in Well / Gallons	Gallons to be Removed
Well Volume	11.06	7.21 X 3	21.63
Actual Removed			
Gallons Left to Remove			

Methods of Development

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

☐ Other _____

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal Lutz Separator Bloomfield NM.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Cumulative Gallons Removed	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
02-14-01	0657		X					5.81	025		Clear No Odor

Circle the date and time that the development criteria are met

Comments Bailed Approximately [illegible] well dry. Let recover Sampled for BTEX 1000 EST [illegible] Water in a Contaminated well

Developer's Signature(s) Chris A. Mac

Date 02-14-01 Reviewer RT Date 2/20/01

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOF 1/31/96

PHILIP ENVIRONMENTAL

Well Number M-02

Serial No. WDPD-

WELL DEVELOPMENT AND PURGE DATA

Page 1 of 1

Project Name EPFS quarterly Sampling

Project Engineer R Thompson

Project No. 62800107

Client Company El paso Field Services

Phase.Task No. 0301

Site Name JAQUEZ

Site Address Blanco N.M.

Development Criteria

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

Methods of Development

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

☐ Other

Water column/well depth information

Initial depth to water (feet) 15.09

Initial depth to product (feet)

Thickness of product (feet)

Initial depth to well (feet) 4.12

Height of water column in well (feet) 10.97

Volume for 4" well 4" type of Pack

Well Diameter	Gallons per Foot	Gallons	Gallons to be Removed
Well Volume		3	21.48
Gravel Pack			
Grout/Seal			
Total			

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal K-TZ Seperator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Column in Well (feet)	Product Thickness (feet)	Gallons Removed	Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
02-14-01	0936									11.2	6.13	026		clear no odor
	0940									11.9	6.04	027		" "
	0945									5.6	6.09	027		" "
	0949									5.2	6.07	027		" "
	0954									4.7	6.04	026		no change

Circle the date and time that the development criteria are met

Comments SAmpled For BTEX MTBE PAH RSI probe never Been in a contaminated well

Developer's Signature(s) [signature]

Date 14-01 Reviewer RT Date 2/20/01

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/96

PHILIP ENVIRONMENTAL

Well Number M-03

Serial No. WDPD-

WELL DEVELOPMENT AND PURGE DATA

Page 1 of 1

Project Name EPFS Quarterly Sampling

Project Engineer R Thompson

Project No. 62800107

Client Company El Paso Field Services

Phase.Task No. 0301

Site Name JAQUEZ

Site Location Blanco N.M.

Development Criteria

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

Methods of Development

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

Water Column Calculation

Initial Depth to Water (feet) 15.13

Initial Depth to Product (feet) 4.40

Height of Water Column in Well (feet) 10.73

Diameter and Type of Well 4" Sand Pack

Item	Feet in Well	Gallons in Well	Gallons to be Removed
Well Volume	10.73	7 X 3	21
Specified Volumes			
Drilling Fluid Loss			
Total			21

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal: KLTZ Separator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Column Volumes Removed (gallons)		Cumulative Volumes Removed (gallons)		Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
02-14-01	1226		X				4.25	4.25			6.7	5.99	027		Clear Rotten egg odor
	1229		X				[illegible]	8.50			6.4	5.95	018		" "
	1235		X				[illegible]	12.75			6.4	5.84	016		" "
	1239		X				[illegible]	17			6.5	5.90	016		" "
	1244		X				[illegible]	21.25			6.3	5.76	016		no change

Circle the date and time that the development criteria are met

Comments: SAmpled for BTEX 1301-1

Developer's Signature(s): Chris A. Mann

Date: 2/14/01 Reviewer: RT Date: 2/20/01

PHILIP ENVIRONMENTAL

Well Number M-04

Serial No. WOPD-

WELL DEVELOPMENT AND PURGE DATA

Page 1 of 1

Project Name EPFS Quarterly Sampling

Developed By R. Thompson

Project No. 62800107

Client Company El paso Field Services

Phase.Task No.

Site Name Jaquez

Site Location Blanco N.M.

Development Criteria

☑ 3 to 5 Casing Volumes of Water Removal

☑ Stabilization of Indicator Parameters

☐ Other

Methods of Development

Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic
- ☐ Other

Bailer
- ☑ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

Water Column Calculation

Initial Depth to Water (feet) 15.37

Initial Depth to Well Bottom (feet) 30.1

Height of Water Column in Well (feet) 12.36

Diameter (inches) of Well 4" Type of Pack

Item	Feet	Gallons	Gallons to be Removed
Well Casing	12.36	80X3	24.18
Gravel Pack			
Sandpack Volume			
Total			24.18

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal K-TZ Seperator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Pooling Water Depth (feet)	Casing Volumes Removed	Cumulative Casing Volumes Removed	Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
02-14-01	1145		X				5	5	7.4	5.95	081		Clear No Odor
			X										
			X										
			X										
			X										

Circle the date and time that the development criteria are met.

Comments After Bailing Approx. [illegible] Well Dry Sampled for BTEX

1255

Developer's Signature(s) Chris L. May

Date 02-14-01 Reviewer RT Date 2/20/01

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/96

HILIP ENVIRONMENTAL

Well Number E.B-05

Serial No. WDPD-

WELL DEVELOPMENT AND PURGE DATA

Page 1 of 1

Project Name EpFS quarterly Sampling

Project Engineer R. Thompson

Project No. 62800107

Client Company El paso Field Services

Phase.Task No. 0301

Site Name JAquez

Site Location Blanco N.M.

Development Criteria

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

Methods of Development

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

☐ Other

Well Volume Calculation

Initial Depth to Free Product (feet) N/A

Initial Depth to Water (feet) N/A

Height of Water Column in Well (feet) N/A

Diameter of Well (inches) N/A Gravel Pack

Item	Factor (feet/gallons)	Gallons	Gallons to be Removed
Well Casing			
Gravel Pack			
Annular Void & Formation			
Total			

Instruments

	Serial No. (if applicable)
☐ pH Meter	
☐ DO Monitor	
☐ Conductivity Meter	
☐ Temperature Meter	
☐ Other	

Water Disposal N/A

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Cumulative Volume Removed (gallons)	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments

EQUIPMENT BLANK AFTER M-5. COLLECTED OFF OF OIL/WATER INTERFACE PROBE.

Circle the date and time that the development criteria are met

Comments SAmpled 1127 Collected Sample after Deconing probe

Developer's Signature(s) Chris A. May

Date 02-14-01 Reviewer RT Date 2/20/01

PHILIP ENVIRONMENTAL

Well Number M-05

Serial No. WDPD-

WELL DEVELOPMENT AND PURGE DATA

Page 1 of 1

Project Name EPFS quarterly Sampling

Project Manager R. Thompson

Project No. 62800107

Client Company El Paso Field Services

Phase.Task No 0301

Site Name JAquez

Site Location Blanco N.M

Development Criteria

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

Water Column Height in Well (feet) 15.06

Initial Depth to Water (feet) 4.80

Height of Water Column in Well (feet) 10.26

Diameter of Well 4" Type of Pack

Item	Gallons/Foot	Gallons	Gallons to be Removed
Well Volume	0.75	7.695	21.06
Initial Purge			
Purge to Date			27.06

Methods of Development

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

☐ Other

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal: ELTZ Separator Bloomfield NM

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Static Water Column Height (feet)	Purge Volume (gallons)	Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
02-14-01	1036		X				4.25		9.7	6.35	048		Clear no Odor
	1042		X				8.50		10.5	6.00	044		" "
	1049		X				6.75		9.3	6.01	035		no Change
	1054		X				6.75		8.9	6.01	035		Becoming Cloudy Brown
	1101		X				5.25		8.8	5.91	035		no Change

Circle the date and time that the development criteria are met

Comments: SAmpled for BTEX 1133

Developer's Signature(s) Ron A. May

Date 02-14-01 Reviewer RT Date 2/20/01

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOF 1/31/96

PHILIP ENVIRONMENTAL

Well Number M 6

Serial No. WDPD-

WELL DEVELOPMENT AND PURGE DATA

Page 1 of 1

Project Name EPFS quarterly Sampling

Project Manager R Thompson

Project No. 62800107

Client Company El paso Field Services

Phase.Task No. 0301

Site Name JAQUEZ

Site Address Blanco N.M.

Development Criteria

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

Water column height in well (feet): 17.89

Initial Depth to Water (feet): 7.40

Initial Depth to Bottom (feet): 10.49

Height of Water Column in Well (feet): 10.49

Diameter and Depth of Well: 4" Cased Back

Water Column in Well			Gallons to be Removed
Well Casing	10.49	1.84 x 3	20.52
Sand Pack			
Gallons Added			
Total			20.52

Methods of Development

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

☐ Other

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal: Lit Seperator Bloomfield N.M

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
02-14-01	1357		X				10.9	6.16	053		Cloudy Brown No odor
	1400		X				9.5	6.00	054		" "
	1407		X				9.7	5.86	050		" "
	1412		X				9.6	5.82	046		" "
	1432		X				8.8	5.81	044		DO Change

Circle the date and time that the development criteria are met.

Comments SAmpled for BTEX 1440

Developer's Signature(s) Chris A Mancy

Date 02-14-01 Reviewer RT Date 2/20/01

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/96

PHILIP

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2854

Project Name EPFS Q-a. Tool. Sur.

Project Number 28001.07 Phase . Task 2310

Samplers C Mac

Laboratory Name PINNACLE

Location ALBQ NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAG-0201-M1	02-14-01	1000				JAQUEZ G.C. ICI 70995
JAG-0201-M2	02-14-01	1007				" "
JAG-0201-M3	02-14-01	1307				" "
JAG-0201-M4	02-14-01	1255				" "
JAG-0201-M5	02-14-01	1133				" "
EB-MOS	02-14-01	1127				" "
JAG-0201-M6	02-14-01	1410				" "

Relinquished by:

Signature	Date	Time

Received By:

Signature	Date	Time

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) H_2SO_4
- ☐ Other (Specify) _____

Carrier: Airbill No. GLI/80691986 4

Shipping and Lab Notes:

PE-176 4/95

PINNACLE LABORATORIES

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

RECEIVED
MAR - 9 2001

Pinnacle Lab ID number **102072**
March 06, 2001

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/SCOTT POPE

On 02/16/01 Pinnacle Laboratories, 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 analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

All other analyses were performed by Environmental Services Laboratory, Inc. Portland, OR.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 102072
PROJECT #	: 62800107	DATE RECEIVED	: 02/16/01
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 03/06/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
102072 - 01	JAQ-0201-M1	AQUEOUS	02/14/01
102072 - 02	JAQ-0201-M2	AQUEOUS	02/14/01
102072 - 03	JAQ-0201-M3	AQUEOUS	02/14/01
102072 - 04	JAQ-0201-M4	AQUEOUS	02/14/01
102072 - 05	JAQ-0201-M5	AQUEOUS	02/14/01
102072 - 06	EB-M05	AQUEOUS	02/14/01
102072 - 07	JAQ-0201-M6	AQUEOUS	02/14/01

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 : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 102072
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0201-M1	AQUEOUS	02/14/01	NA	02/22/01	1
02	JAQ-0201-M2	AQUEOUS	02/14/01	NA	02/22/01	1
03	JAQ-0201-M3	AQUEOUS	02/14/01	NA	02/22/01	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0201-M1	JAQ-0201-M2	JAQ-0201-M3
BENZENE	0.5	**UG/L**	**10**	< 0.5	**0.6**
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	**UG/L**	< 0.5	< 0.5	**0.6**
SURROGATE:					
BROMOFLUOROBENZENE (%)			102	101	103
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 102072
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0201-M4	AQUEOUS	02/14/01	NA	02/22/01	1
05	JAQ-0201-M5	AQUEOUS	02/14/01	NA	02/22/01	1
06	EB-M05	AQUEOUS	02/14/01	NA	02/22/01	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0201-M4	JAQ-0201-M5	EB-M05
BENZENE	0.5	**UG/L**	**94**	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**0.7**	< 0.5	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**13**	< 0.5	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			103	102	99
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

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 102072

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	JAQ-0201-M6	AQUEOUS	02/14/01	NA	02/22/01	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0201-M6
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 (%) 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 RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 102072
BLANK I. D.	: 022201	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 02/22/01
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		101
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 #	: 102072-02	PINNACLE I.D.	: 102072
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 02/22/01
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	19.4	97	19.1	96	2	(80 - 120)	20
TOLUENE	<0.5	20.0	17.8	89	17.9	90	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.0	95	19.4	97	2	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	55.9	93	57.2	95	2	(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

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

February 28, 2001

Jacinta A. Tenorio
Pinnacle Laboratories
2709-D Pan American Fwy NE
Albuquerque, NM 87107
TEL: 505-344-3777
FAX (505) 344-4413

RE: 102072/PHIL Order No.: 0102110

Dear Jacinta A. Tenorio,

Environmental Services Laboratory received 2 samples on 2/20/01 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Nitrate (EPA 353.3)
Nitrite in DW (EPA 353.3)

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 test results, please feel free to call.

Sincerely,

Nichole Karl

Nichole Karl
Project Manager

Keith Hunter

Technical Review

Case Narrative

ESL Job: 0102110 February 21, 2001

The calculated MS and MSD recoveries for sample 0102110-01 are outside of the control limits. A low concentration of nitrite, below our reporting limit, was detected in the original sample. Once the sample had been spiked with standard the concentration of nitrite was above our reporting limit. The calculations for percent recovery do not consider any concentrations below the reporting limit and assume the original sample had zero nitrite. This causes the MS and MSD recoveries to be artificially high.

The calculated MS and MSD recoveries for sample 0102110-02 are outside of the control limits. The original concentration of nitrate in this particular sample was more than 10x our set spike value. Because the concentration was already high, the spike values were insignificant to the post spike concentrations, resulting in poor recoveries.

Please do not hesitate to call if there are any questions, or if we can be of further assistance in this project. Thank you.

Ginny Vanscoy, General Chemist

Environmental Services Laboratory

Date: *28-Feb-01*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	JAQ-0201-M3/102072-03
Lab Order:	0102110	**Tag Number:**	
Project:	102072/PHIL	**Collection Date:**	2/14/01
Lab ID:	0102110-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE		**EPA 353.3**				Analyst: **gvs**
Nitrogen, Nitrate	ND	0.0500		mg/L	1	2/28/01
NITRITE IN DW		**EPA 353.3**				Analyst: **gvs**
Nitrogen, Nitrite	ND	0.0500		mg/L	1	2/20/01

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: *28-Feb-01*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	JAQ-0201-M3/102072-04
Lab Order:	0102110	**Tag Number:**	
Project:	102072/PHIL	**Collection Date:**	2/14/01
Lab ID:	0102110-02A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE		**EPA 353.3**				Analyst: **gvs**
Nitrogen, Nitrate	3.37	0.500		mg/L	10	2/28/01
NITRITE IN DW		**EPA 353.3**				Analyst: **gvs**
Nitrogen, Nitrite	4.47	0.0500		mg/L	25	2/20/01

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: *28-Feb-01*

CLIENT: Pinnacle Laboratories
Work Order: 0102110
Project: 102072/PHIL

QC SUMMARY REPORT
Method Blank

Sample ID: MBlank	Batch ID: 01 NITRATE-	Test Code: EPA 353.3	Units: mg/L	Analysis Date 2/28/01	Prep Date:
Client ID:	0102110	Run ID: HIT MAN_010228A		SeqNo: 69506	

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

Sample ID: MBlank	Batch ID: 01 NITRITE-2/	Test Code: EPA 353.3	Units: mg/L	Analysis Date 2/20/01	Prep Date:
Client ID:	0102110	Run ID: HIT MAN_010220A		SeqNo: 68293	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	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: *28-Feb-01*

CLIENT: Pinnacle Laboratories
Work Order: 0102110
Project: 102072/PHIL

QC SUMMARY REPORT

Sample Duplicate

Sample ID: **0102110-02A DUP** Batch ID: **01 NITRATE-** Test Code: **EPA 353.3** Units: mg/L Analysis Date **2/28/01** Prep Date:
Client ID: **JAQ-0201-M3/102** **0102110** Run ID: **HIT MAN_010228A** SeqNo: **69510**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate	3.32	0.5	0	0	0.0%	0	0	3.37	1.5%	20	

Sample ID: **0102110-01A DUP** Batch ID: **01 NITRITE-2/** Test Code: **EPA 353.3** Units: mg/L Analysis Date **2/20/01** Prep Date:
Client ID: **JAQ-0201-M3/102** **0102110** Run ID: **HIT MAN_010220A** SeqNo: **68296**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	ND	0.05	0	0	0.0%	80	120	0	0.0%	20	

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: *28-Feb-01*

CLIENT: Pinnacle Laboratories
Work Order: 0102110
Project: 102072/PHIL

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: 0102110-02A MS	Batch ID: 01 NITRATE-	Test Code: EPA 353.3	Units: mg/L	Analysis Date 2/28/01	Prep Date:
Client ID: JAQ-0201-M3/102	0102110	Run ID: HIT MAN_010228A		SeqNo: 69511	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate	3.5	0.5	0.2	3.37	65.0%	75	125	0			S, N

Sample ID: 0102110-02A MSD	Batch ID: 01 NITRATE-	Test Code: EPA 353.3	Units: mg/L	Analysis Date 2/28/01	Prep Date:
Client ID: JAQ-0201-M3/102	0102110	Run ID: HIT MAN_010228A		SeqNo: 69512	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate	3.5	0.5	0.2	3 37	65.0%	75	125	3.5	0.0%	20	S, N

Sample ID: 0102110-01A MS	Batch ID: 01 NITRITE-2/	Test Code: EPA 353.3	Units: mg/L	Analysis Date 2/20/01	Prep Date:
Client ID: JAQ-0201-M3/102	0102110	Run ID: HIT MAN_010220A		SeqNo: 68297	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	.132	0.05	0.1	0	132.0%	75	125	0			N

Sample ID: 0102110-01A MSD	Batch ID: 01 NITRITE-2/	Test Code: EPA 353.3	Units: mg/L	Analysis Date 2/20/01	Prep Date:
Client ID: JAQ-0201-M3/102	0102110	Run ID: HIT MAN_010220A		SeqNo: 68298	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	.129	0.05	0.1	0	129.0%	75	125	0.132	2.3%	20	N

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: *28-Feb-01*

CLIENT: Pinnacle Laboratories
Work Order: 0102110
Project: 102072/PHIL

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: LCS	Batch ID: 01 NITRATE-	Test Code: EPA 353.3	Units: mg/L	Analysis Date 2/28/01	Prep Date:
Client ID:	0102110	Run ID: HIT MAN_010228A		SeqNo: 69507	

Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate	.308	0.05	0.3	0	102.7%	85	115	0			

Sample ID: LCS	Batch ID: 01 NITRITE-2/	Test Code: EPA 353.3	Units: mg/L	Analysis Date 2/20/01	Prep Date:
Client ID:	0102110	Run ID: HIT MAN_010220A		SeqNo: 68294	

Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite	.191	0.05	0.2	0	95.5%	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: 2/19 Page: 1 of 1

Network Project Manager: Jacinta A. Tenorio

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

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)		TOX	TOC	Gen Chemistry: Total NO3		Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
JAQ-0201-M3/102072-03	2/14	1304	AQ	01								X															
JAQ-0201-M4/102072-04	"	1255	"	02								X															

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISED BY: 1.	RELINQUISED BY: 2.
PROJECT #:	102072	Total Number of Containers		PENSACOLA - STL-FL		Signature: Francine Tonvio Time: 1700	Signature: Time:
PROJ. NAME:	PHIL	Chain of Custody Seals		ESL - OR	X	Printed Name: Francine Tonvio Date: 2/19/a	Printed Name: Date:
QC LEVEL:	(STD) IV	Received Intact?		STL - CT		Pinnacle Laboratories, Inc.	Company
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		ATEL - AZ		RECEIVED BY: 1.	RECEIVED BY: 2.
TAT:	(STANDARD) RUSH!!	LAB NUMBER: 102010		ATEL - MARION		Signature: Nichole Karl Time: 1010	Signature: Time:
DUE DATE:	3/2	COMMENTS:		ATEL - MELMORE		Printed Name: Nichole Karl Date: 2/20	Printed Name: Date:
RUSH SURCHARGE:	-			BARRINGER		Company	Company
CLIENT DISCOUNT:				ENVIRO TEST LABS			
SPECIAL CERTIFICATION REQUIRED:	YES (NO)			WCAS			
				WOHL			

Chain of Custody Record

102072

PHILIP ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2854

Project Name EPFS quarterly Sampling
Project Number 62800107 Phase . Task 0301
Samplers C Maez
Laboratory Name PINNACLE
Location ALBQ N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	BTEX 8021	NITRATES	Comments	
JAG-0201-M1	02-14-01	1000	H_2O	2	X		JAQUEZ G.C. #C1 70995	-01
JAG-0201-M2	02-14-01	1004	H_2O	2	X		" "	-02
JAG-0201-M3	02-14-01	1304	H_2O	4	X	X	" "	-03
JAG-0201-M4	02-14-01	1255	H_2O	4	X	X	" "	-04
JAG-0201-M5	02-14-01	1133	H_2O	2	X		" "	-05
EB-MOS	02-14-01	1127	H_2O	2	X		" "	-06
JAG-0201-M6	02-14-01	1440	H_2O	2	X		" "	-07

Relinquished by:

Signature	Date	Time
Chris Maez	02-15-01	16 00

Received By:

Signature	Date	Time
[signature]	02.16.01	18:30

Samples Iced: ☑ Yes ☐ No

Carrier: Greyhound

Airbill No GLI 106919864

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) H5ch2
- ☐ Other (Specify)

Shipping and Lab Notes:

[illegible] 02. 19.01

4.9°

-176 4/95

ENVIRONMENTAL

Well Number R 1

WELL DEVELOPMENT AND PURGE DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS quarterly Sampling Project Manager R Thompson Project No. 62800107

Client Company El paso Field Services Phase.Task No. 0301

Site Name JAquez GC #C1 (70995) Site Location Blanco N.M.

Development Criteria

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

Water Column Calculation

Initial Depth to Water (feet) 22.09

Initial Depth to Bottom (feet) 14.88

Height of Water Column in Well (feet) 7.21

Diameter of Well 4" Casing Type Steel

Item	1 Casing Volume (gal)	3 Casing Volumes (gal)	Gallons to be Removed
Well Casing	1.21	4.10 X 3	14.1
Gravel Pack			
Drilling Fluid			
Total			14.1

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Methods of Development

Pump	Bailer
☐ Centrifugal	☑ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Femmeter

☐ Other _____

Water Disposal Lutz Seperator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Cumulative Gallons Removed	Cumulative Casing Volumes Removed	Temperature (°C)	pH	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Comments
02-15-01	1346		X				3	1	15	5.72	1620		Cloudy yellow ish tint Strong product odor
	1351		X				3	1	15.2	6.36	1650		No Change

Circle the date and time that the development criteria are met

Comments Bailed Approximately 11 gal. Bailed well Dry Let Recover Sampled for BTEX 1400

Developer's Signature(s) Chris A. May Date 02-15-01 Reviewer RT Date 2/20/01

PHILIP ENVIRONMENTAL

Well Number R 2

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS quarterly Sampling Project Manager R. Thompson Project No. 62800107

Client Company El paso Field Services Phase.Task No. 0301

Site Name Jaquez GC #C1 (70995) Site Location Blanco N.M.

Development Criteria

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

Methods of Development

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

☐ Other

Water Column Calculation

Initial Depth to Well (feet) 22.12

Initial Depth to Water (feet) 13.63

Height of Water Column in Well (feet) 8.49

Diameter Purged Well 4" Gravel Pack

Item	Gallons/Linear Foot	Gallons	Gallons to be Removed
Well Casing	8.119	5.54 x 3	16.62
Gravel Pack			
Drilling Fluid			
Total			16.62

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal Lt Tz Separator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Initial Depth (feet)	Ending Depth (feet)	Water Removed This Period	Water Removed Cumulative	Cumulative Time (hours)	Cumulative Time (minutes)	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
02-15-01	1255		X				3.5	3.5			11.6	5.72	768		clear/product
	1259		X				3.5	7			12.7	5.61	772		" "
	1306		X				3.5	10.5			13.4	5.87	665		no change
							3.5								
							3.5								

Circle the date and time that the development criteria are met.

Comments 1360 TO product product thickness .03 Bailed Approximately 11 gal. Bailed well Dry LET Recover Sampled for BTEX 1320 conductivity x100 Range

Developer's Signature(s) Chris A. Mc Date 02-15-01 Reviewer RT Date 2/20/01

WELL DEVELOPMENT AND PURGE DATA

Well Number R 3

Serial No. WDPD-

Page 1 of 1

Project Name PEPFS Quarterly Sampling — Project Manager R Thompson — Project No. 62800102

Client Company El paso Field Services — Phase.Task No. 0301

Site Name Jaquez G.C. #C1 (70995) — Site Address Blanco N.M.

Development Criteria

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

Water Column Height Calculations

Initial Depth to Well Bottom (feet) 22.20

Initial Depth to Water (feet) 14.50

Height of Water Column in Well (feet) 5.7

Diameter of Well (inches) 4" — Type of Pack

Item	Feet of Water in Well	Gallons	Gallons to be Removed
Well Casing	7.7	5.0243	15.06
Sand Pack			
Drilling Fluids			
Total			15.06

Methods of Development

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

☐ Other

Instruments

Serial No. (if applicable)

- ☑ pH Meter — Hydac
- ☐ DO Monitor
- ☑ Conductivity Meter — Hydac
- ☑ Temperature Meter — Hydac
- ☐ Other

Water Disposal: Kutz Separator Bloomfield NM

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Column Height (feet)	Cumulative Gallons Removed	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
02-15-01	1150		X				5.25	3.25	14.2	5.89	1030		Clear Faint Odor
	1153		X				5.25	6.50	15.8	5.69	1040		" "
	1159		X				5.25	9.75	15.7	5.66	0990		" "
	1203		X				5.25	13	15.7	5.63	0920		" "
	1207		X				5.25	16.25	15.4	5.65	0960		No Change

Circle the date and time that the development criteria are met.

Comments Sampled For BTEX 1213

Developer's Signature(s) Chris A Mac — Date 02-15-01 — Reviewer RT — Date 2/20/01

WILIP ENVIRONMENTAL

Well Number R 4

Serial No. WDPD-

WELL DEVELOPMENT AND PURGE DATA

Page 1 of 1

Project Name EPFS quarterly Sampling

Project Manager R. Thompson

Project No. 62800107

Client Company El Paso Field Services

Phase.Task No. 0301

Site Name Jaquez GC #C1 (70995) Location Blanco N.M.

Development Criteria

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

Methods of Development

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

☐ Other

Water Column Information

Initial Depth to Well (feet) 22.22

Initial Depth to Water (feet) 14.05

Height of Water Column in Well (feet) 8.17

Diameter (inches) & Well Material Type Sch 40 PVC

Begin	Well Volume (gal)	Well Volume (gal)	Gallons to be Removed
Well Volume	8.17	5.33x3	15.99
Sand Pack			
Drilling Water			
Total			15.99

Instruments

	Serial No. (If applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal KNTZ Separator Bloomfield N.M

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Column (feet)	Gallons Removed	Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
12-15-01	1421						3.25	3.25	11.9	5.93	718		Cloudy yellowish tint Sheen product odor
	1425						3.25	6.50	12.5	5.77	727		no change

Circle the date and line that the development criteria are met.

Comments After Bailing Approx 18 gal. Bailed well Dry Let Recover Sampled for BTEX 1437 Conductivity in X Ray R

Developer's Signature(s) [signature] 12-15-01 Reviewer RT Date 2/20/01

Form A0101 Rev. 10/6/94 37

F:\NEWFORM\PE_A0101.DOT 1/31/96

PHILIP ENVIRONMENTAL

Well Number R 5

Serial No. WDPD-

WELL DEVELOPMENT AND PURGE DATA

Page 1 of 1

Project Name EpES quarterly Sampling

Technician R Thompson

Project No. 62800107

Client Company El paso Field Services

Phase.Task No. 0301

Site Name Jaquez G.C. #C1 (70995)

Site Location Blanco N.M.

Development Criteria

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

Methods of Development

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

☐ Other

Water Column Calculation

Initial Depth to Water (feet) 24.48

Initial Depth to Well Bottom (feet) 16.59

Height of Water Column in Well (feet) 7.89

Diameter of Casing in Well 4" Gravel Pack

Item	Gallons per Linear Foot	Gallons	Gallons to be Removed
Well Volume	7.89	5.15 X 3	15.45
Filter Pack			
Total			15.45

Instruments

	Serial No. (if applicable)
☐ pH Meter	Hydac
☐ DO Monitor	
☒ Conductivity Meter	Hydac
☒ Temperature Meter	Hydac
☐ Other	

Water Disposal knIZ Seperator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Casing Bottom Depth (feet)	Water Level During Development: Initial	Water Level During Development: Final	Turbidity (Qualitative): Initial	Turbidity (Qualitative): Final	Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
02-15-01	1057		X				3.25	3.35			12.4	5.95	1030		clear no odor
	1101		X				3.26	6.51			12.4	5.97	1100		" "
	1105		X				3.33	9.72			12.4	5.94	1130		no Chems

Circle the date and time that the development criteria are met.

Comments After Bailing Approximately 15 GAL Bailed well Dry Let Recover Sampled for BTex 1125

Developer's Signature(s) Chris A Mang

Date 02-15-01 Reviewer RT Date 2/20/01

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/96

PHILIP ENVIRONMENTAL

Well Number R-6

WELL DEVELOPMENT AND PUR[illegible] DATA

Serial No. WOPD-

Project Name EPFS Quarterly Sampling — Project No. 62800107

Client Company El Paso Field Services — Phase.Task No. 0301

Site Name Jaquez G.C. #C1 (70995) — Blanco N.M.

Development Criteria
- ☐ (3) to 5 Casing Volumes of Water Removal
- ☑ Stabilization of Indicator Parameters
- ☐ Other

Methods of Development

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

☐ Other

Initial Depth to Water (feet) 2/.96
Initial Depth to Bottom (feet) 16.22
Height of Water Column in Well (feet) 5.72
Diameter and Type of Well "4" Sch 40 PVC — Type of Pack

Item	Feet	Gallons	Gallons to be Removed
Well Volume	5.72	3.73 x 3	11.19
Sand Pack			
Bailer Capacity			
Total			11.19

Instruments — Serial No. (If applicable)
- ☑ pH Meter — Hydac
- ☐ DO Monitor
- ☑ Conductivity Meter — Hydac
- ☑ Temperature Meter — Hydac
- ☐ Other

Water Disposal: knuz separator Bloomfield NM

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Gallons Removed	Cumulative Gallons Removed (by volume)	Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
02-15-01	1026		X				2.25		12.2	5.90	294		Clear No odor

Circle the date and time that the development criteria are met

Comments: Bailed Approximately 2.25 gal, Bailed well Dry Let Recover Collected Sample Conductivity X 100 Range Sample [illegible] 1037

Developer's Signature(s) Chris A Wall — Reviewer RT — Date 2/20/01

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/96

PHILIP

Chain of Custody Record

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

COC Serial No. C 2855

Project Nar EpFS quarterly Sampl
Project Number 24600107 Phase . Task 2301
Samplers C Mace
Laboratory Name DENVER
Location NBR NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0201-R1	02-15-01	1410	↓			JAQ-02 GC #CI 20995
JAQ-0201-R2	02-15-01	1320	↓			"
JAQ-0201-R3	02-15-01	1211	↓			"
JAQ-0201-R4	02-15-01	1127	↓			"
JAQ-0201-R5	02-15-01	1125	↓			"
JAQ-0201-R6	02-15-01	1039	↓			"

Relinquished by:

Signature	Date	Time

Received By:

Signature	Date	Time

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) HgCl2
- ☐ Other (Specify) _____

Carrier:

Airbill No. GLI 60691 9864

Shipping and Lab Notes:

PE-176 4/95

PINNACLE LABORATORIES

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

RECEIVED
MAR - 1 2001

Pinnacle Lab ID number **102073**
February 28, 2001

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/SCOTT POPE

On 02/16/01 Pinnacle Laboratories, 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.

The scheduled reagent blank associated with this study did not run. However, clean samples validated the instrument in lieu of the reagent blank. The sample data is reported.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 102073
PROJECT #	: 62800107	DATE RECEIVED	: 02/16/01
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 02/28/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
102073 - 01	JAQ-0201-R1	AQUEOUS	02/15/01
102073 - 02	JAQ-0201-R2	AQUEOUS	02/15/01
102073 - 03	JAQ-0201-R3	AQUEOUS	02/15/01
102073 - 04	JAQ-0201-R4	AQUEOUS	02/15/01
102073 - 05	JAQ-0201-R5	AQUEOUS	02/15/01
102073 - 06	JAQ-0201-R6	AQUEOUS	02/15/01

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 : PHILIP ENVIRONMENTAL PINNACLE I.D.: 102073
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0201-R1	AQUEOUS	02/15/01	NA	02/22/01	20
02	JAQ-0201-R2	AQUEOUS	02/15/01	NA	02/22/01	20
03	JAQ-0201-R3	AQUEOUS	02/15/01	NA	02/22/01	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0201-R1	JAQ-0201-R2	JAQ-0201-R3
BENZENE	0.5	**UG/L**	**120**	**620**	**2.2**
TOLUENE	0.5	**UG/L**	< 10	**400**	< 0.5
ETHYLBENZENE	0.5	**UG/L**	< 10	**43**	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**190**	**440**	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			128*	104	106
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
* = HIGH SURROGATE DUE TO 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 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL PINNACLE I.D.: 102073
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQ-0201-R4	AQUEOUS	02/15/01	NA	02/22/01	20
05	JAQ-0201-R5	AQUEOUS	02/15/01	NA	02/22/01	1
06	JAQ-0201-R6	AQUEOUS	02/15/01	NA	02/22/01	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0201-R4	JAQ-0201-R5	JAQ-0201-R6
BENZENE	0.5	**UG/L**	**19**	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 10	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 10	< 0.5	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**36**	< 0.5	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			103	104	103
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.	: 102073
BLANK I. D.	: 022101-B	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 02/21/01
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BRO FLUOROBENZENE (%)		101
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 #	: 102067-01	PINNACLE I.D.	: 102073
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 02/21/01
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	19.1	96	19.3	97	1	(80 - 120)	20
TOLUENE	<0.5	20.0	18.0	90	17.9	90	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.4	97	19.7	99	2	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	57.5	96	57.5	96	0	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

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

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

Chain of Custody Record

10207

PHILIP ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2855

Project Name: EpFS quarterly Sampling
Project Number: 62900107 Phase . Task: 0301 . 5
Samplers: C Mace
Laboratory Name: PINNACLE
Laboratory Location: ABQ N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Comments	
JAQ-0201-R1	02-15-01	1400	H_2O	2	X	JAQ-22 C.C. #CI 70995	-01
JAQ-0201-R2	02-15-01	1320	H_2O	2	X	" "	-02
JAQ-0201-R3	02-15-01	1213	H_2O	2	X	" "	-03
JAQ-0201-R4	02-15-01	1437	H_2O	2	X	" "	-04
JAQ-0201-R5	02-15-01	1125	H_2O	2	X	" "	-05
JAQ-0201-R6	02-15-01	1039	H_2O	2	X	" "	-06

Relinquished by:

Signature	Date	Time
[signature]	02-15-01	1600

Received By:

Signature	Date	Time
[signature]	02.16.01	18:30

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) H_5Cl_2
- ☐ Other (Specify)

Carrier: Greyhound

Airbill No. GLI 160691 9864

Shipping and Lab Notes:

TRIP BLANK HN 02.15.01 -07

4.90°C

~~-01 MISSING~~ HN 02.15.01

176 4/95

Appendix E - 2000 Soil Investigations

Analytical Data

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006068**
June 26, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name JAQUEZ EXCAVATION
Project Number 62800243

Attention: Steve Stellavato/LeAudra Stanley

On 06/16/00 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.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006068
PROJECT #	: 62800243	DATE RECEIVED	: 06/16/00
PROJECT NAME	: JAQUEZ EXCAVATION	REPORT DATE	: 06/26/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQEXC-SS-1	NON-AQ	06/14/00
02	JAQEXC-SS-2	NON-AQ	06/14/00
03	JAQEXC-SS-3	NON-AQ	06/14/00
04	JAQEXC-SS-4	NON-AQ	06/14/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800243
PROJECT NAME : JAQUEZ EXCAVATION

PINNACLE I.D.: 006068

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQEXC-SS-1	NON-AQ	06/14/00	06/20/00	06/20/00	1
02	JAQEXC-SS-2	NON-AQ	06/14/00	06/20/00	06/20/00	1
03	JAQEXC-SS-3	NON-AQ	06/14/00	06/20/00	06/20/00	1

PARAMETER	DET. LIMIT	UNITS	JAQEXC-SS-1	JAQEXC-SS-2	JAQEXC-SS-3
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
METHYL-t-BUTYL ETHER	0.13	MG/KG	< 0.13	< 0.13	< 0.13
SURROGATE:					
BROMOFLUOROBENZENE (%)			107	112	104
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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800243
PROJECT NAME : JAQUEZ EXCAVATION

PINNACLE I.D.: 006068

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQEXC-SS-4	NON-AQ	06/14/00	06/20/00	06/20/00	1

PARAMETER	DET. LIMIT	UNITS	JAQEXC-SS-4
BENZENE	0.025	**MG/KG**	**0.10**
TOLUENE	0.025	**MG/KG**	**0.085**
ETHYLBENZENE	0.025	**MG/KG**	**0.047**
TOTAL XYLENES	0.025	**MG/KG**	**0.51**
METHYL-t-BUTYL ETHER	0.13	MG/KG	< 0.13

SURROGATE:
BROMOFLUOROBENZENE (%) 121*
SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:
* = high surrogate due to 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
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 006068
BLANK I. D.	: 062000	DATE EXTRACTED	: 06/20/00
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 06/20/00
PROJECT #	: 62800243	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: JAQUEZ EXCAVATION		

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.025
METHYL-t-BUTYL ETHER	MG/KG	<0.13
SURROGATE:		
BROMOFLUOROBENZENE (%)		104
SURROGATE LIMITS:	(30 - 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 #	: 006068-01	PINNACLE I.D.	: 006068
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: 06/20/00
PROJECT #	: 62800243	DATE ANALYZED	: 06/20/00
PROJECT NAME	: JAQUEZ EXCAVATION	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	0.85	85	0.87	87	2	(68 - 120)	20
TOLUENE	<0.025	1.00	0.88	88	0.90	90	2	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	0.85	85	0.87	87	2	(49 - 127)	20
TOTAL XYLENES	<0.025	3.00	2.57	86	2.63	88	2	(58 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

006068

COC Serial No. C 2580

Project Name JAQUEZ EXCAVATION

Project Number 62800243 Phase . Task .

Samplers S STELLAVATO

Laboratory Name PINNACLE LAB

Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	BTEX	Lab ID # Rec'd @ 4.8°C	Comments
JAQEXC-SS-1	6/14/00	1144	Soil	2	X	01	
JAQEXC-SS-2	6/14/00	1206	Soil	2	X	02	
JAQEXC-SS-3	6/14/00	1320	Soil	2	X	03	
JAQEXC-SS-4	6/14/00	1355	Soil	2	X	04	

Type of Analysis and Bottle

Relinquished by:

Signature	Date	Time
Stephen Stellavato	6/15/00	0930

Received By:

Signature	Date	Time
Francine Jenio	6/16/00	1710

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: Please invoice EPFS directly. Please send results to Philip Services and a copy to EPFS.

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006068**
July 03, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name JAQUEZ EXCAVATION
Project Number 62800243

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 06/16/00 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.

Per client request, samples were re-accessioned to include diesel. This request was made one (1) day past hold time. EPA method 418.1 was also analyzed (at no cost) to provide in-hold time data. We apologize for any inconvenience this may have caused.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006068
PROJECT #	: 62800243	DATE RECEIVED	: 06/16/00
PROJECT NAME	: JAQUEZ EXCAVATION	REPORT DATE	: 07/03/00

PIN D. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQEXC-SS-1	NON-AQ	06/14/00
02	JAQEXC-SS-2	NON-AQ	06/14/00
03	JAQEXC-SS-3	NON-AQ	06/14/00
04	JAQEXC-SS-4	NON-AQ	06/14/00

PINNACLE LABORATORIES

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

GENERAL CHEMISTRY RESULTS
418.1

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE I.D.	: 006068
PROJECT #	: 62800243	DATE RECEIVED	: 06/16/00
PROJECT NAME	: JAQUEZ EXCAVATION		

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQEXC-SS-1	NON-AQ	06/14/00	06/30/00	06/30/00	1
02	JAQEXC-SS-2	NON-AQ	06/14/00	06/30/00	06/30/00	1
03	JAQEXC-SS-3	NON-AQ	06/14/00	06/30/00	06/30/00	1

PARAMETER	DET. LIMIT	UNITS	JAQEXC-SS-1	JAQEXC-SS-2	JAQEXC-SS-3
PETROLEUM HYDROCARBONS	20	MG/KG	< 20	< 20	< 20

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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

GENERAL CHEMISTRY RESULTS
418.1

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE I.D.	: 006068
PROJECT #	: 62800243	DATE RECEIVED	: 06/16/00
PROJECT NAME	: JAQUEZ EXCAVATION		

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
24	JAQEXC-SS-4	NON-AQ	06/14/00	06/30/00	06/30/00	1

PARAMETER	DET. LIMIT	UNITS	JAQEXC-SS-4
PETROLEUM HYDROCARBONS	20	**MG/KG**	34

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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

GENERAL CHEMISTRY - REAGENT BLANK
418.1

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE I.D.	: 006068
PROJECT #	: 62800243	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: JAQUEZ EXCAVATION	UNITS	: MG/KG

PARAMETER	REAGENT BLANK I.D.	SAMPLE RESULT
PETROLEUM HYDROCARBONS	063000	<20

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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

GENERAL CHEMISTRY - QUALITY CONTROL
418.1

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE I.D.	: 006068
PROJECT #	: 62800243	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: JAQUEZ EXCAVATION	UNITS	: MG/KG

PARAMETER	PINNACLE I.D.	SAMPLE RESULT	DUP. RESULT	% RPD	SPIKED SAMPLE	SPIKE CONC.	% REC
PETROLEUM HYDROCARBONS	006068-01	<20	<20	N/A	183	162	113%

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 : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 006068
PROJECT # : 62800243
PROJECT NAME : JAQUEZ EXCAVATION

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQEXC-SS-1	NON-AQ	06/14/00	06/29/00	06/30/00	1
02	JAQEXC-SS-2	NON-AQ	06/14/00	06/29/00	06/30/00	1
03	JAQEXC-SS-3	NON-AQ	06/14/00	06/29/00	06/30/00	1

PARAMETER	DET. LIMIT	UNITS	JAQEXC-SS-1	JAQEXC-SS-2	JAQEXC-SS-3
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C22-C36	10	MG/KG	< 10	< 10	< 10
CALCULATED SUM:					
SURROGATE:					
O-TERPHENYL (%)			107	106	109
SURROGATE LIMITS	(66 - 151)				

CHEMIST NOTES:
Samples were analyzed out of hold time per client request.

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800243
PROJECT NAME : JAQUEZ EXCAVATION

PINNACLE I.D.: 006068

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JAQEXC-SS-4	NON-AQ	06/14/00	06/29/00	06/30/00	1

PARAMETER	DET. LIMIT	UNITS	JAQEXC-SS-4
FUEL HYDROCARBONS, C6-C10	10	**MG/KG**	**27**
FUEL HYDROCARBONS, C10-C22	10	**MG/KG**	**30**
FUEL HYDROCARBONS, C22-C36	10	**MG/KG**	**18**
CALCULATED SUM:			75
SURROGATE:			
O-TERPHENYL (%)			115
SURROGATE LIMITS	(66 - 151)		

CHEMIST NOTES:
Samples were analyzed out of hold time per client request.

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.	: 062900	PINNACLE I.D.	: 006068
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: 06/29/00
PROJECT #	: 62800243	DATE ANALYZED	: 06/29/00
PROJECT NAME	: JAQUEZ EXCAVATION	SAMPLE MATRIX	: NON-AQ

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 10
FUEL HYDROCARBONS, C22-C36	MG/KG	< 10
SURROGATE:		
O-TERPHENYL (%)		102
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 #	: 006068-01	PINNACLE I.D.	: 006068
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: 06/29/00
PROJECT #	: 62800243	DATE ANALYZED	: 06/30/00
PROJECT NAME	: JAQUEZ EXCAVATION	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	<10	200	172	86	169	85	2	(56 - 148)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

0060068

COC Serial No. C 2580

Project Name JAQUEZ EXCAVATION

Project Number 62800243 Phase . Task

Samplers S STELLAVATO

Laboratory Name PINNACLE LAB

Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX	Lab ID #	Preserved @ 4°C	Comments
JAQEXC-SS-1	6/14/00	1144	Soil	2	X	01		
JAQEXC-SS-2	6/14/00	1206	Soil	2	X	02		
JAQEXC-SS-3	6/14/00	1320	Soil	2	X	03		
JAQEXC-SS-4	6/14/00	1355	Soil	2	X	04		

Relinquished by:

Signature	Date	Time
Stephen Stellavato	6/15/00	0930

Received By:

Signature	Date	Time
Francine Jimio	6/16/00	1710

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

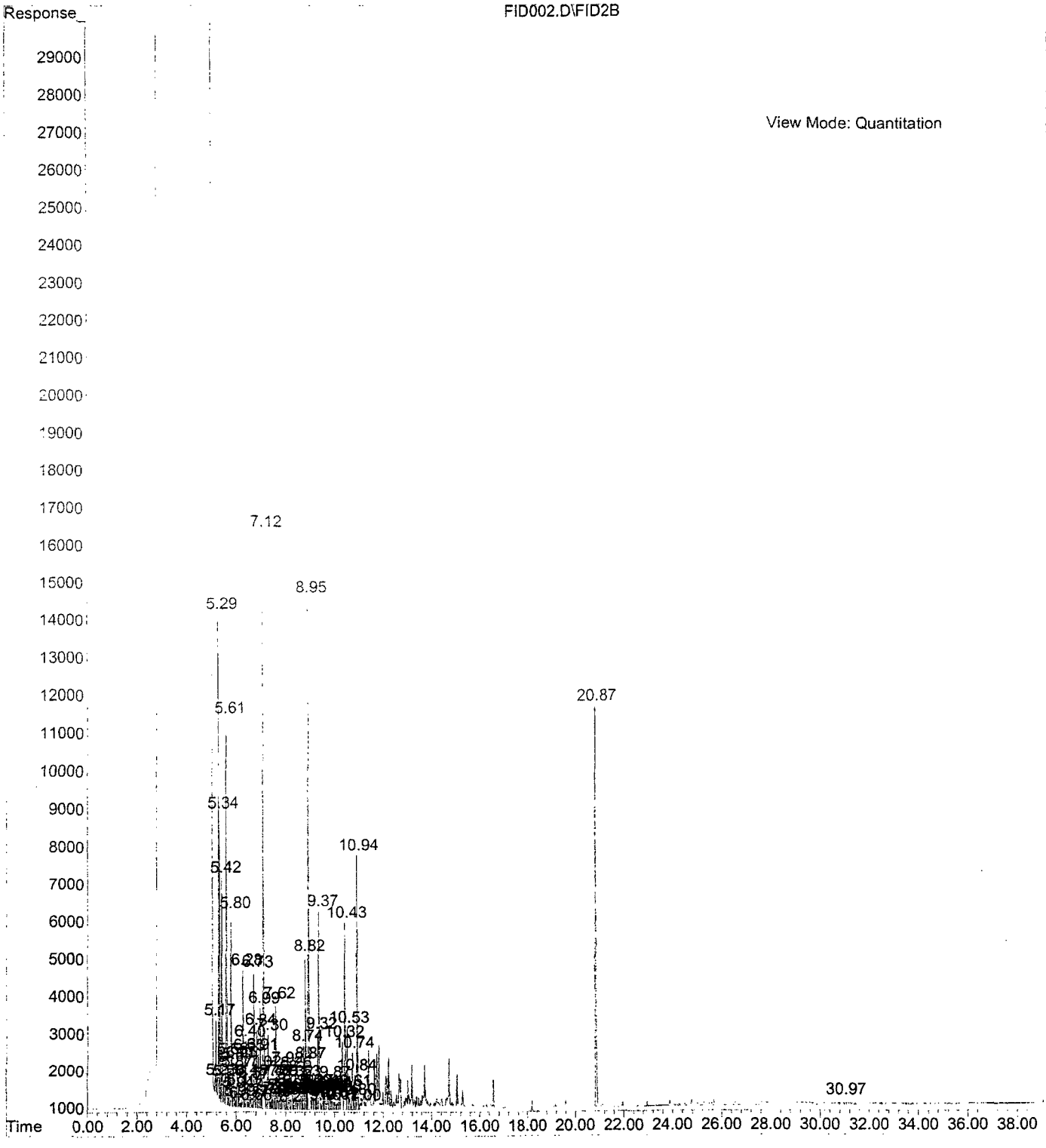
- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☐ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

Carrier:

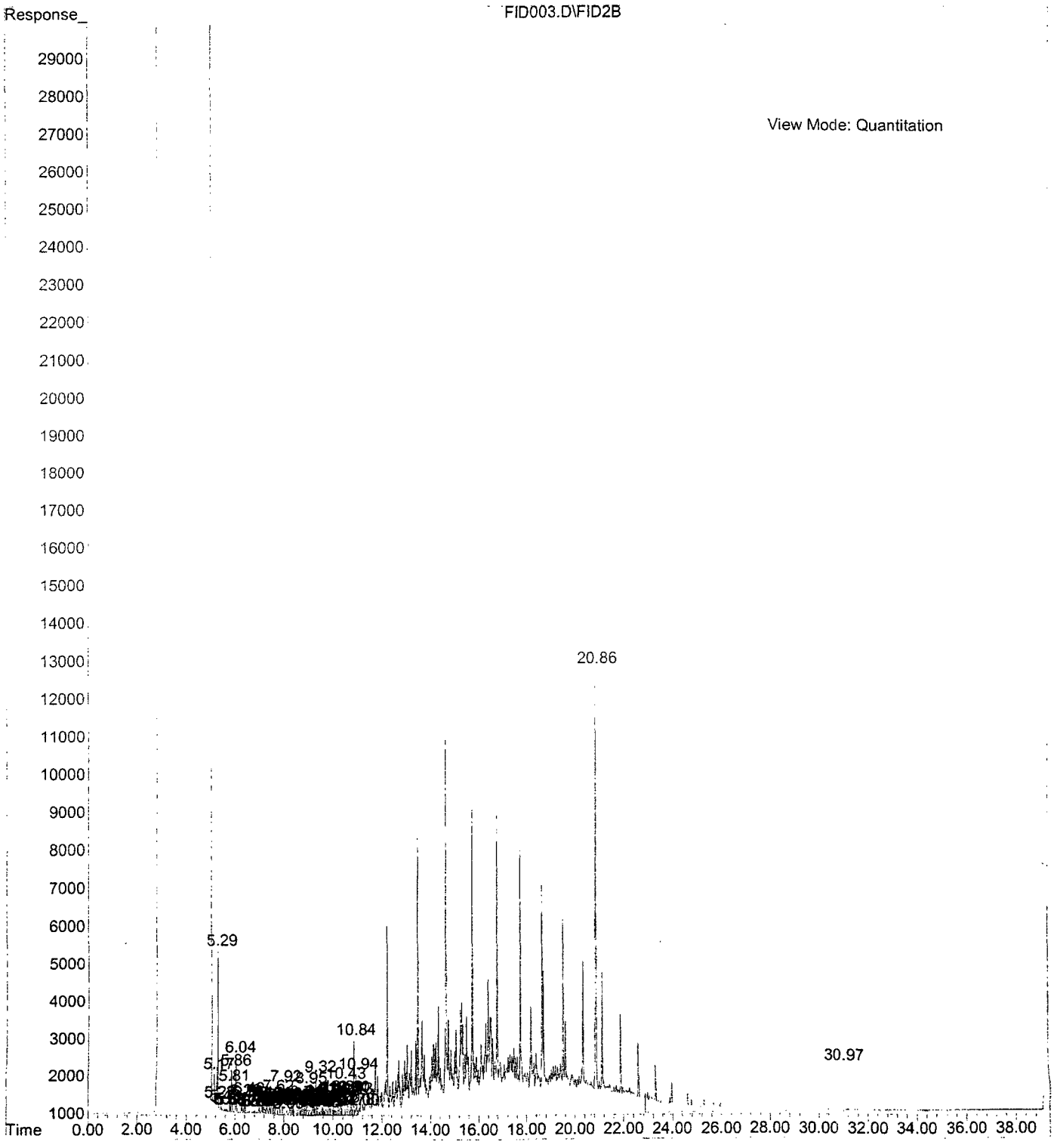
Airbill No.

Shipping and Lab Notes: Please invoice EPFS directly. Please send results to Philip Services and a copy to EPFS.

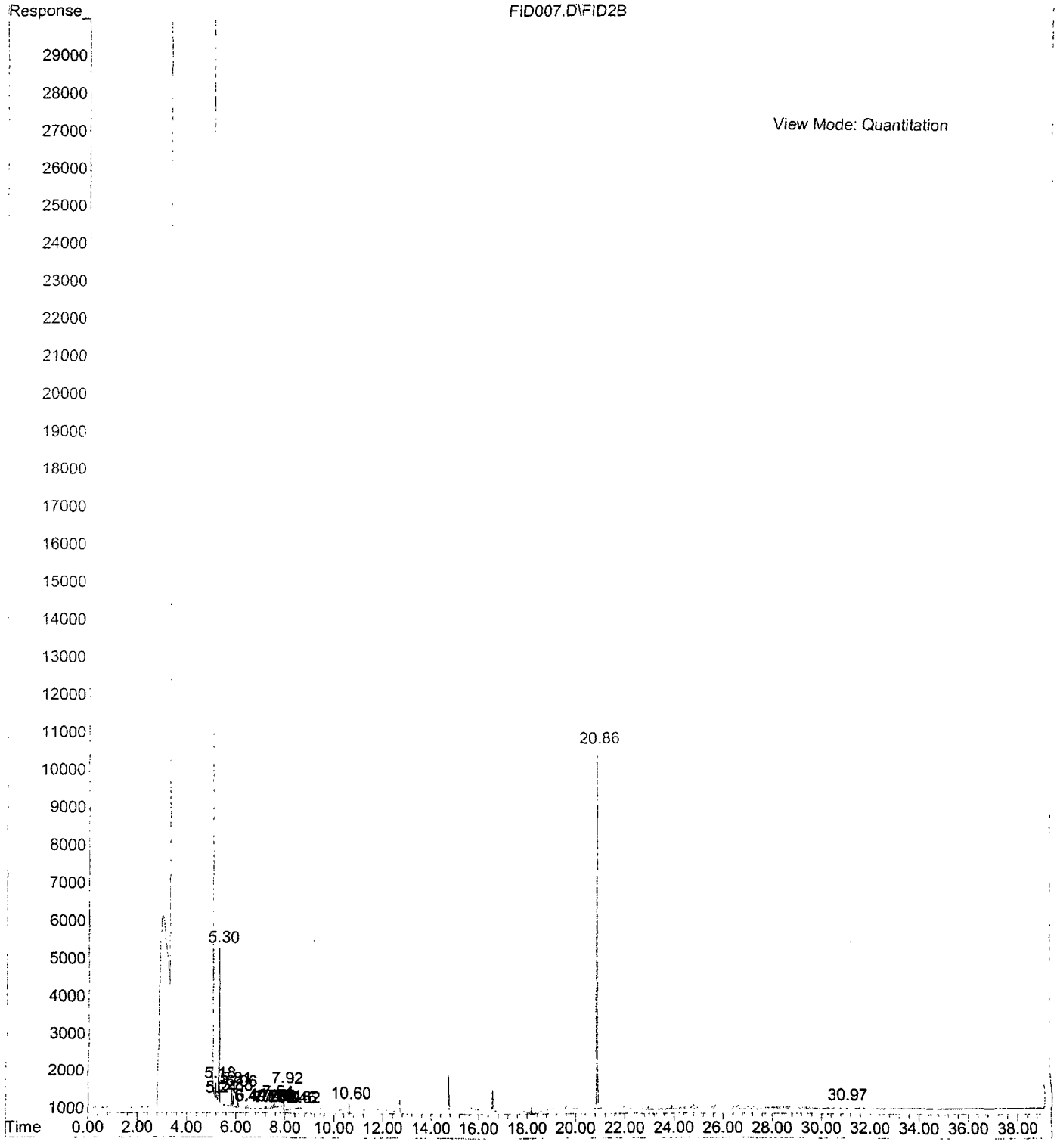
File : C:\HPCHEM\2\DATA\062900\FID002.D
Operator : cff
Acquired : 29 Jun 2000 21:40 using AcqMethod NM032100.M
Instrument : FID-1
Sample Name: gas ccv
Misc Info :
Vial Number: 2



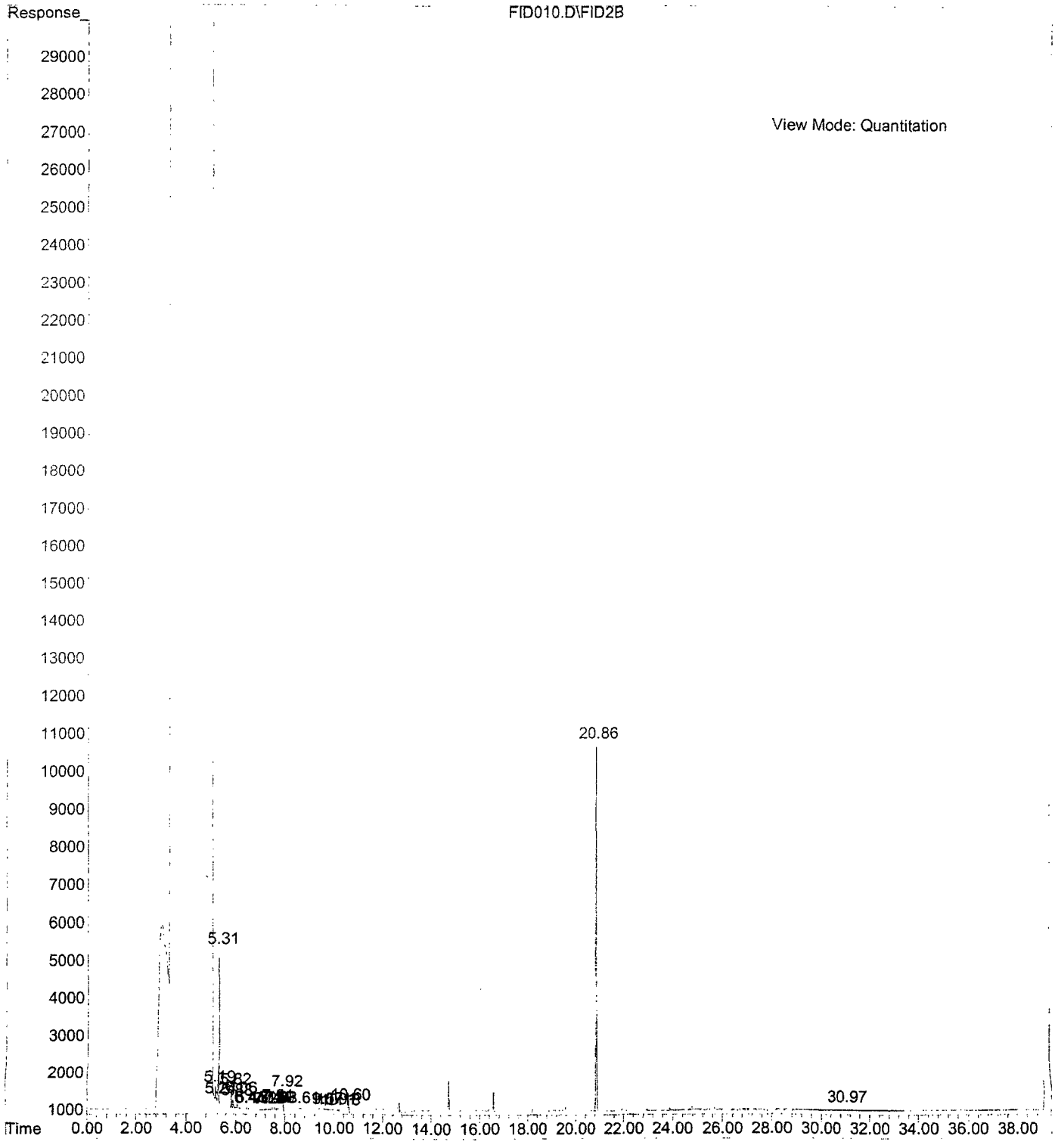
File : C:\HPCHEM\2\DATA\062900\FID003.D
Operator : cff
Acquired : 29 Jun 2000 22:34 using AcqMethod NM032100.M
Instrument : FID-1
Sample Name: dsl ccv
Misc Info :
Vial Number: 3



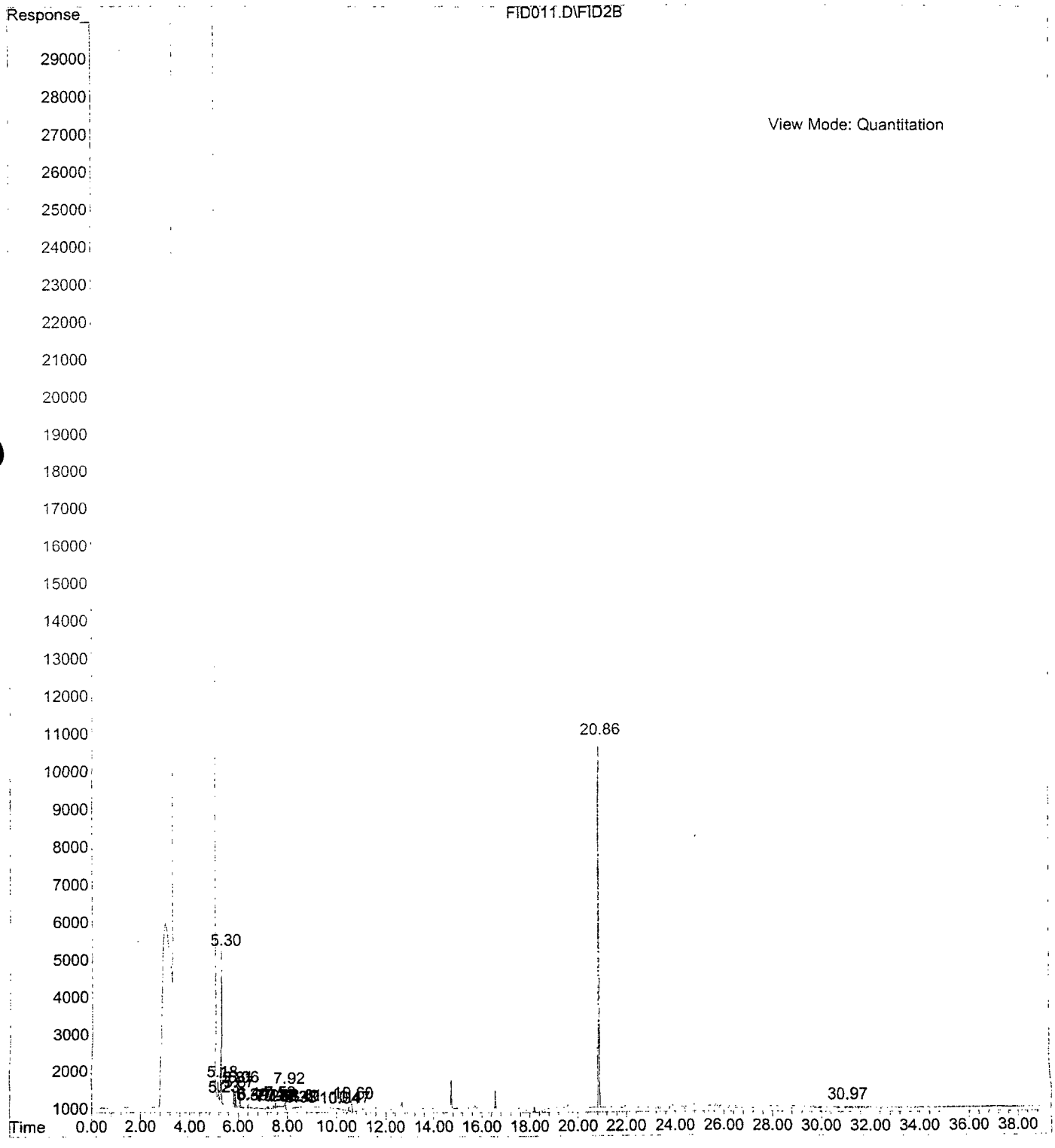
File : C:\HPCHEM\2\DATA\062900\FID007.D
Operator : cff
Acquired : 30 Jun 2000 2:14 using AcqMethod NM032100.M
Instrument : FID-1
Sample Name: 006068-01
Misc Info :
Vial Number: 7



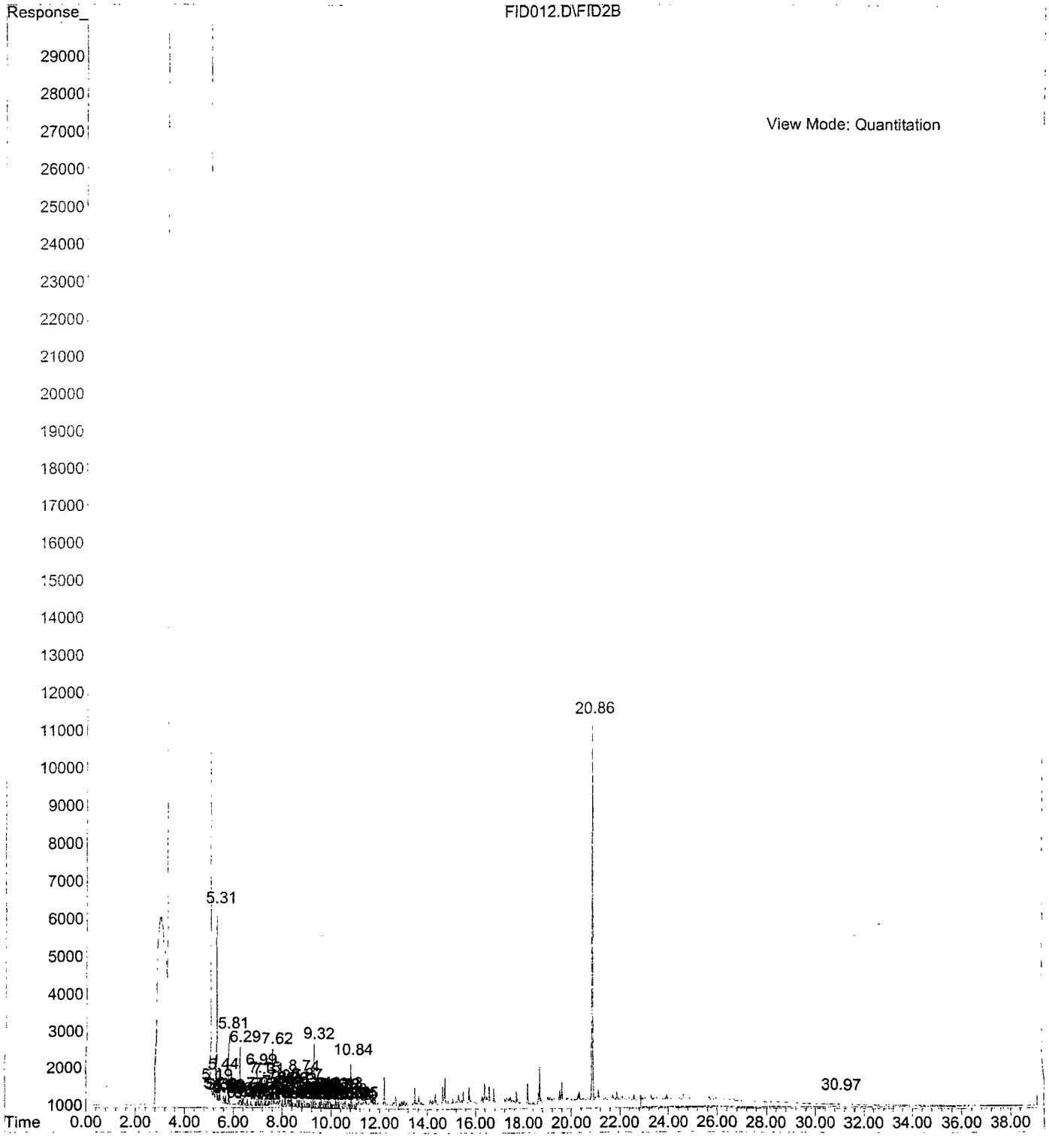
File : C:\HPCHEM\2\DATA\062900\FID010.D
Operator : cff
Acquired : 30 Jun 2000 4:59 using AcqMethod NM032100.M
Instrument : FID-1
Sample Name: 006068-02
Misc Info :
Vial Number: 10



File : C:\HPCHEM\2\DATA\062900\FID011.D
Operator : cff
Acquired : 30 Jun 2000 5:54 using AcqMethod NM032100.M
Instrument : FID-1
Sample Name: 006068-03
Misc Info :
Vial Number: 11



File : C:\HPCHEM\2\DATA\062900\FID012.D
Operator : cff
Acquired : 30 Jun 2000 6:49 using AcqMethod NM032100.M
Instrument : FID-1
Sample Name: 006068-04
Misc Info :
Vial Number: 12



PHILIP

Chain of Custody Record

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

COC Serial No. C 2595

Project Name EDFS QUARTERLY Sam...

Project Number 62800107 Phase . Task 03...

Samplers J. WAGNON

Laboratory Name PINNACLE LABS

Location ALBUQUERQUE N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0007-TMW01	7/13/0...	...1...				JAQUEZ TEMP MW-01
JAQ-0007-TMW02	7/13/00	1253				JAQUEZ TEMP. MW-02
TRIP BLANK	7/13/0...	...1...				

Relinquished by:

Signature	Date	Time
Jason Wagnon	...7/13/00	

Received By:

Signature	Date	Time

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. 6LI16...6L5105 7

Shipping and Lab Notes.

PE-176 4/95

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006069**
June 26, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name JAQUEZ EXCAVATION
Project Number 62800243

Attention: Steve Stellavato/LeAudra Stanley

On 06/16/00 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.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006069
PROJECT #	: 62800243	DATE RECEIVED	: 06/16/00
PROJECT NAME	: JAQUEZ EXCAVATION	REPORT DATE	: 06/26/00

PIN I.D. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQEXC-SS-5	NON-AQ	06/15/00
02	JAQEXC-SS-6	NON-AQ	06/15/00

PINNACLE LABORATORIES

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

GAS CHROMATOGRAPHY RESULTS

'EST : EPA 8021 MODIFIED
:LIENT : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 006069
'ROJECT # : 62800243
'ROJECT NAME : JAQUEZ EXCAVATION

'AMPLE D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
1	JAQEXC-SS-5	NON-AQ	06/15/00	06/20/00	06/20/00	1
2	JAQEXC-SS-6	NON-AQ	06/15/00	06/20/00	06/20/00	1

ARAMETER	DET. LIMIT	UNITS	JAQEXC-SS-5	JAQEXC-SS-6
ENZENE	0.025	MG/KG	< 0.025	< 0.025
OLUENE	0.025	MG/KG	< 0.025	< 0.025
THYLBENZENE	0.025	MG/KG	< 0.025	< 0.025
OTAL XYLENES	0.025	MG/KG	< 0.025	< 0.025
ETHYL-t-BUTYL ETHER	0.13	MG/KG	< 0.13	< 0.13
URROGATE:				
ROMOFLUOROBENZENE (%)			112	109
URROGATE LIMITS	(65 - 120)			

HEMIST NOTES:
A

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006069**
July 03, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name JAQUEZ EXCAVATION
Project Number 32800243

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 06/16/00 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.

Per the client request, samples were reaccessioned to include diesel analyses.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006069
PROJECT #	: 62800243	DATE RECEIVED	: 06/16/00
PROJECT NAME	: JAQUEZ EXCAVATION	REPORT DATE	: 07/03/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQEXC-SS-5	NON-AQ	06/15/00
02	JAQEXC-SS-6	NON-AQ	06/15/00

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 : PHILIP ENVIRONMENTAL PINNACLE I.D.: 006069
PROJECT # : 62800243
PROJECT NAME : JAQUEZ EXCAVATION

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQEXC-SS-5	NON-AQ	06/15/00	06/29/00	06/30/00	1
02	JAQEXC-SS-6	NON-AQ	06/15/00	06/29/00	06/30/00	1

PARAMETER	DET. LIMIT	UNITS	JAQEXC-SS-5	JAQEXC-SS-6
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C22-C36	10	MG/KG	< 10	< 10
CALCULATED SUM:				
SURROGATE:				
O-TERPHENYL (%)			109	108
SURROGATE LIMITS	(66 - 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 RESULTS
REAGENT BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)		
BLANK I.D.	: 062900	PINNACLE I.D.	: 006069
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: 06/29/00
PROJECT #	: 62800243	DATE ANALYZED	: 06/29/00
PROJECT NAME	: JAQUEZ EXCAVATION	SAMPLE MATRIX	: NON-AQ

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 10
FUEL HYDROCARBONS, C22-C36	MG/KG	< 10
SURROGATE:		
O-TERPHENYL (%)		102
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 #	: 006068-01	PINNACLE I.D.	: 006069
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: 06/29/00
PROJECT #	: 62800243	DATE ANALYZED	: 06/30/00
PROJECT NAME	: JAQUEZ EXCAVATION	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	<10	200	172	36	169	85	2	(56 - 148)	20

CHEMIST NOTES:
N/A

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

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

006069

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2581

Project Name JAQUEZ EXCAVATION

Project Number 62800243 Phase . Task

Samplers S STELLAVATO

Laboratory Name PINNACLE LAB

Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	BTEX	Lab ID #	Comments
JAQEXC-SS-5	6/15/00	0945	Soil	2	X	01	
JAQEXC-SS-6	6/15/00	1050	Soil	2	X	02	

Type of Analysis and Bottle

Relinquished by:

Signature	Date	Time
Stephen Stellavato	6/15/00	0930

Received By:

Signature	Date	Time
Francine Trino	6/16/00	1710

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) _____

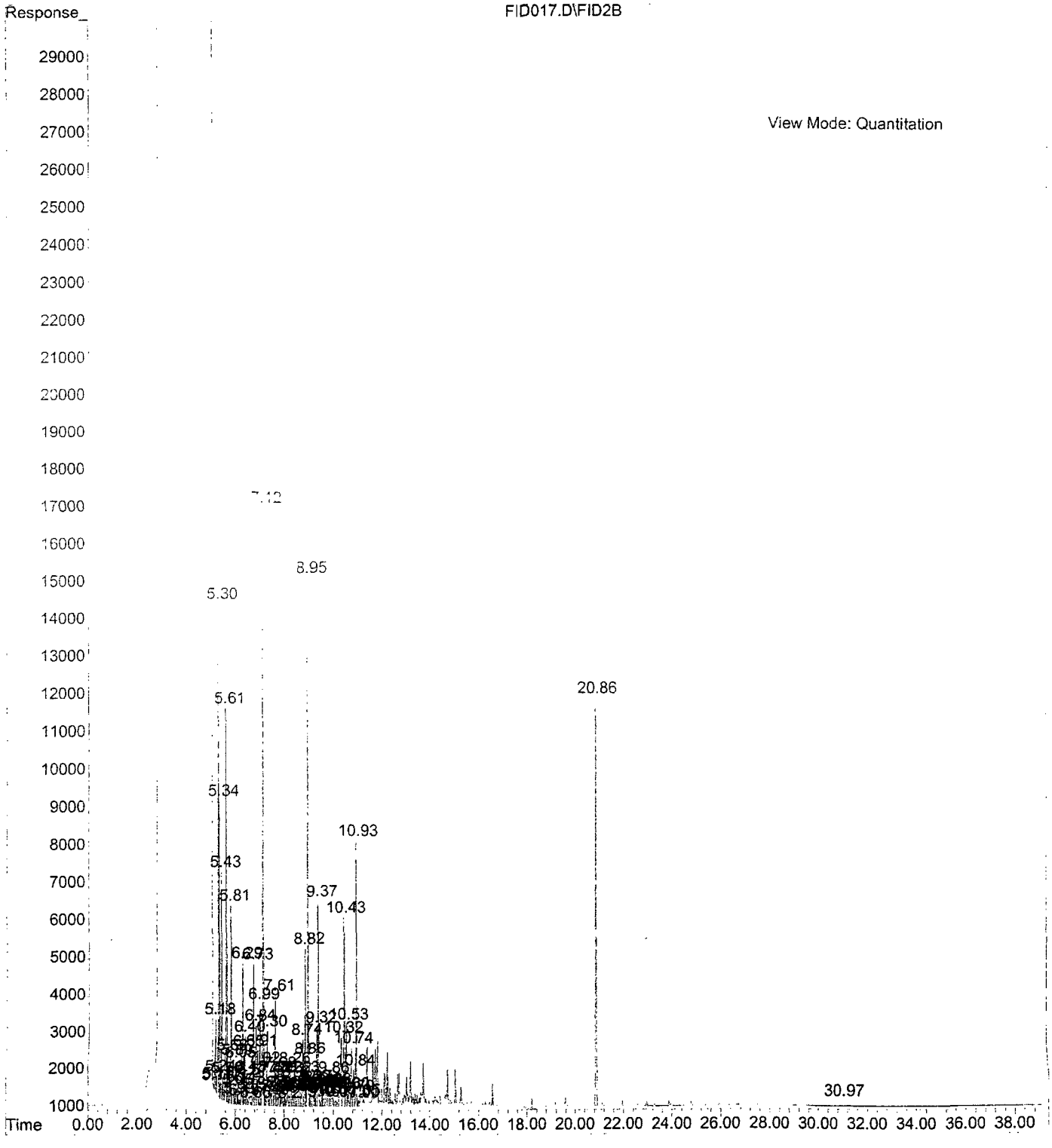
Carrier: Airbill No.

Shipping and Lab Notes: Please invoice EPFS directly. Please send result to Philip Services and a copy to EPFS.

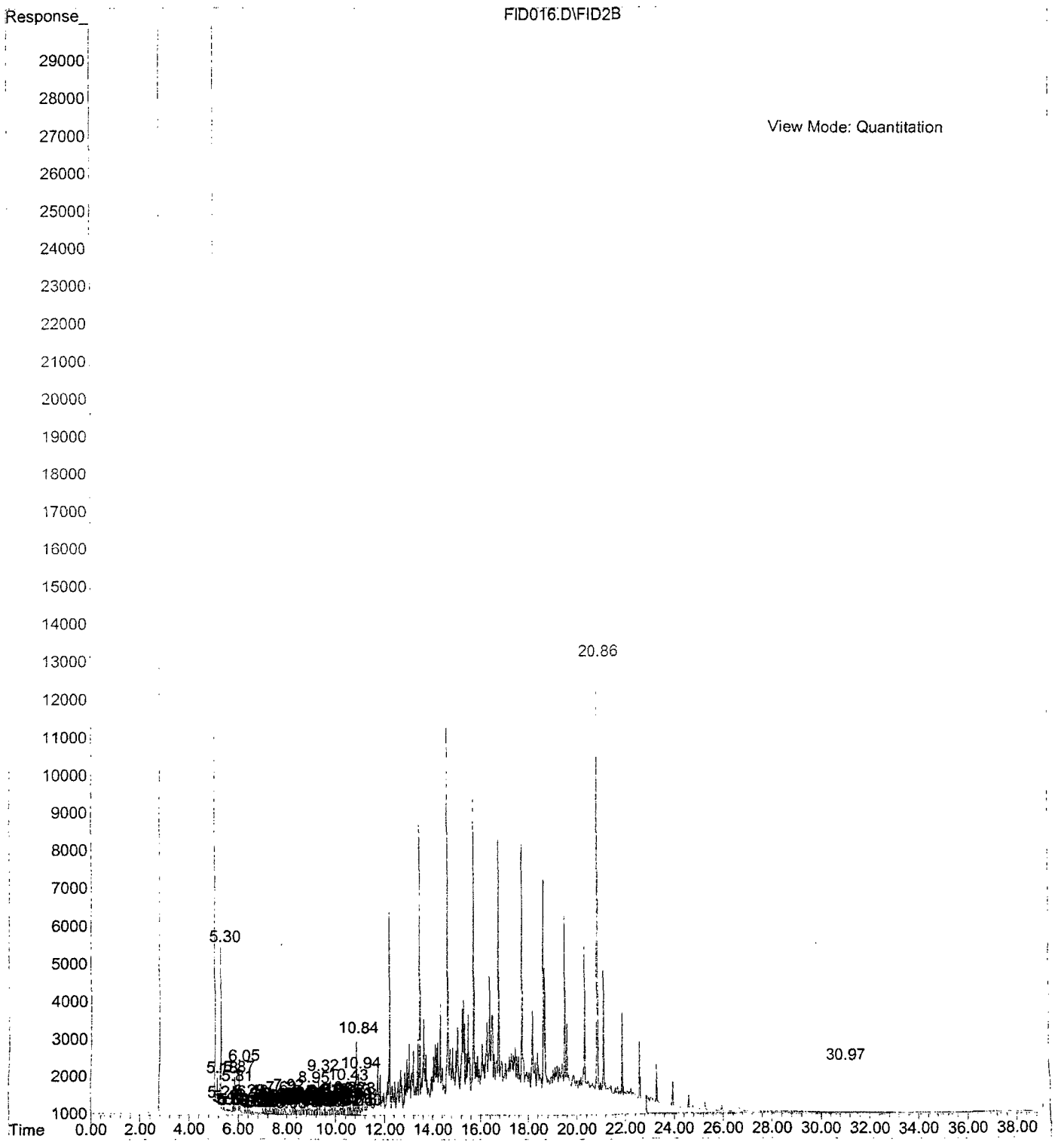
Rec'd @ 4.8°C

PE-176 4/95

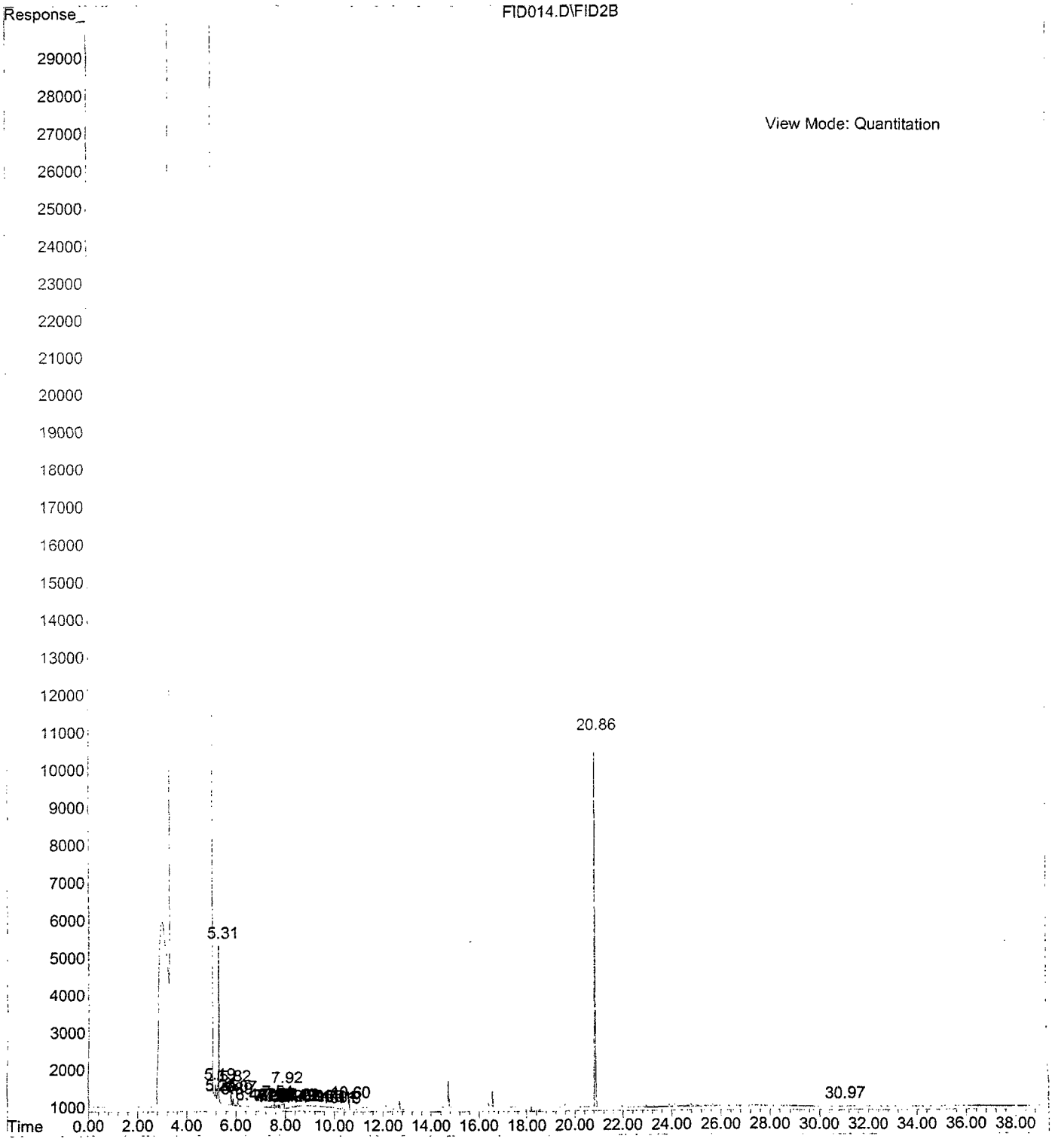
File : C:\HPCHEM\2\DATA\062900\FID017.D
Operator : cff
Acquired : 30 Jun 2000 11:22 using AcqMethod NM032100.M
Instrument : FID-1
Sample Name: GAS CCV
Misc Info :
Vial Number: 17



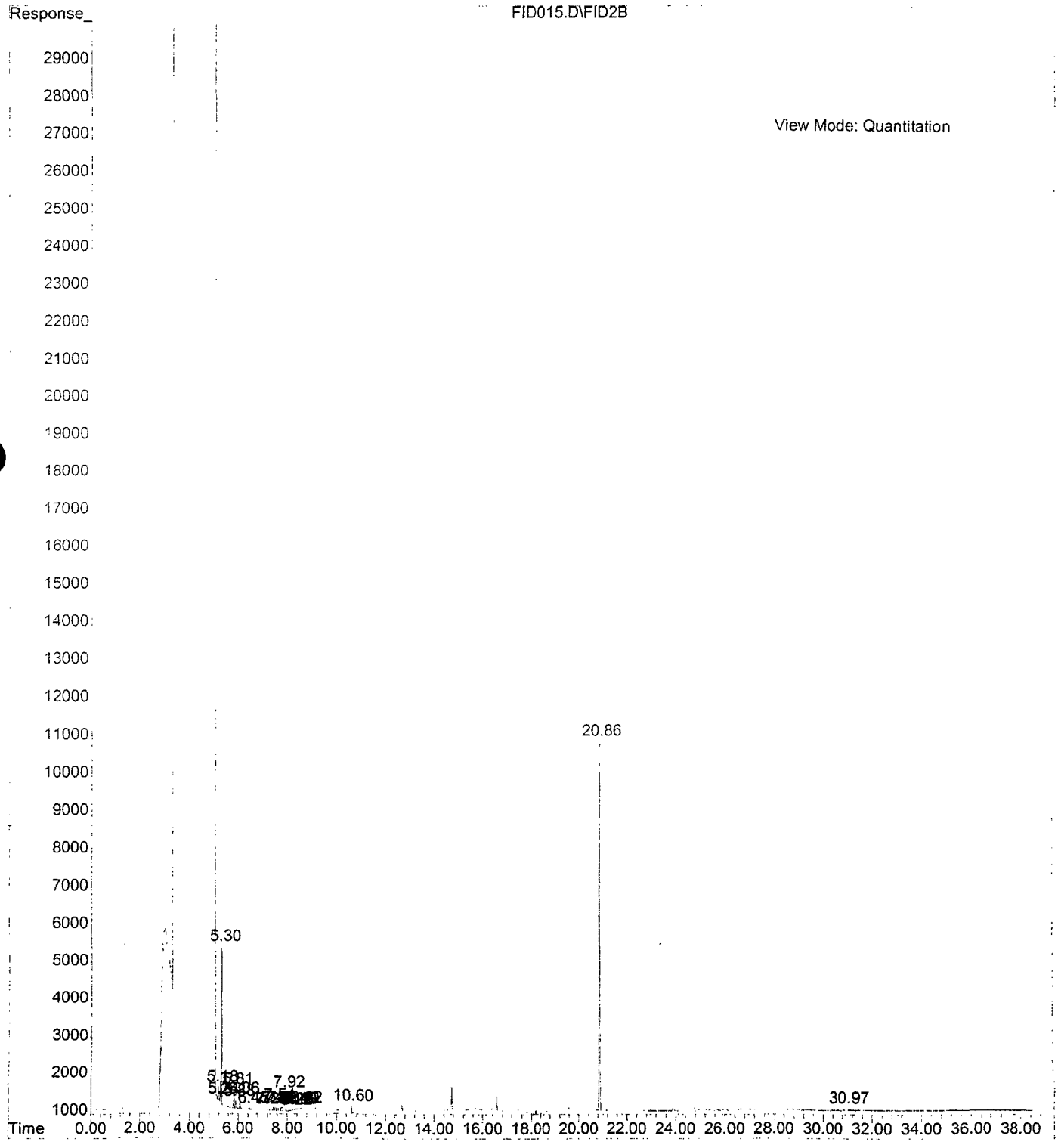
File : C:\HPCHEM\2\DATA\062900\FID016.D
Operator : cff
Acquired : 30 Jun 2000 10:28 using AcqMethod NM032100.M
Instrument : FID-1
Sample Name: DSL CCV
Misc Info :
Vial Number: 16



File : C:\HPCHEM\2\DATA\062900\FID014.D
Operator : cff
Acquired : 30 Jun 2000 8:39 using AcqMethod NM032100.M
Instrument : FID-1
Sample Name: 006069-01
Misc Info :
Vial Number: 14



File : C:\HPCHEM\2\DATA\062900\FID015.D
Operator : cff
Acquired : 30 Jun 2000 9:33 using AcqMethod NM032100.M
Instrument : FID-1
Sample Name: 006069-02
Misc Info :
Vial Number: 15



PHILIP

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2581

Project Name JAQUEZ EXCAVATION

Project Number 62800243 Phase . Task

Samplers S. STELLMATZ

Laboratory Name PHILIP LAB

Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQEXC-SS-5	6/15/95	1PM				
JAQEXC-SS-6	6/15/95	1030				

Relinquished by:

Signature	Date	Time
Stephen Stellmatz		

Received By:

Signature	Date	Time

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:

Copy to

4/95

Appendix F – Miscellaneous Sampling Data

IRRIGATION WELL

PINNACLE LABORATORIES

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

Pinnacle Lab ID number 002015
February 09, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name JAQUEZ DRILLING
Project Number 62800089

Attention: CECIL IRBY

On 02/03/00 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.

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

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 002015
PROJECT #	: 62800089	DATE RECEIVED	: 02/03/00
PROJECT NAME	: JAQUEZ DRILLING	REPORT DATE	: 02/09/00

PIN I.D. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JQZ0002R071 (IRRIGATION WELL)	AQUEOUS	02/02/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800089
PROJECT NAME : JAQUEZ DRILLING

PINNACLE I.D.: 002015

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JQZ0002R071 (IRRIGATION WELL)	AQUEOUS	02/02/00	NA	02/03/00	1

PARAMETER	DET. LIMIT	UNITS	JQZ0002R071 (IRRIGATION WELL)
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 (%) 106
SURROGATE LIMITS (30 - 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.	: 002015
BLANK I. D.	: 020300	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 02/03/00
PROJECT #	: 62800089	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: JAQUEZ DRILLING		

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 (%)		99
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 #	: 020300	PINNACLE I.D.	: 002015
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800089	DATE ANALYZED	: 02/03/00
PROJECT NAME	: JAQUEZ DRILLING	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	21.3	109	23.2	116	3	80 - 120)	20
TOLUENE	<0.5	20.0	19.3	97	21.3	107	10	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	22.5	113	23.5	118	4	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	66.1	110	65.6	109	1	80 - 120)	20

[redacted]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 Inc.

CHAIN OF CUSTODY

DATE: 2/2/2000 PAGE: 1 OF 1

PLI Accession #: 002015

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

PROJECT MANAGER: Cecil Irby

COMPANY: Philip Services Corp.
ADDRESS: 4000 Monroe
Farmington, NM 87401
PHONE: (505)326-2262
FAX: (505)326-2388

BILL TO: EPFS
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	NUMBER OF CONTAINERS
TQZ0002R071 (Irrigation Well)	2/2/2000	1410	H2O	01	2

Analyses requested (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:)

PROJECT INFORMATION

PROJ. NO.: 628000 89
PROJ. NAME: Jaquez Drilling
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS	2
CUSTODY SEALS	Y / N / (NA)
RECEIVED INTACT	YES
BLUE ICE	A/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 ☐
Preservative HCL + Ice

RELINQUISHED BY: 1.

Signature: Steve Oller Time: 1630
Printed Name: Steve Oller Date: 2/2/2000
Company:
See reverse side (Force Magure)

RECEIVED BY: 1.

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.

Signature: Time: 1015
Printed Name: Francine Torrio Date: 2/3/00
Pinnacle Laboratories Inc.

CITIZENS DITCH - SEDIMENT

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **002076**
March 08, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name EPFS JAQUEZ
Project Number 62800089

Attention: ROBERT THOMPSON

On 02/23/00 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

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 002076
PROJECT #	: 62800089	DATE RECEIVED	: 02/23/00
PROJECT NAME	: EPFS JAQUEZ	REPORT DATE	: 03/08/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JQZ-CD-SS-01	NON-AQ	02/18/00
02	JQZ-CD-SS-02	NON-AQ	02/18/00
03	JQZ-CD-SS-03	NON-AQ	02/18/00
04	JQZ-CD-SS-04	NON-AQ	02/18/00
05	JQZ-CD-SS-05	NON-AQ	02/18/00
06	JQZ-CD-SS-06	NON-AQ	02/18/00
07	JQZ-CD-SS-56	NON-AQ	02/18/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800089
PROJECT NAME : EPFS JAQUEZ

PINNACLE I.D.: 002076

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JQZ-CD-SS-01	NON-AQ	02/18/00	02/23/00	02/23/00	1
02	JQZ-CD-SS-02	NON-AQ	02/18/00	02/23/00	02/23/00	1
03	JQZ-CD-SS-03	NON-AQ	02/18/00	02/23/00	02/23/00	1

PARAMETER	DET. LIMIT	UNITS	JQZ-CD-SS-01	JQZ-CD-SS-02	JQZ-CD-SS-03
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 (%)			112	103	103
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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800089
PROJECT NAME : EPFS JAQUEZ

PINNACLE I.D.: 002076

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JQZ-CD-SS-04	NON-AQ	02/18/00	02/23/00	02/23/00	1
05	JQZ-CD-SS-05	NON-AQ	02/18/00	02/23/00	02/29/00	1
06	JQZ-CD-SS-06	NON-AQ	02/18/00	02/23/00	02/23/00	1

PARAMETER	DET. LIMIT	UNITS	JQZ-CD-SS-04	JQZ-CD-SS-05	JQZ-CD-SS-06
BENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	0.091	< 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 (%)			107	116	111
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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800089
PROJECT NAME : EPFS JAQUEZ

PINNACLE I.D.: 002076

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	JQZ-CD-SS-56	NON-AQ	02/18/00	02/23/00	02/23/00	1

PARAMETER	DET. LIMIT	UNITS	JQZ-CD-SS-56
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 (%) 104
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
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 002076
BLANK I. D.	: 022300	DATE EXTRACTED	: 02/23/00
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 02/23/00
PROJECT #	: 62800089	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: EPFS JAQUEZ		

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 (%) 96
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 #	: 002067-01	PINNACLE I.D.	: 002076
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: 02/22/00
PROJECT #	: 62800089	DATE ANALYZED	: 02/23/00
PROJECT NAME	: EPFS JAQUEZ	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	1.09	109	1.05	105	4	(68 - 120)	20
TOLUENE	<0.025	1.00	1.05	105	1.00	100	5	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.17	117	1.11	111	5	(49 - 127)	20
TOTAL XYLENES	<0.025	3.00	3.34	111	3.15	105	6	(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 : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 002076
PROJECT # : 62800089
PROJECT NAME : EPFS JAQUEZ

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JQZ-CD-SS-01	NON-AQ	02/18/00	02/24/00	02/25/00	1
02	JQZ-CD-SS-02	NON-AQ	02/18/00	02/24/00	02/25/00	1
03	JQZ-CD-SS-03	NON-AQ	02/18/00	02/24/00	02/25/00	1

PARAMETER	DET. LIMIT	UNITS	JQZ-CD-SS-01	JQZ-CD-SS-02	JQZ-CD-SS-03
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C22-C36	20	MG/KG	< 20	< 20	< 20
CALCULATED SUM:					
SURROGATE:					
O-TERPHENYL (%)			105	106	108
SURROGATE LIMITS	(66 - 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 RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 002076
PROJECT # : 62800089
PROJECT NAME : EPFS JAQUEZ

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	JQZ-CD-SS-04	NON-AQ	02/18/00	02/24/00	02/25/00	1
05	JQZ-CD-SS-05	NON-AQ	02/18/00	02/24/00	02/25/00	1
06	JQZ-CD-SS-06	NON-AQ	02/18/00	02/24/00	02/25/00	1

PARAMETER	DET. LIMIT	UNITS	JQZ-CD-SS-04	JQZ-CD-SS-05	JQZ-CD-SS-06
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C22-C36	20	MG/KG	< 20	< 20	< 20
CALCULATED SUM:					
SURROGATE:					
O-TERPHENYL (%)			106	110	104
SURROGATE LIMITS	(66 - 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 RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800089
PROJECT NAME : EPFS JAQUEZ

PINNACLE I.D.: 002076

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	JQZ-CD-SS-56	NON-AQ	02/18/00	02/24/00	02/25/00	1

PARAMETER	DET. LIMIT	UNITS	JQZ-CD-SS-56
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10
FUEL HYDROCARBONS, C22-C36	20	MG/KG	< 20
CALCULATED SUM:			
SURROGATE:			
O-TERPHENYL (%)			109
SURROGATE LIMITS	(66 - 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 RESULTS
REAGENT BLANK

TEST_	: EPA 8015 MODIFIED (DIRECT INJECT)		
BLANK I.D.	: 022400	PINNACLE I.D.	: 002076
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: 02/24/00
PROJECT #	: 62800089	DATE ANALYZED	: 02/24/00
PROJECT NAME	: EPFS JAQUEZ	SAMPLE MATRIX	: NON-AQ

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 10
FUEL HYDROCARBONS, C22-C36	MG/KG	< 20

SURROGATE:
TERPHENYL (%) 107
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 #	: 002081-01	PINNACLE I.D.	: 002076
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: 02/24/00
PROJECT #	: 62800089	DATE ANALYZED	: 02/25/00
PROJECT NAME	: EPFS JAQUEZ	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	<10	200	220	110	219	110	0	(56 - 148)	20

CHEMIST NOTES:

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2494

Project Name EPFS JAQUEZ
Project Number 62800089 Phase . Task 35 .
Samplers ROBERT THOMPSON
Laboratory Name PINNACLE LABS
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	TPH 8015 MOD. (DRO)	BTEX 8021	Accession # 002076 PLI Lab ID	Comments
JQZ-CD-SS-01	2/18/00	1430	SOIL	1	X	X	01	
JQZ-CD-SS-02	2/18/00	1410	SOIL	1	X	X	02	
JQZ-CD-SS-03	2/18/00	1400	SOIL	1	X	X	03	
JQZ-CD-SS-04	2/18/00	1440	SOIL	1	X	X	04	
JQZ-CD-SS-05	2/18/00	1520	SOIL	1	X	X	05	
JQZ-CD-SS-06	2/18/00	1535	SOIL	1	X	X	06	
JQZ-CD-SS-SD	2/18/00	1540	SOIL	1	X	X	07	

Relinquished by:

Signature	Date	Time
Robert Thompson	2/22/00	1015

Received By:

Signature	Date	Time
Jeanine Jaramillo	2/23/00	1020

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: GREYHOUND LINES Airbill No. GLI 160 665 040 8

Shipping and Lab Notes:

PLEASE SEND MORE GREYHOUND SHIPPING LABELS AND MORE SOIL SAMPLE JARS.

Rcvd 4°C

Quantitation Report (QT Reviewed)

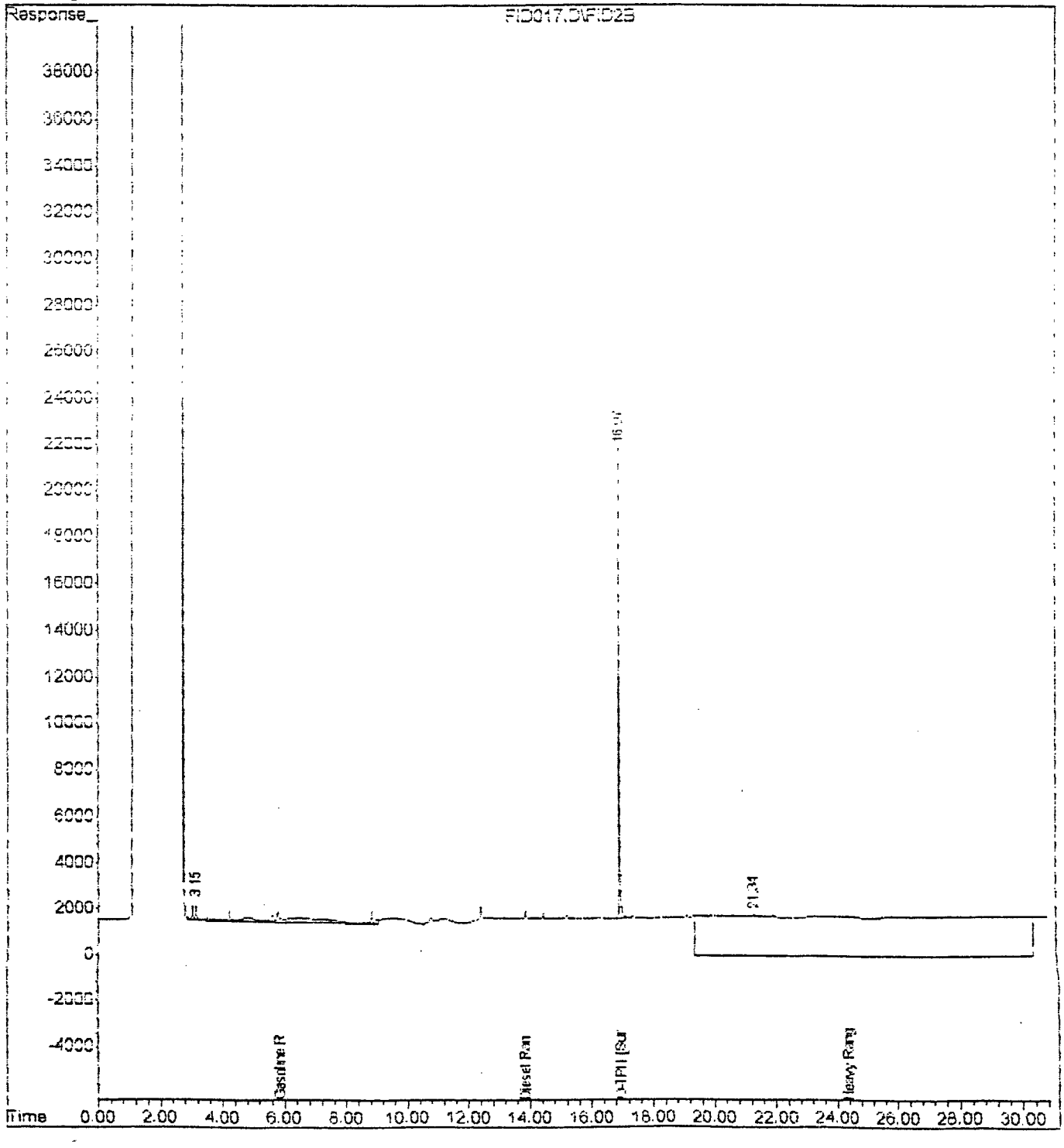
Data File : C:\HPCHEM\2\DATA\022400\FID017.D
Acq On : 25 Feb 2000 1:54
Sample : 002076-01
Misc :
IntFile : EVENTS.E

Vial: 17
Operator: cff
Inst : FID-1
Multiplr: 1.00

Quant Time: Mar 1 15:53 2000 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 (QT Reviewed)

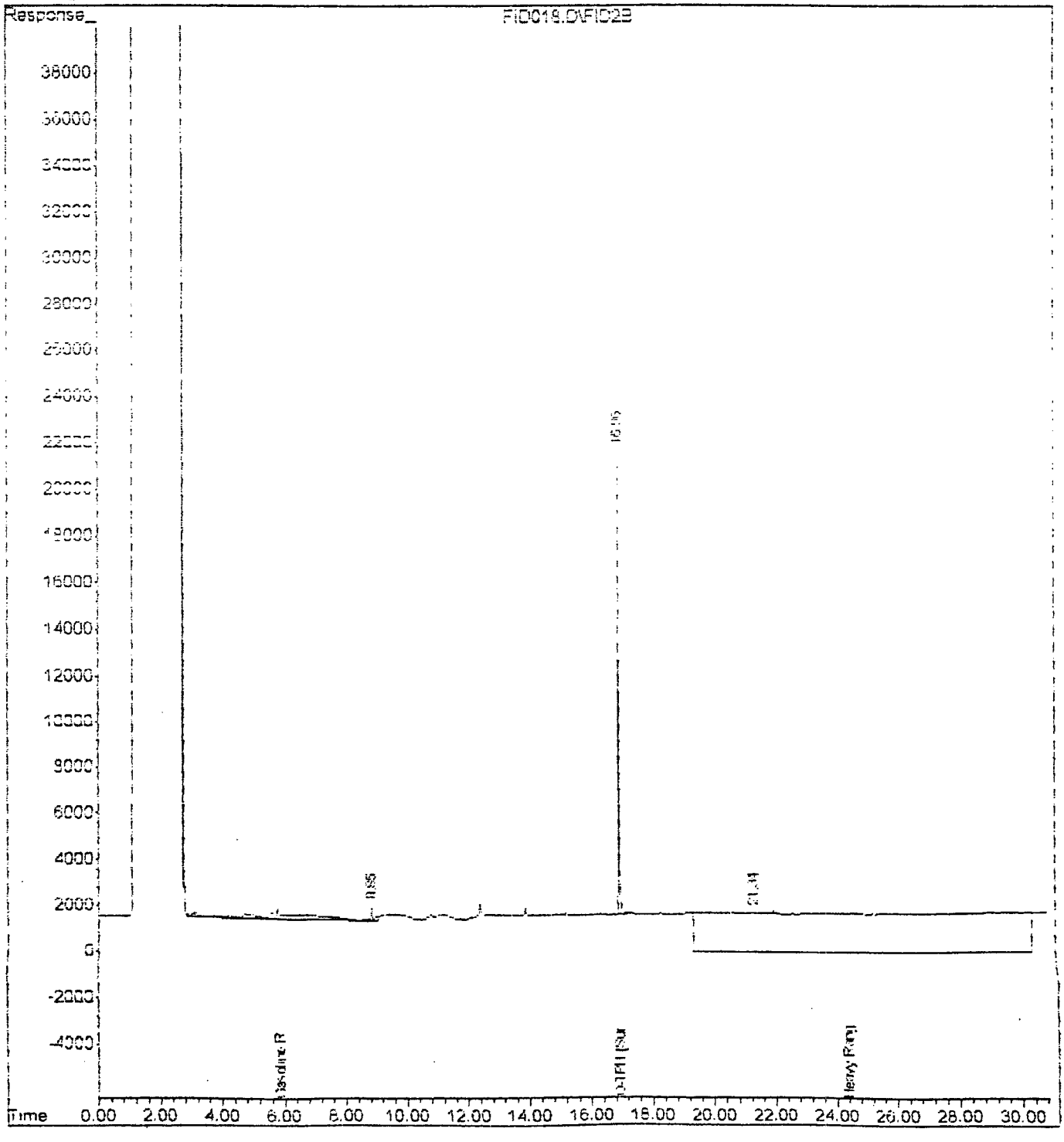
Data File : C:\HPCHEM\2\DATA\022400\FID018.D
Acq On : 25 Feb 2000 2:43
Sample : 002076-02
Misc :
IntFile : EVENTS.E

Vial: 18
Operator: cff
Inst : FID-1
Multiplr: 1.00

Quant Time: Mar 1 15:54 2000 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 (QT Reviewed)

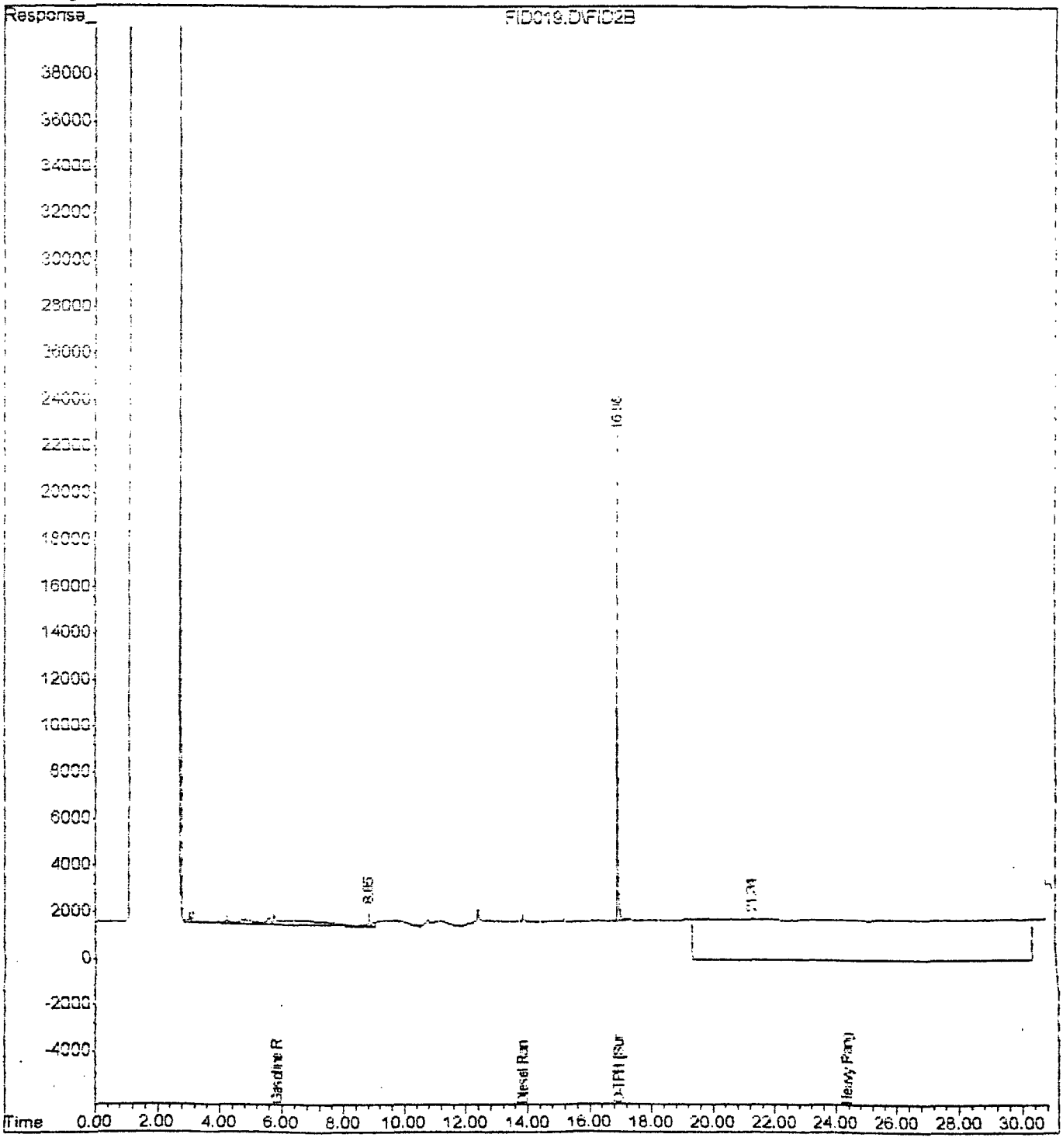
Data File : C:\HPCHEM\2\DATA\022400\FID019.D
Acq On : 25 Feb 2000 3:31
Sample : 002076-03
Misc :
IntFile : EVENTS.E

Vial: 19
Operator: cff
Inst : FID-1
Multiplr: 1.00

Quant Time: Mar 1 15:56 2000 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 (Not Reviewed)

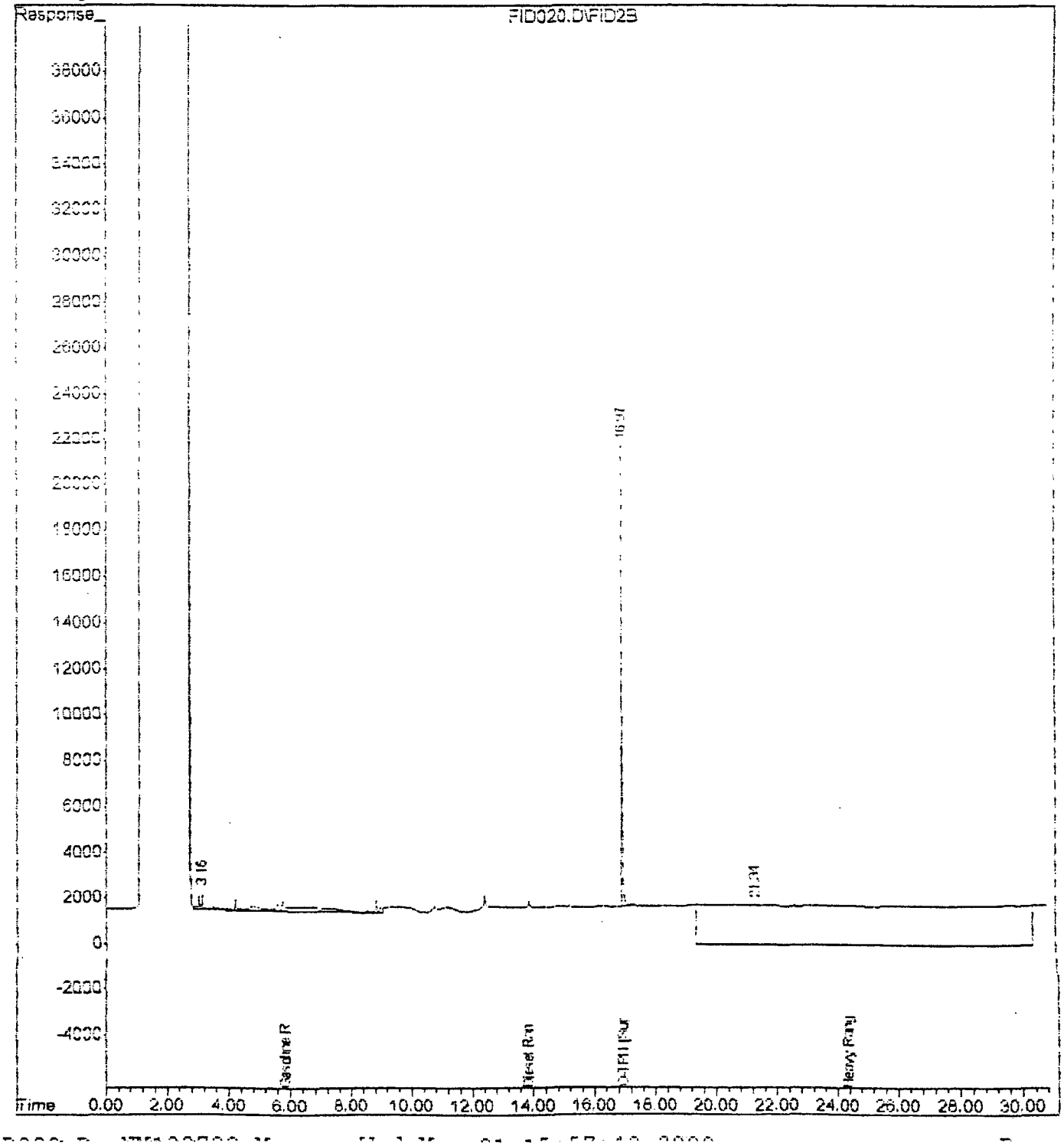
Data File : C:\HPCHEM\2\DATA\022400\FID020.D
Acq On : 25 Feb 2000 4:20
Sample : 002076-04
Misc :
IntFile : EVENTS.E

Vial: 20
Operator: cff
Inst : FID-1
Multiplr: 1.00

Quant Time: Mar 1 15:57 2000 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 (QT Reviewed)

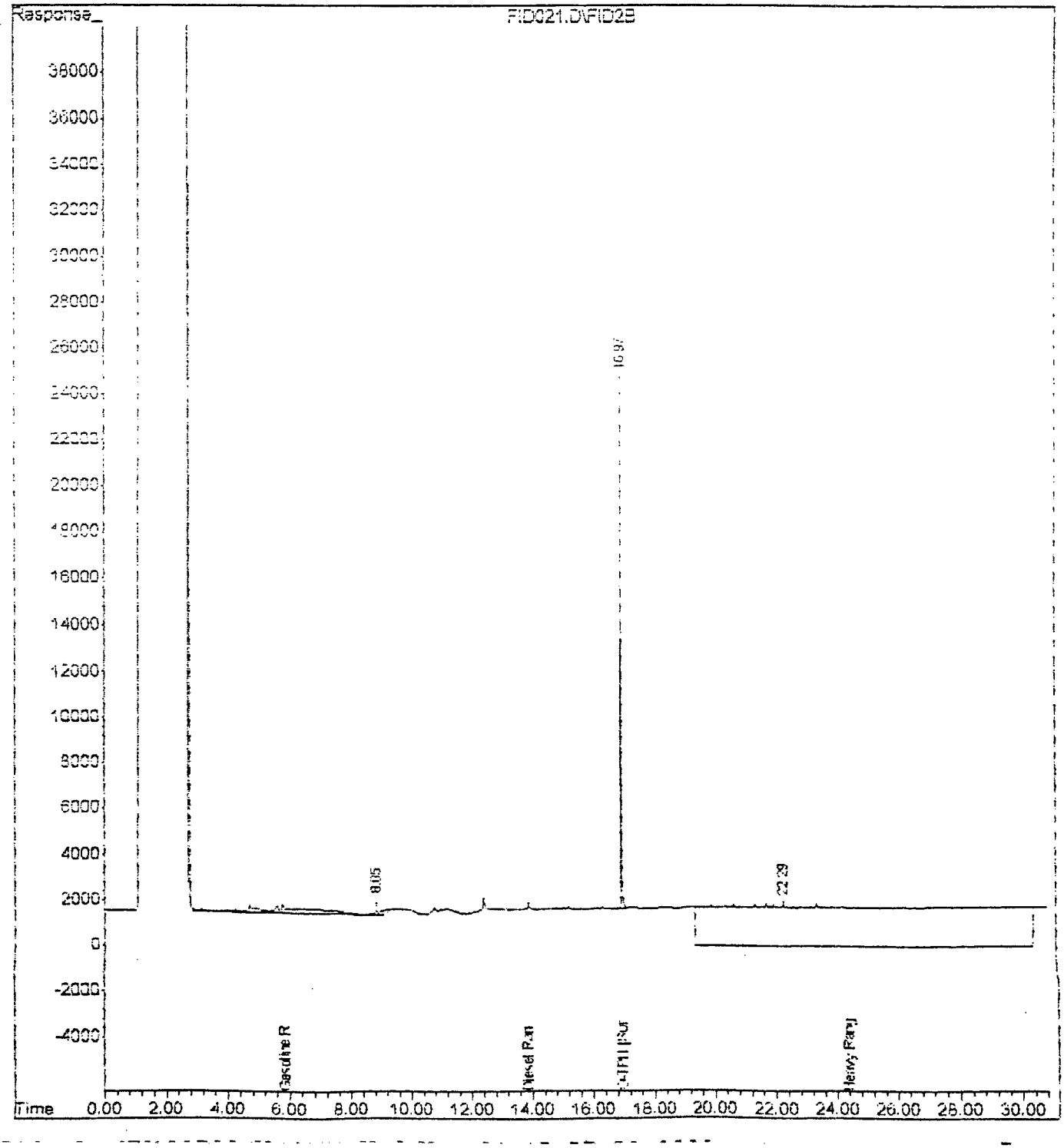
Data File : C:\HPCHEM\2\DATA\022400\FID021.D
Acq On : 25 Feb 2000 5:07
Sample : 002076-05
Misc :
IntFile : EVENTS.E

Vial: 21
Operator: cff
Inst : FID-1
Multiplr: 1.00

Quant Time: Feb 28 14:32 2000 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 (QT Reviewed)

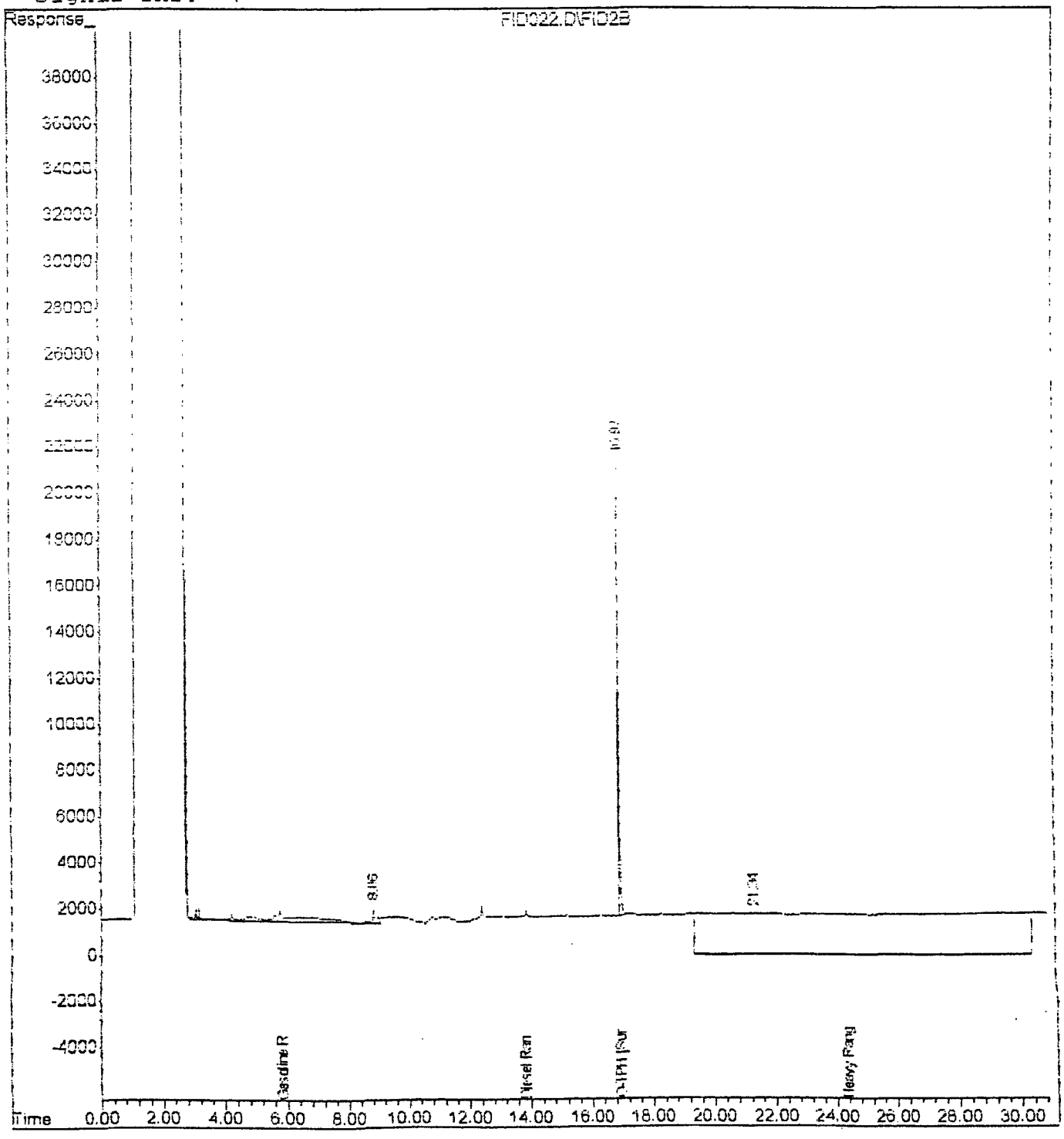
Data File : C:\HPCHEM\2\DATA\022400\FID022.D
Acq On : 25 Feb 2000 5:54
Sample : 002076-06
Misc :
IntFile : EVENTS.E

Vial: 22
Operator: cff
Inst : FID-1
Multiplr: 1.00

Quant Time: Mar 1 15:59 2000 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 :



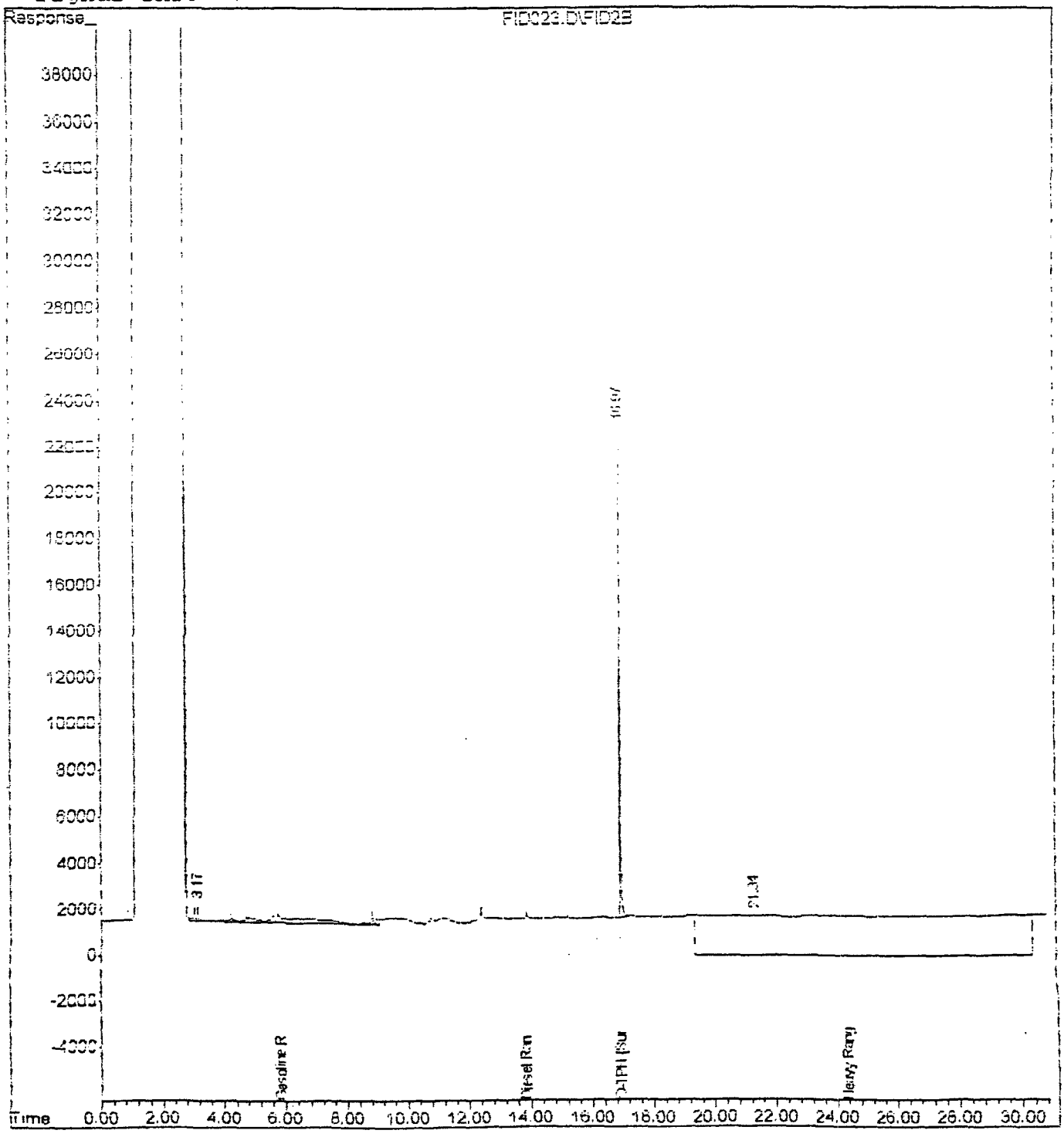
Data File : C:\HPCHEM\2\DATA\022400\FID023.D
Acq On : 25 Feb 2000 6:41
Sample : 002076-07
Misc :
IntFile : EVENTS.E

Vial: 23
Operator: cff
Inst : FID-1
Multiplr: 1.00

Quant Time: Mar 1 16:06 2000 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

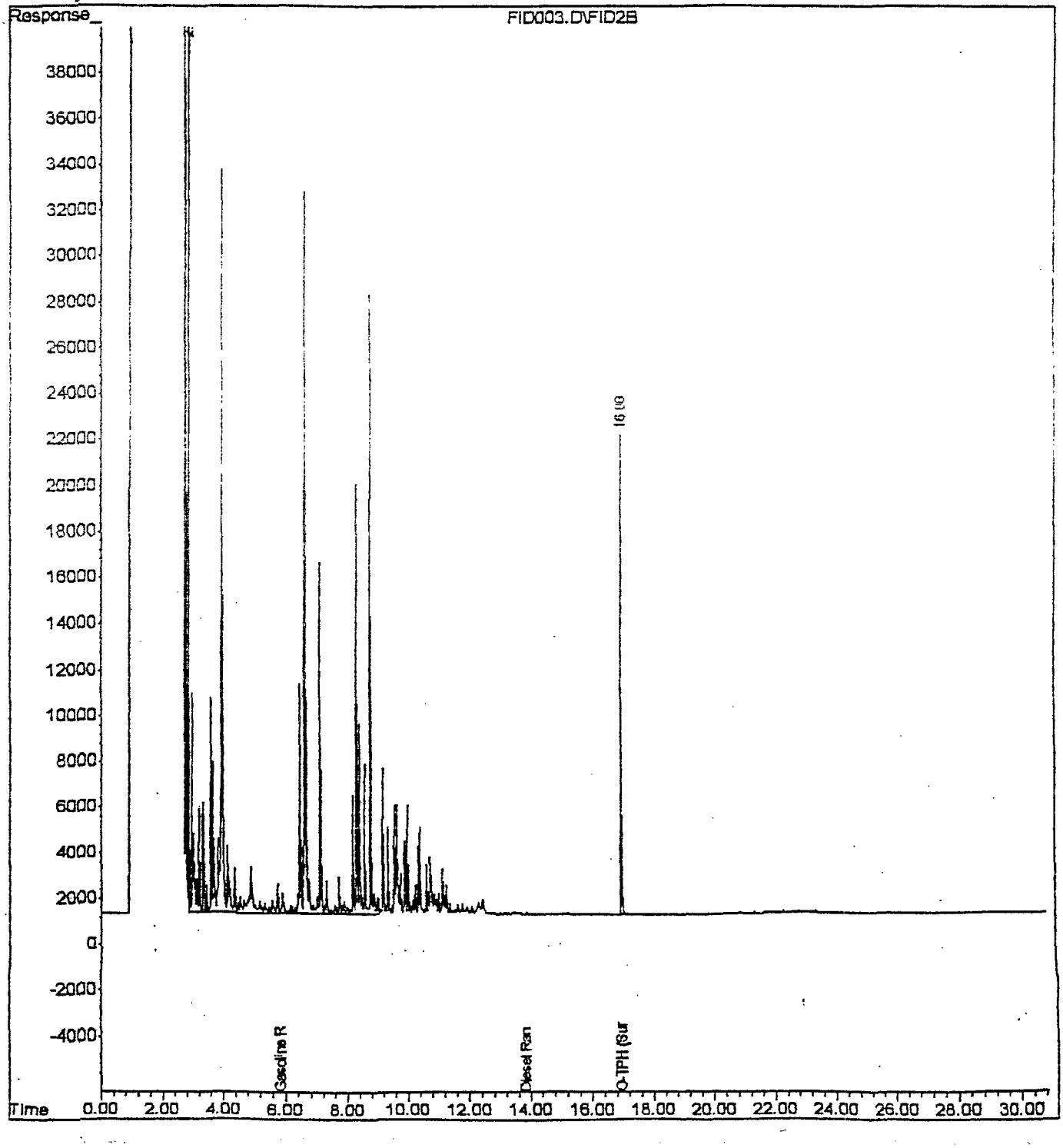
Data File : C:\HPCHEM\2\DATA\111299\FID003.D
Acq On : 12 Nov 1999 11:21
Sample : gasoline
Misc : at 200ug/mL
IntFile : EVENTS.E

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 :



Quantitation Report

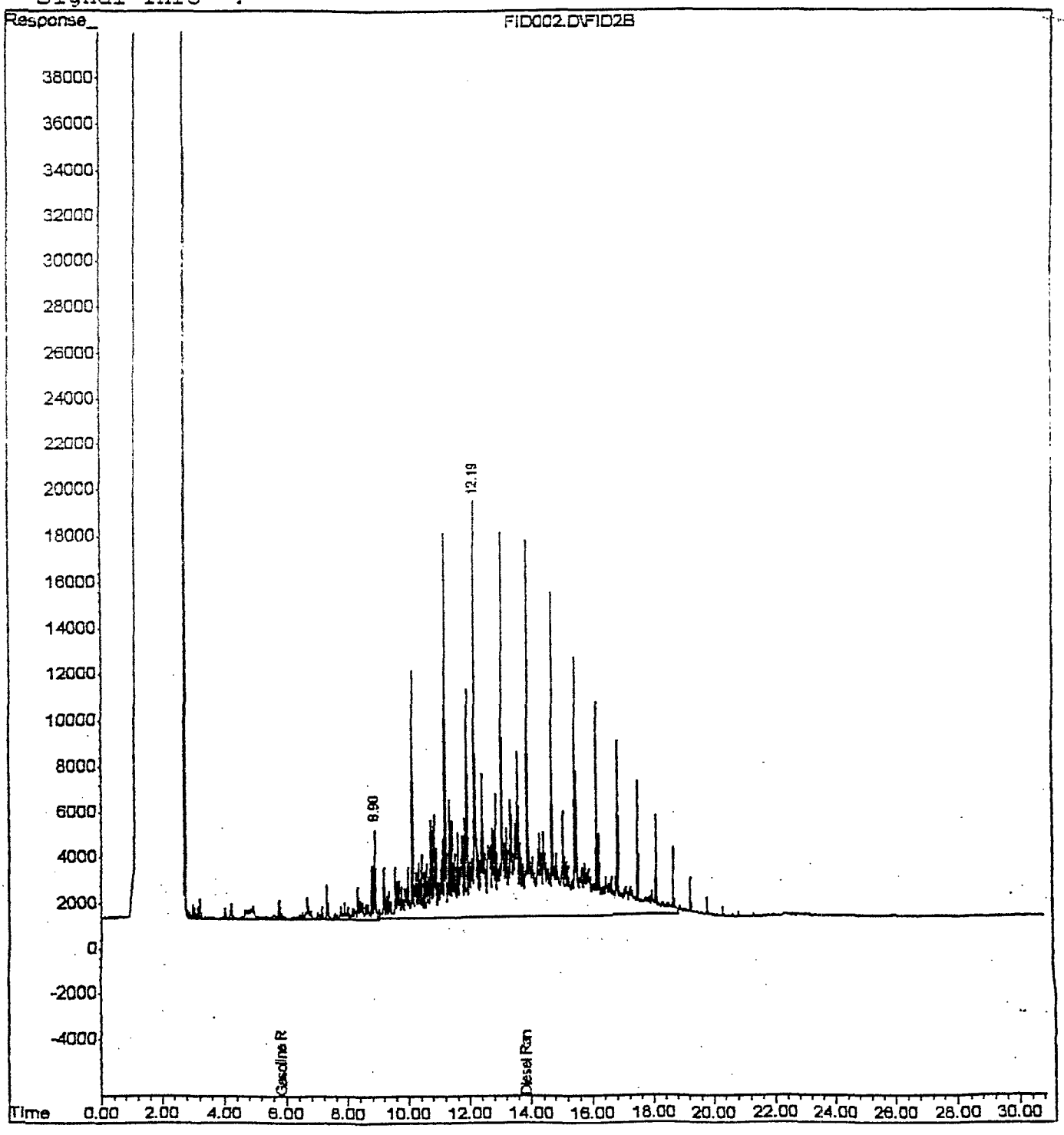
Data File : C:\HPCHEM\2\DATA\111299\FID002.D
Acq On : 12 Nov 1999 10:32
Sample : diesel
Misc : at 200ug/mL
IntFile : EVENTS.E

Vial: 2
Operator: CFF
Inst : FID-1
Multiplr: 1.00

Quant Time: Nov 12 11:42 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

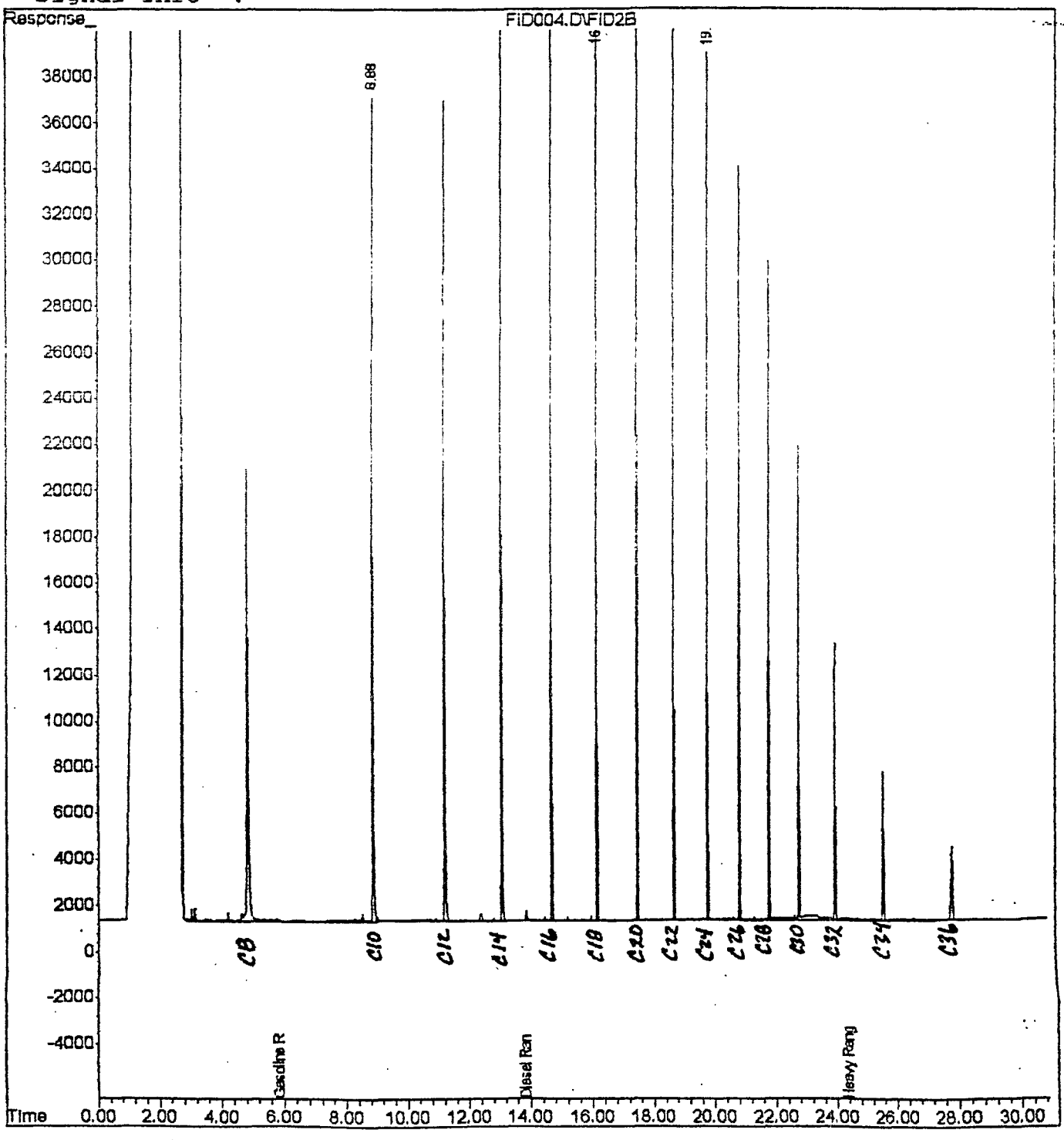
Data File : C:\HPCHEM\2\DATA\110899\FID004.D
Acq On : 8 Nov 1999 13:29
Sample : rt std gc4-14-06
Misc :
IntFile : EVENTS.E

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 :



SEEP

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **008089**
August 28, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name JAQUEZ SVE
Project Number 62800165

Attention: DON FERNALD

On 08/24/00 Pinnacle Laboratories, 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.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 008089
PROJECT #	: 62800165	DATE RECEIVED	: 08/24/00
PROJECT NAME	: JAQUEZ SVE	REPORT DATE	: 08/29/00

PIN O. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0008-SEEP	AQUEOUS	08/22/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800165
PROJECT NAME : JAQUEZ SVE

PINNACLE I.D.: 008089

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
1	JAQ-0008-SEEP	AQUEOUS	08/22/00	NA	08/25/00	2

PARAMETER	DET. LIMIT	UNITS	JAQ-0008-SEEP
BENZENE	0.5	UG/L	< 1.0
TOLUENE	0.5	UG/L	< 1.0
ETHYLBENZENE	0.5	UG/L	< 1.0
TOTAL XYLENES	0.5	UG/L	< 1.0

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

CHEMIST NOTES:
necessary sample dilution due to the foamy nature of the sample.

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.	: 008089
BLANK I. D.	: 082500	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 08/25/00
PROJECT #	: 62800165	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: JAQUEZ SVE		

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 (%)		101
SURROGATE LIMITS:	(80 - 120)	

CHE[redacted] NOTES:
N/A

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

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

EST	: EPA 8021 MODIFIED		
SMSD #	: 082500	PINNACLE I.D.	: 008089
LIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
ROJECT #	: 62800165	DATE ANALYZED	: 08/25/00
ROJECT NAME	: JAQUEZ SVE	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

ARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
ENZENE	<0.5	20.0	18.6	93	18.7	94	1	(80 - 120)	20
OLUENE	<0.5	20.0	20.2	101	19.2	96	5	(80 - 120)	20
THYLBENZENE	<0.5	20.0	20.7	104	20.3	102	2	(80 - 120)	20
OTAL XYLENES	<0.5	60.0	61.9	103	61.1	102	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

008089

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2640

Project Name JAQUEZ SVE
Project Number 62800165 Phase . Task 55
Samplers J. WAGNON
Laboratory Name PINNACLE LABS
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Lab ID #	Comments
JAQ-0008-SEEP	8/22/00	1535	H2O	3	X	01	SEEPAGE FROM JAQUEZ CORN FIELD

Relinquished by:

Signature	Date	Time
Jon Wagnon	8/23/00	1500

Received By:

Signature	Date	Time
Francine Jaime	8/24/00	0930

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: GREYHOUND ~~LABS~~ LINES Airbill No. GLI1606918577

Shipping and Lab Notes:

Bill EDFS per Don Fernald
Rec'd @ 4°C

PE-176 4/96

CITIZENS DITCH – SURFACE WATER

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006018**
June 07, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: Robert Thompson/LeAudra Stanley

On 06/02/00 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.

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

H. Mitchell Rubenstein, Ph. D.
Gerneral Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006018
PROJECT #	: 62800107	DATE RECEIVED	: 06/02/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 06/07/00

PIN D. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0006-CDUG	AQUEOUS	06/01/00
02	JAQ-0006-CDDG	AQUEOUS	06/01/00

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 : PHILIP ENVIRONMENTAL PINNACLE I.D.: 006018
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0006-CDUG	AQUEOUS	06/01/00	NA	06/05/00	1
02	JAQ-0006-CDDG	AQUEOUS	06/01/00	NA	06/05/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0006-CDUG	JAQ-0006-CDDG
BENZENE	0.5	UG/L	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 0.5
SURROGATE:				
BROMOFLUOROBENZENE (%)			106	106
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

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.	: 006018
BLANK I. D.	: 060500	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 06/05/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		108
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

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 #	: 006015-01	PINNACLE I.D.	: 006018
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 06/05/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	18.6	93	19.2	96	3	(80 - 120)	20
TOLUENE	<0.5	20.0	20.2	101	20.4	102	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.9	105	21.6	108	3	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	63.8	106	64.9	108	2	(80 - 120)	20

CHEM NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

006018

COC Serial No. C 2566

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task 0301
Samplers R. THOMPSON
Laboratory Name PINNACLE LABS
Laboratory Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX	Lab ID #	Comments
JAG-0006-CDUG	6/1/00	1230	H_2O	2	X	01	CITIZEN IRRIGATION DITCH H_2O SAMPLE
JAG-0006-CDDG	6/1/00	1230	H_2O	2	X	02	CITIZEN IRRIGATION DITCH H_2O SAMPLE

Relinquished by:

Signature	Date	Time
Jennifer L Thompson	6/2/00	0800

Received By:

Signature	Date	Time
Suzanne Mills	6/2/00	1130

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: GREYHOUND LINES

Airbill No. BLI1606918610

Shipping and Lab Notes:

Rec'd @ 4.3°c

PE-176 4/95

PINNACLE LABORATORIES

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

SEP 15 2000

Pinnacle Lab ID number **009052**
September 13, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 09/08/00 Pinnacle Laboratories, 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.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 009052
PROJECT #	: 62800107	DATE RECEIVED	: 09/08/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 09/13/00

PIN I.D. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ-0009-CD DG	AQUEOUS	09/06/00
02	JAQ-0009-CD UG	AQUEOUS	09/06/00

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 : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 009052
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0009-CD DG	AQUEOUS	09/06/00	NA	09/06/00	1
02	JAQ-0009-CD UG	AQUEOUS	09/06/00	NA	09/06/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0009-CD DG	JAQ-0009-CD UG
BENZENE	0.5	UG/L	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 0.5
SURROGATE:				
BROMOFLUOROBENZENE (%)			107	107
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

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

PINNACLE LABORATORIES

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 009052
BLANK I. D.	: 091100	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 09/11/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

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 (%)		104
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 #	: 009051-01	PINNACLE I.D.	: 009052
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 09/11/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	20.1	101	19.7	99	2	(80 - 120)	20
TOLUENE	<0.5	20.0	21.0	105	21.1	106	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	22.1	111	21.7	109	2	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	66.0	110	65.7	110	0	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

009055

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2451

Project Name EPFS quarterly Sampling
Project Number 62900107 Phase . Task 0301.
Samplers C.Maez
Laboratory Name pinnacle
Location Albq. N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Lab ID#	Comments
JAQ-0009-CD OG	09-06-00	1305	H20	2	X	01	JAquez
JAQ-0009-CD-UG	09-06-00	1310	H20	2	X	02	Jaquez

Relinquished by:

Signature	Date	Time
Chris A. Maez	09-07-00	16:00

Received By:

Signature	Date	Time
Marianne Linton	9/8/00	1420

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) $HgCl_2$
- ☐ Other (Specify)

Carrier: Greyhound Bus Lines

Airbill No.

Shipping and Lab Notes:

Kept @ 4°c

PE-176 4/95

PHILIP

Chain of Custody Record

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

COC Serial No. C 2451

Project Name EDFS quarterly Sampling
Project Number 92400107 Phase . Task
Samplers C.Maez
Laboratory Name pinnacle
Location Albq. NM.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0009-CD DG	09-06-00					JAQUEZ
JAQ-0009-CD-UG	09-06-00					JAQUEZ

Relinquished by:

Signature	Date	Time
Chris A. Maez		

Received By:

Signature	Date	Time

Samples Iced: ☐ Yes ☐ No

Carrier:

Airbill 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) $HgCl_2$
- ☐ Other (Specify)

Shipping and Lab Notes:

E-176 4/95

PINNACLE LABORATORIES

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

RECEIVED
JAN 2 6 2001

Pinnacle Lab ID number **101069**
January 23, 2001

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name JAQUEZ SVE
Project Number 62800165

Attention: ROBERT THOMPSON/SCOTT POPE

On 01/23/01 Pinnacle Laboratories, 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.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 101069
PROJECT #	: 62800165	DATE RECEIVED	: 01/23/01
PROJECT NAME	: JAQUEZ SVE	REPORT DATE	: 01/23/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
101069 - 01	JAQ-0101-CDUG	AQUEOUS	01/19/01
101069 - 02	JAQ-0101-CDDG	AQUEOUS	01/19/01
101069 - 03	TRIP BLANK	AQUEOUS	01/22/01

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800165
PROJECT NAME : JAQUEZ SVE

PINNACLE I.D.: 101069

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JAQ-0101-CDUG	AQUEOUS	01/19/01	NA	01/23/01	1
02	JAQ-0101-CDDG	AQUEOUS	01/19/01	NA	01/23/01	1
03	TRIP BLANK	AQUEOUS	01/22/01	NA	01/23/01	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0101-CDUG	JAQ-0101-CDDG	TRIP BLANK
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			101	100	101
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.	: 101069
BLANK I. D.	: 012301	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 01/23/01
PROJECT #	: 62800165	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: JAQUEZ SVE		

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 (%)		101
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 #	: 101069-01	PINNACLE I.D.	: 101069
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800165	DATE ANALYZED	: 01/23/01
PROJECT NAME	: JAQUEZ SVE	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	19.9	100	18.7	94	6	(80 - 120)	20
TOLUENE	<0.5	20.0	19.0	95	17.6	88	8	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.6	103	19.3	97	7	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	60.0	100	56.1	94	7	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

PLI ID#: 101069

COC Serial No. C 2808

Project Name JAQUEZ S.V.E.
Project Number 62800165 Phase . Task 55
Samplers C Maez
Laboratory Name PINNACLE
Location ALBQ NM.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Lab ID #	Comments
JAQ-0101-CDUG	01-19-01	1709	H_2O	2	X	01	Citizens Ditch JAQUEZ
JAQ-0101-CDDG	01-19-01	1717	H_2O	2	X	02	Citizens Ditch JAQUEZ
Trip Blank	01-22-01	1530	H_2O	1	X	03	

Relinquished by:

Signature	Date	Time
Chris A. Maez	01-22-01	0800

Received By:

Signature	Date	Time
Jimenez Juno	1/23/01	0950

Samples Iced: ☑ Yes ☐ No

Carrier: GREYHOUND Airbill No. 811606919963

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) $HgCl_2$
- ☐ Other (Specify)

Shipping and Lab Notes:

Rec'd @ 8° C On Ice

E-176 4/95

PHILIP

Chain of Custody Record

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

COC Serial No. C 2808

Project Name JAQuez SITE

Project Number 62300165 Phase . Task 55

Samplers C Maez

Laboratory Name PINNACLE

Location ALBQ NM.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0101-CDUG	01-19-01	1701	W			Citizens Ditch JAQuez
JAQ-0101-CDDG	01-19-01	1712	W			Citizens Ditch JAQuez
Trip Blank	01-22-01	15 32	W			

Relinquished by:

Signature	Date	Time
Chris A Maez	01-[illegible]-01	[illegible]

Received By:

Signature	Date	Time

Samples Iced: ☑ Yes ☐ No

Carrier: [illegible]

Airbill No: 811606919963

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) HCL 2
- ☐ [illegible] (Specify)

Shipping and Lab Notes:

PE-176 4/95

Appendix G - 2000 Air Analytical Data

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006027**
June 07, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 37401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: Robert Thompson/LeAudra Stanley

On 06/06/00 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592 pending), received a request to analyze air 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.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006027
PROJECT #	: 62800107	DATE RECEIVED	: 06/06/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 06/07/00

PIN D. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
1	JAQEFF-T-0	AIR	06/05/00
2	JAQEFF-T-5	AIR	06/05/00
3	JAQEFF-T-20	AIR	06/05/00
4	JAQEFF-T-60	AIR	06/05/00
5	JAQEFF-T-120	AIR	06/05/00
6	JAQEFF-T-240	AIR	06/05/00
7	JAQEFF-T-480	AIR	06/05/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006027

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
1	JAQEFF-T-0	AIR	06/05/00	NA	06/06/00	1
2	JAQEFF-T-5	AIR	06/05/00	NA	06/06/00	1
3	JAQEFF-T-20	AIR	06/05/00	NA	06/06/00	1

PARAMETER	DET. LIMIT	UNITS	JAQEFF-T-0	JAQEFF-T-5	JAQEFF-T-20
BENZENE	0.05	**MG/M ^{3}**	**2.8**	**2.2**	**1.9**
TOLUENE	0.05	**MG/M ^{3}**	**1.4**	**1.0**	**0.82**
ETHYLBENZENE	0.05	MG/M ^{3}	< 0.05	< 0.05	< 0.05
TOTAL XYLENES	0.05	**MG/M ^{3}**	**2.8**	**2.4**	**1.9**
			3.05		
SURROGATE:					
BROMOFLUOROBENZENE (%)			120	108	113
SURROGATE LIMITS	(74 - 120)				

CHEMIST NOTES:
N/A

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006027

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
4	JAQEFF-T-60	AIR	06/05/00	NA	06/06/00	1
5	JAQEFF-T-120	AIR	06/05/00	NA	06/06/00	1
3	JAQEFF-T-240	AIR	06/05/00	NA	06/06/00	1

PARAMETER	DET. LIMIT	UNITS	JAQEFF-T-60	JAQEFF-T-120	JAQEFF-T-240
BENZENE	0.05	**MG/M ^{3}**	**1.6**	**1.5**	**2.2**
TOLUENE	0.05	**MG/M ^{3}**	**0.83**	**0.83**	**0.93**
ETHYLBENZENE	0.05	MG/M ^{3}	< 0.05	< 0.05	< 0.05
TOTAL XYLENES	0.05	**MG/M ^{3}**	**1.7**	**1.7**	**1.5**
SURROGATE:					
BROMOFLUOROBENZENE (%)			117	119	107
SURROGATE LIMITS	(74 - 120)				

CHEMIST NOTES:
N/A

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006027

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
7	JAQEFF-T-480	AIR	06/05/00	NA	06/06/00	1

PARAMETER	DET. LIMIT	UNITS	JAQEFF-T-480
BENZENE	0.05	**MG/M ^{3}**	**4.9**
TOLUENE	0.05	**MG/M ^{3}**	**1.6**
ETHYLBENZENE	0.05	**MG/M ^{3}**	**0.05**
TOTAL XYLENES	0.05	**MG/M ^{3}**	**1.0**

SURROGATE:
BR[illegible]OFLUOROBENZENE (%) 120
SURROGATE LIMITS (74 - 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.	: 006027
BLANK I. D.	: 060600	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 06/06/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AIR
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

PARAMETER	UNITS	
BENZENE	MG/M ^{3}	<0.05
TOLUENE	MG/M ^{3}	<0.05
ETHYLBENZENE	MG/M ^{3}	<0.05
TOTAL XYLENES	MG/M ^{3}	<0.05

SURROGATE:
BROMOFLUOROBENZENE (%) 106
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A

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 #	: 006024-01	PINNACLE I.D.	: 006027
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 06/06/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	SAMPLE MATRIX	: AIR
		UNITS	: MG/M

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.05	2.00	1.93	97	1.98	99	3	(80 - 120)	20
TOLUENE	<0.05	2.00	2.13	107	2.26	113	6	(80 - 120)	20
ETHYLBENZENE	<0.05	2.00	2.20	110	2.22	111	1	(80 - 120)	20
TOTAL XYLENES	<0.05	6.00	6.68	111	6.72	112	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

006027

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

COC Serial No. C 2575

Project Name EPFS QUARTerly SAMPLING

Project Number 62800107 Phase . Task

Samplers S. STELLAVATO

Laboratory Name PINNACLE LAB

Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX	Lab ID #	Comments
JAQEff-t-0	6/5/00	1000	AIR	1	X	01	
JAQEff-t-5	6/5/00	1005	AIR	1	X	02	
JAQEff-t-20	6/5/00	1020	AIR	1	X	03	
JAQEff-t-60	6/5/00	1100	AIR	1	X	04	
JAQEff-t-120	6/5/00	1200	AIR	1	X	05	
JAQEff-t-240	6/5/00	1400	AIR	1	X	06	
JAQEff-t-480	6/5/00	1800	AIR	1	X	07	

Relinquished by:

Signature	Date	Time
Stephen Stellavato	6/6/00	1000

Received By:

Signature	Date	Time
Francine Jones	6/6/00	1640

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: Please invoice EPFS directly. Please send results to Philip Services and a copy to EPFS.

PE-176 4/95

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2575

Project Name EPFS Quarterly Sampling

Project Number 62800107 Phase . Task

Samplers S. Stellavato

Laboratory Name Pinnacle Lab

Location Albuquerque, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQEff-t-0	6/5/00	1000	AIR	1		
JAQEff-t-5	6/5/00	1005	AIR	1		
JAQEff-t-20	6/5/00	1020	AIR	1		
JAQEff-t-60	6/5/00	1100	AIR	1		
JAQEff-t-120	6/5/00	1200	AIR	1		
JAQEff-t-240	6/5/00	1400	AIR	1		
JAQEff-t-480	6/5/00	1800	AIR	1		

Relinquished by:

Signature	Date	Time
Stephen Stellavato	6/6/00	

Received By:

Signature	Date	Time

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: [illegible] directly. Please [illegible] and a copy to [illegible]

PE-176 4/95

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006031**
June 12, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 06/07/00 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592 pending), received a request to analyze air 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.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

LIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006031
ROJECT #	: 62800107	DATE RECEIVED	: 06/07/00
ROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 06/12/00

:N			DATE
). #	CLIENT DESCRIPTION	MATRIX	COLLECTED
1	JAQEFF-T-1740	AIR	06/06/00

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

GAS CHROMATOGRAPHY RESULTS

EST : EPA 8021 MODIFIED
LIENT : PHILIP ENVIRONMENTAL
ROJECT # : 62800107
ROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006031

AMPLE). #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
	JAQEFF-T-1740	AIR	06/06/00	NA	06/08/00	1

ARAMETER	DET. LIMIT	UNITS	JAQEFF-T-1740
ENZENE	0.05	**MG/M ^{3}**	**3.8**
OLUENE	0.05	**MG/M ^{3}**	**0.37**
THYLBENZENE	0.05	**MG/M ^{3}**	**0.35**
OTAL XYLENES	0.05	**MG/M ^{3}**	**0.36**

URROGATE:
RO[redacted]LUOROBENZENE (%) 136*
URROGATE LIMITS (74 - 120)

HEMIST NOTES:
= High surrogate due to matrix interference.

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

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

EST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 006031
LANK I. D.	: 060800	DATE EXTRACTED	: NA
LIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 06/08/00
ROJECT #	: 62800107	SAMPLE MATRIX	: AIR
ROJECT NAME	: EPFS QUARTERLY SAMPLING		

ARAMETER	UNITS	
ENZENE	MG/M ^{3}	<0.05
OLUENE	MG/M ^{3}	<0.05
THYLBENZENE	MG/M ^{3}	<0.05
OTAL XYLENES	MG/M ^{3}	<0.05

URROGATE:
ROMOFLUOROBENZENE (%) 114
URROGATE LIMITS: (80 - 120)
HEM'CT NOTES:
/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 #	: 060800	PINNACLE I.D.	: 006031
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 06/08/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	SAMPLE MATRIX	: AIR
		UNITS	: MG/M

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.05	2.00	2.39	120	2.20	110	8	(80 - 120)	20
TOLUENE	<0.05	2.00	2.10	105	2.24	112	6	(80 - 120)	20
ETHYLBENZENE	<0.05	2.00	2.21	111	2.25	113	2	(80 - 120)	20
TOTAL XYLENES	<0.05	6.00	6.75	113	6.83	114	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

0060031

COC Serial No. C 2576

Project Name EPFS Quarterly Sampling
Project Number 02800107 Phase . Task
Samplers S Stellavato
Laboratory Name Pinnacle Lab
Location Albuquerque, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX				Lab ID #								Comments
JAQEff-t-1740	6/6/00	1500	Air	1	X				01								

Relinquished by:

Signature	Date	Time
Stephen Stellavato	6/6/00	1600

Received By:

Signature	Date	Time
Francine Jaime	6/7/00	1030

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: Please invoice El Paso Field Services directly. Please send results to Philip Services and a copy to EPFS.

PE-176 4/95

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2576

Project Name EPFS Quarterly Sampling
Project Number 62800107 Phase . Task
Samplers S Stellavato
Laboratory Name Annacle Lab
Location Albuquerque, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQEff-t-1742	6/6/00	1500		1		

Relinquished by:

Signature	Date	Time
Stephen Stellavato	6/6/00	

Received By:

Signature	Date	Time

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: U.S. Bio Field Services
will bill to Philip Services

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006044**
June 12, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 06/09/00 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592 pending), received a request to analyze **air** sampies. 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.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

LIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006044
ROJECT #	: 62800107	DATE RECEIVED	: 06/09/00
ROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 06/12/00

IN			DATE
). #	CLIENT DESCRIPTION	MATRIX	COLLECTED
1	JAQEFF-T-4665	AIR	06/08/00

PINNACLE LABORATORIES

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

GAS CHROMATOGRAPHY RESULTS

EST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006044

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
1	JAQEFF-T-4665	AIR	06/08/00	NA	06/11/00	1

PARAMETER	DET. LIMIT	UNITS	JAQEFF-T-4665
BENZENE	0.05	**MG/M ^{3}**	**0.58**
TOLUENE	0.05	**MG/M ^{3}**	**0.16**
ETHYLBENZENE	0.05	**MG/M ^{3}**	**0.30**
TOTAL XYLENES	0.05	**MG/M ^{3}**	**0.28**
			1.32
SURROGATE:			
BROMOFLUOROBENZENE (%)			113
SURROGATE LIMITS	(74 - 120)		

CHEMIST NOTES:
N/A

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.	: 006044
BLANK I. D.	: 061100	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 06/11/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AIR
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

PARAMETER	UNITS	
BENZENE	MG/M ^{3}	<0.05
TOLUENE	MG/M ^{3}	<0.05
ETHYLBENZENE	MG/M ^{3}	<0.05
TOTAL XYLENES	MG/M ^{3}	<0.05

SURROGATE:
BROMOFLUOROBENZENE (%) 111
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 #	: 061100	PINNACLE I.D.	: 006044
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 06/11/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	SAMPLE MATRIX	: AIR
		UNITS	: MG/M

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.05	2.00	1.96	98	1.90	95	3	(80 - 120)	20
TOLUENE	<0.05	2.00	2.14	107	2.09	105	2	(80 - 120)	20
ETHYLBENZENE	<0.05	2.00	2.24	112	2.19	110	2	(80 - 120)	20
TOTAL XYLENES	<0.05	6.00	6.76	113	6.71	112	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

006044

COC Serial No. C 2577

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107 Phase . Task
Samplers J WAGNON
Laboratory Name PINNACLE LAB
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX				LWTP									Comments
JAQEff-t-4665	6/8/00	1545	AIR	1	X				01									

Relinquished by:

Signature	Date	Time
Stephen Stallard	6/9/00	1600

Received By:

Signature	Date	Time
Francine Jaime	6/9/00	1730

Samples Iced: ☐ Yes ☐ No

Carrier:

Airbill 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) _____

Shipping and Lab Notes: Please invoice El Paso Field Services directly. Please send results to Philip Services and a copy to EPFS.

PE-176 4/95

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2577

Project Name EPFS QUARTERLY SAMPLING
Project Number 62E00107 Phase . Task .
Samplers J WAGNON
Laboratory Name PINNACLE LAB
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ Eff-t-4665	6/8/00	1545	AIR	1		

Relinquished by:

Signature	Date	Time
Stephen Stoddard	6/9/00	

Received By:

Signature	Date	Time

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: to Para Field Services
to Philip Services

PE-176 4/95

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006053**
June 16, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: STEVE STELLAVATO/LEAUDRA STANLEY

On 6/13/00 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592 pending), received a request to analyze **air** 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.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006053
PROJECT #	: 62800107	DATE RECEIVED	: 6/13/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 6/16/00

PIN D. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	JAQ EFF-T-10500	AIR	6/12/00
02	JAQ VENT-VW-T-10500	AIR	6/12/00
03	JAQ VENT-R1-T-10500	AIR	6/12/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006053

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
1	JAQ EFF-T-10500	AIR	6/12/00	NA	6/14/00	1
2	JAQ VENT-VW-T-10500	AIR	6/12/00	NA	6/14/00	1
3	JAQ VENT-R1-T-10500	AIR	6/12/00	NA	6/14/00	10

PARAMETER	DET. LIMIT	UNITS	JAQ EFF-T-10500	JAQ VENT-VW-T-10500	JAQ VENT-R1-T-10500
BENZENE	0.05	**MG/M ^{3}**	**0.51**	**0.66**	**100**
TOLUENE	0.05	**MG/M ^{3}**	**0.10**	**0.21**	**34**
ETHYLBENZENE	0.05	**MG/M ^{3}**	**0.06**	**0.12**	**1.2**
TOTAL XYLENES	0.05	**MG/M ^{3}**	< 0.05	**0.33**	**15**
SURROGATE:					
BROMOFLUOROBENZENE (%)			108	110	108
SURROGATE LIMITS	(74 - 120)				

CHEMIST NOTES:
N/A

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

PINNACLE LABORATORIES

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 006053
BLANK I. D.	: 061400	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 6/14/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AIR
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

PARAMETER	UNITS	
BENZENE	MG/M ^{3}	<0.05
TOLUENE	MG/M ^{3}	<0.05
ETHYLBENZENE	MG/M ^{3}	<0.05
TOTAL XYLENES	MG/M ^{3}	<0.05
SURROGATE:		
BROMOFLUOROBENZENE (%)		106
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
NA

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 #	: 061400	PINNACLE I.D.	: 006053
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 6/14/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	SAMPLE MATRIX	: AIR
		UNITS	: MG/M

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.05	2.00	1.79	90	1.83	92	2	(80 - 120)	20
TOLUENE	<0.05	2.00	1.95	98	2.02	101	4	(80 - 120)	20
ETHYLBENZENE	<0.05	2.00	2.03	102	2.08	104	2	(80 - 120)	20
TOTAL XYLENES	<0.05	6.00	6.08	101	6.34	106	4	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

CC0653

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2578

Project Name: EPFS QUARTERLY SAMPLING
Project Number: 62800107 Phase . Task:
Samplers: S STELLAVATO
Laboratory: Name: PINNACLE LAB
Location: ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX	Comments
JAQEff-t-10500	6/12/00	1700	AIR	1	X -01	
JAQ VENT-VW-t-10500	6/12/00	1700	AIR	1	X -02	
JAQVENT-R1-t-10500	6/12/00	1700	AIR	1	X -03	

Relinquished by:

Signature	Date	Time
Steve Stellavato	6/12/00	1800

Received By:

Signature	Date	Time
[illegible]	6/13/00	18:30

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: Please invoice EPFS directly. Please send results to Philip Services (Steve Stellavato) and a copy to EPFS. Temp = < RT

PE-176 4/95

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2578

Project Name: EPFS Quarterly Sampling
Project Number: 62800107 Phase . Task
Samplers: S Stellavato
Laboratory: Name: PINNACLE LAB
Location: ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ Eff-t-10500	6/12/00	1700		1		
JAQ Vent-VW-t-10500	6/12/00	1700		1		
JAQ Vent-RI-t-10500	6/12/00	1700		1		

Relinquished by:

Signature	Date	Time
Steve Stellavato	6/13/00	

Received By:

Signature	Date	Time

Samples Iced: ☐ Yes ☐ No

Carrier: Airbill 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) _____

Shipping and Lab Notes: Fax directly, Please (Steve Stellavato)

PE-176 4/95

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **006099**
June 30, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: Steve Stellavato/LeAudra Stanley

On 06/27/00 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592 pending), received a request to analyze air 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.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

LIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 006099
ROJECT #	: 62800107	DATE RECEIVED	: 06/27/00
ROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 06/30/00

'N). #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
1	JAQ EFF-t-26100	AIR	06/23/00

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 / 8015 GRO
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 006099

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
1	JAQ EFF-t-26100	AIR	06/23/00	NA	06/27/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ EFF-t-26100
FUEL HYDROCARBONS	5.0	**MG/M ^{3}**	**26**
HYDROCARBON RANGE			**C6-C14**
HYDROCARBONS QUANTITATED USING			**GASOLINE**
BENZENE	0.05	MG/M ^{3}	< 0.05
TOLUENE	0.05	MG/M ^{3}	< 0.05
ETHYLBENZENE	0.05	MG/M ^{3}	< 0.05
TOTAL XYLENES	0.05	MG/M ^{3}	< 0.05
SURROGATE:			
BROMOFLUOROBENZENE (%)			114
SURROGATE LIMITS	(74 - 120)		

CHEMIST NOTES:
Per PLI SOP, air bags should be analyzed within 72 hours. The samples were received past 72 hours and analyzed "as is." There is no EPA guidelines and the hold_time is for internal purposes only.

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 / 8015 GRO		
BLANK I.D.	: 062700	PINNACLE I.D.	: 006099
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 06/27/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	SAMPLE MATRIX	: AIR

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/M ^{3}	<5.0
HYDROCARBON RANGE	C6-C14	-
HYDROCARBONS QUANTITATED USING	GASOLINE	-
BENZENE	MG/M ^{3}	<0.05
TOLUENE	MG/M ^{3}	<0.05
ETHYLBENZENE	MG/M ^{3}	<0.05
TOTAL XYLENES	MG/M ^{3}	<0.05
SURROGATE:		
BROMOFLUOROBENZENE (%)		99
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

EST	: EPA 8021 MODIFIED / 8015 GRO		
SMSD #	: 062700	PINNACLE I.D.	: 006099
LIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
ROJECT #	: 62800107	DATE ANALYZED	: 06/27/00
ROJECT NAME	: EPFS QUARTERLY SAMPLING	SAMPLE MATRIX	: AIR
		UNITS	: MG/M

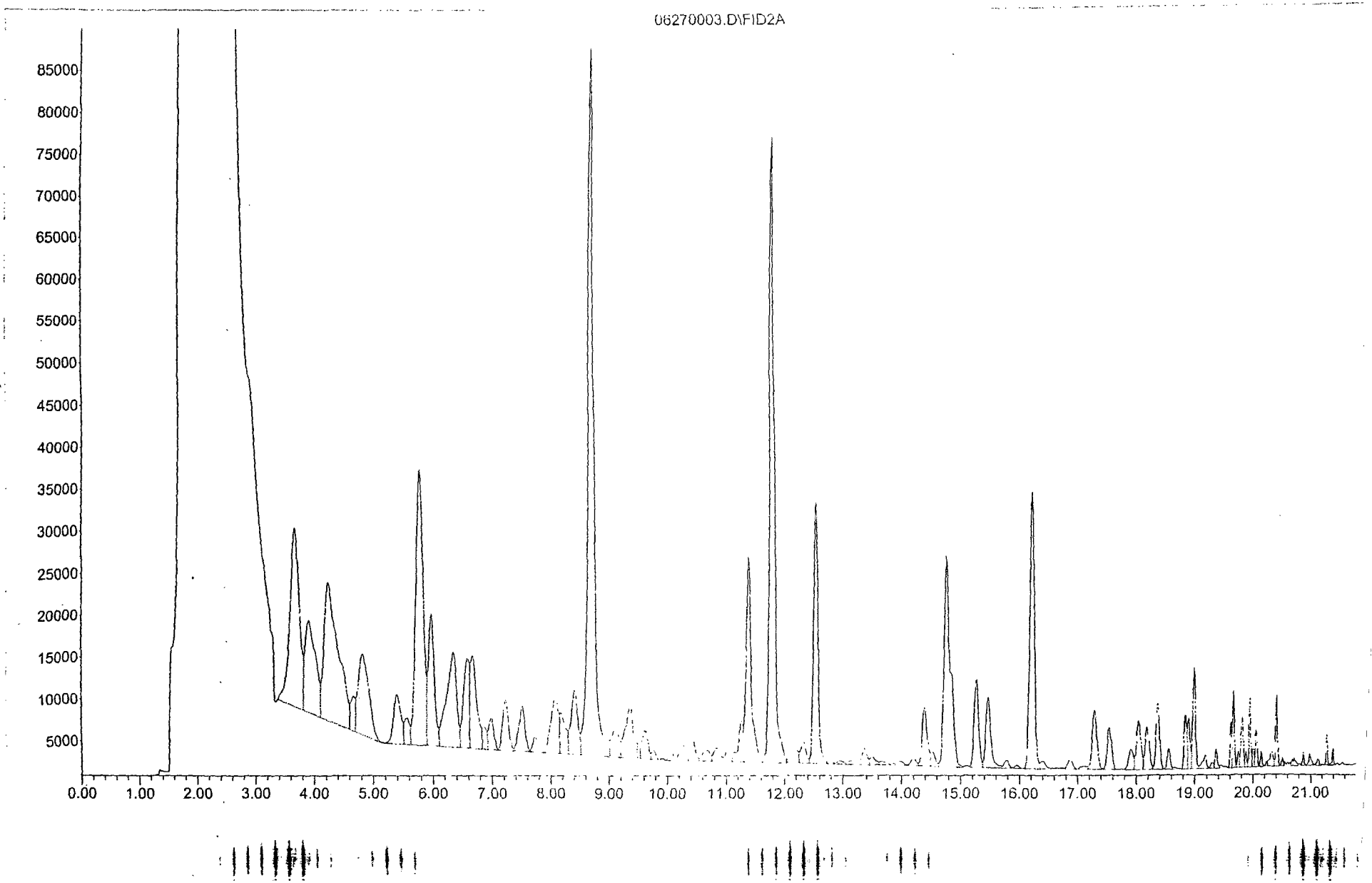
ARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
ENZENE	<0.05	2.00	1.79	90	1.77	89	1	(80 - 120)	20
OLUENE	<0.05	2.00	2.10	105	1.98	99	6	(80 - 120)	20
THYLBENZENE	<0.05	2.00	2.18	109	2.14	107	2	(80 - 120)	20
OTAL XYLENES	<0.05	6.00	6.66	111	6.45	108	3	(80 - 120)	20

CHEM NOTES:
N/A

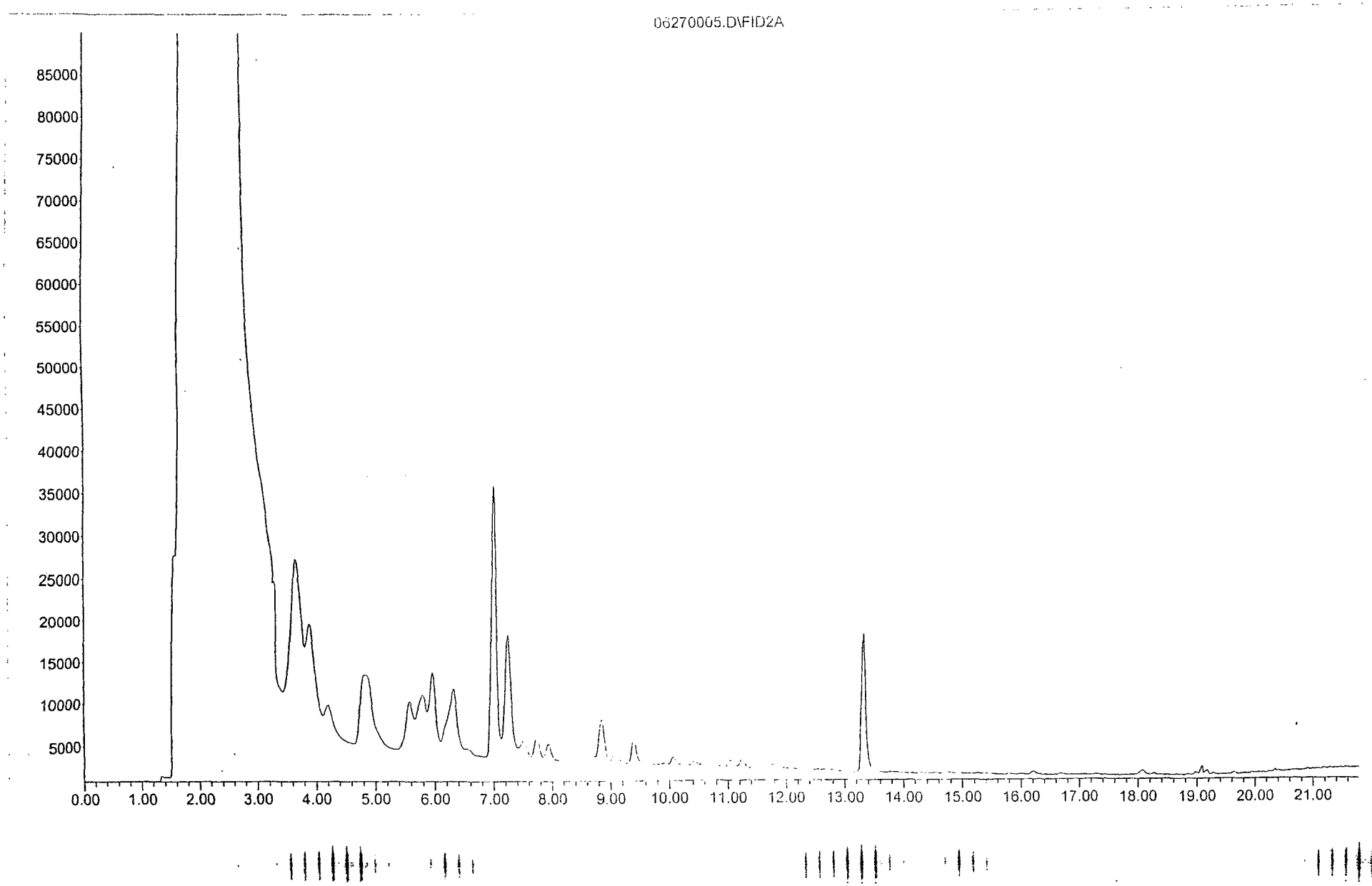
$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

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

File : C:\HPCHEM\1\DATA\062700\06270003.D
Operator :
Acquired : 27 Jun 2000 11:12 using AcqMethod BTEX0522.M
Instrument : GC-2
Sample Name: gas ccv
Misc Info :
Vial Number: 1



File : C:\HPCHEM\1\DATA\062700\06270005.D
Operator :
Acquired : 27 Jun 2000 12:20 using AcqMethod BTEX0522.M
Instrument : GC-2
Sample Name: 006099-01
Misc Info : air 50 ml
Vial Number: 3



PHILIP ENVIRONMENTAL

Chain of Custody Record

006099

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

COC Serial No. C 2591

Project Name: EPFS Quarterly Sampling
Project Number: 62800107 Phase . Task
Samplers: S Stellavato
Laboratory Name: Pinnacle Lab
Location: Albuquerque, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX	TPH	Lab ID#	Comments
JAQ Eff-t-26100	6/23/00	1300	AIR	1	X	X	01	

Relinquished by:

Signature	Date	Time
Stephen Stellavato	6/26/00	1600
Jean Wagner	6/26/00	1600

Received By:

Signature	Date	Time
Jean Wagner	6/26/00	1600
Francine Diano	6/27/00	0920

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: GREYHOUND LINES Airbill No. 160 6918599

Shipping and Lab Notes: Please invoice EPFS directly. Please send results to Philip Services (Steve Stellavato) and a copy to EPFS,

PE-176 4/95

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2591

Project Name EPFS Quarterly Sampling
Project Number 62800167 Phase . Task .
Samplers S Stellavato
Laboratory Name Pinnacle Lab
Location Albuquerque, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ Eff-t-26100	6/23/00	1300	Aq	1		

Relinquished by:

Signature	Date	Time
Stephen Stellavato	6/[illegible]	

Received By:

Signature	Date	Time

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: [illegible] directly. Please [illegible] (Steve Stellavato)

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

Pinnacle Lab ID number **008083**
August 29, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name JAQUEZ SVE
Project Number 62800165

Attention: DON FERNALD

On 08/24/00 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **air** 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.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 008083
PROJECT #	: 62800165	DATE RECEIVED	: 08/24/00
PROJECT NAME	: JAQUEZ SVE	REPORT DATE	: 08/29/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	62800165-082200-AIR-01	AIR	08/22/00

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 : PHILIP ENVIRONMENTAL
PROJECT # : 62800165
PROJECT NAME : JAQUEZ SVE

PINNACLE I.D.: 008083

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	62800165-082200-AIR-01	AIR	08/22/00	NA	08/25/00	1

PARAMETER	DET. LIMIT	UNITS	62800165-082200-AIR-01
BENZENE	0.05	**MG/M ^{3}**	**0.06**
TOLUENE	0.05	MG/M ^{3}	< 0.05
ETHYLBENZENE	0.05	MG/M ^{3}	< 0.05
TOTAL XYLENES	0.05	MG/M ^{3}	< 0.05

SURROGATE:
BROMOFLUOROBENZENE (%) 102
SURROGATE LIMITS (74 - 120)

CHEMIST NOTES:
N/A

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.	: 008083
BLANK I. D.	: 082500	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 08/25/00
PROJECT #	: 62800165	SAMPLE MATRIX	: AIR
PROJECT NAME	: JAQUEZ SVE		

PARAMETER	UNITS	
BENZENE	MG/M ^{3}	<0.05
TOLUENE	MG/M ^{3}	<0.05
ETHYLBENZENE	MG/M ^{3}	<0.05
TOTAL XYLENES	MG/M ^{3}	<0.05
SURROGATE:		
BROMOFLUOROBENZENE (%)		101
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

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 #	: 082500	PINNACLE I.D.	: 008083
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800165	DATE ANALYZED	: 08/25/00
PROJECT NAME	: JAQUEZ SVE	SAMPLE MATRIX	: AIR
		UNITS	: MG/M

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.05	2.00	1.86	93	1.87	94	1	(80 - 120)	20
TOLUENE	<0.05	2.00	2.02	101	1.92	96	5	(80 - 120)	20
ETHYLBENZENE	<0.05	2.00	2.07	104	2.03	102	2	(80 - 120)	20
TOTAL XYLENES	<0.05	6.00	6.19	103	6.11	102	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

008083

COC Serial No. C 2638

Project Name JAQUEZ SVE

Project Number 62800165 Phase . Task 55

Samplers ~~D.J~~ J. WAGNON

Laboratory Name PINNACLE LABS

Location ALBUQUERQUE NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Lab ID #	Comments
62800165-082200-- AIR-01	8/22/00	1020	AIR	1	X	01	JAQUEZ SVE

Relinquished by:

Signature	Date	Time
Jeri Wagnon	8/23/00	0532

Received By:

Signature	Date	Time
Francine Finno	8/24/00	0930

Samples Iced: ☑ Yes ☐ No

Carrier: GREYHOUND LINES

Airbill No. 6LF16069185 77

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) _____

Shipping and Lab Notes:

Rec'd @ 4°C

PE-176 4/95

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2638

Project Name JAQUEZ SVE

Project Number 62800165 Phase . Task 515

Samplers ~~D.L.~~ J. WAGNON

Laboratory Name PINNACLE LABS

Location ALBUQUERQUE N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
62800165-082200-AIR-01	8/22/00	1020	AIR	1		JAQUEZ SVE

Relinquished by:

Signature	Date	Time
Jon Wagnon	8/22/00	

Received By:

Signature	Date	Time

Samples Iced: ☑ Yes ☐ No

Carrier:

Airbill No. GJF16009185 77

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) _____

Shipping and Lab Notes:

PINNACLE LABORATORIES

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

OCT 1 2 2000

Pinnacle Lab ID number **010005**
October 09, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name JAQUEZ SVE
Project Number 62800165

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 10/03/00 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **air** 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.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

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

LIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 010005
ROJECT #	: 62800165	DATE RECEIVED	: 10/03/00
ROJECT NAME	: JAQUEZ SVE	REPORT DATE	: 10/09/00

IN			DATE
). #	CLIENT DESCRIPTION	MATRIX	COLLECTED
1	JAQ-0009-AIR	AIR	09/29/00

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

GAS CHROMATOGRAPHY RESULTS

ΕST : EPA 8021 MODIFIED
LIENT : PHILIP ENVIRONMENTAL
ROJECT # : 62800165
ROJECT NAME : JAQUEZ SVE

PINNACLE I.D.: 010005

AMPLE). #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
1	JAQ-0009-AIR	AIR	09/29/00	NA	10/05/00	1

ARAMETER	DET. LIMIT	UNITS	JAQ-0009-AIR
ΕNZENE	0.05	MG/M ^{3}	< 0.05
OLUENE	0.05	MG/M ^{3}	< 0.05
THYLBENZENE	0.05	MG/M ^{3}	< 0.05
OTAL XYLENES	0.05	MG/M ^{3}	< 0.05

URR ATE:
RO LUOROBENZENE (%) 109
URROGATE LIMITS (74 - 120)

HEMIST NOTES:
rbag was brought to Pinnacle Labs outside of our SOP hold time.
PA has no designated holding time for Airbags.

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

PINNACLE LABORATORIES

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

EST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 010005
LANK I. D.	: 100500	DATE EXTRACTED	: NA
LIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 10/05/00
ROJECT #	: 62800165	SAMPLE MATRIX	: AIR
ROJECT NAME	: JAQUEZ SVE		

RAMETER	UNITS	
ENZENE	MG/M ^{3}	<0.05
OLUENE	MG/M ^{3}	<0.05
THYLBENZENE	MG/M ^{3}	<0.05
OTAL XYLENES	MG/M ^{3}	<0.05

URROGATE:
ROMOFLUOROBENZENE (%) 106
URROGATE LIMITS: (80 - 120)
HEM NOTES:
A

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

PINNACLE LABORATORIES

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

:ST	: EPA 8021 MODIFIED		
SMSD #	: 100500	PINNACLE I.D.	: 010005
IENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
OJECT #	: 62800165	DATE ANALYZED	: 10/05/00
OJECT NAME	: JAQUEZ SVE	SAMPLE MATRIX	: AIR
		UNITS	: MG/M

RAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
ENZENE	<0.05	2.00	1.86	93	2.01	101	8	(80 - 120)	20
LUENE	<0.05	2.00	1.99	100	2.09	105	5	(80 - 120)	20
THYLBENZENE	<0.05	2.00	2.07	104	2.27	114	9	(80 - 120)	20
TAL XYLENES	<0.05	6.00	6.31	105	6.80	113	7	(80 - 120)	20

EMIST NOTES:
A

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

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

010005

Chain of Custody Record

PHILIP ENVIRONMENTAL

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

COC Serial No. C 2430

Project Name JAQUEZ SVE
Project Number 62900165 Phase . Task 55
Samplers C. Maez
Laboratory Name PINNACLE
Location ALBQ. N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	LAB ID #	Comments
JAQ-0009-AIR	09-29-00	1449	AIR	1	X	01	JAQUEZ SVE

Relinquished by:

Signature	Date	Time
Chris A. Maez	10-02-00	1430

Received By:

Signature	Date	Time
Francine Jaramillo	10/3/00	0930

Samples Iced: ☐ Yes ☑ No

Carrier: Grey Hound

Airbill No. GLI 160691 8775

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) _____

Shipping and Lab Notes:

Rec'd @ 4.5°C

PE-176 4/95

PHILIP

Chain of Custody Record

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

COC Serial No. C 2430

Project Name JAq #2 SVE
Project Number 62900165 Phase . Task 50 .
Samplers C. Maez
Laboratory Name PINNACLE
Location ALBQ. NM.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAq-0001-AIR	09-29-00	1445	Air	1		JAq #2 SVE

Relinquished by:

Signature	Date	Time
Chris A. Maez	10-6-00	

Received By:

Signature	Date	Time

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. GLI 160691 8775

Shipping and Lab Notes:

PINNACLE LABORATORIES

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

RECEIVED
DEC 2 2 2000

Pinnacle Lab ID number **012064**
December 19, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name JAQUEZ SVE O & M
Project Number 62800165

Attention: ROBERT THOMPSON/SCOTT POPE

On 12/15/00 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **air** 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.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

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

NT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 012064
JECT #	: 62800165	DATE RECEIVED	: 12/15/00
JECT NAME	: JAQUEZ SVE O & M	REPORT DATE	: 12/19/00

ACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
64 - 01	JAQ-0012-AIR	AIR	12/14/00

PINNACLE LABORATORIES

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

GAS CHROMATOGRAPHY RESULTS

ΕST : EPA 8021 MODIFIED
LIENT : PHILIP ENVIRONMENTAL
ROJECT # : 62800165
ROJECT NAME : JAQUEZ SVE O & M

PINNACLE I.D.: 012064

AMPLE). #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
1	JAQ-0012-AIR	AIR	12/14/00	NA	12/16/00	1

ARAMETER	DET. LIMIT	UNITS	JAQ-0012-AIR
ΕNZENE	0.05	MG/M ^{3}	< 0.05
OLUENE	0.05	**MG/M** ^{3}	**0.06**
THYLBENZENE	0.05	MG/M ^{3}	< 0.05
OTAL XYLENES	0.05	**MG/M** ^{3}	**0.18**

UR GATE:
RO FLUOROBENZENE (%) 103
URROGATE LIMITS (74 - 120)

CHEMIST NOTES:
N/A

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

PINNACLE LABORATORIES

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

EST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 012064
LANK I. D.	: 121600	DATE EXTRACTED	: NA
LIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 12/16/00
ROJECT #	: 62800165	SAMPLE MATRIX	: AIR
ROJECT NAME	: JAQUEZ SVE O & M		

ARAMETER	UNITS	
ENZENE	MG/M ^{3}	<0.05
OLUENE	MG/M ^{3}	<0.05
THYLBENZENE	MG/M ^{3}	<0.05
OTAL XYLENES	MG/M ^{3}	<0.05

URROGATE:
ROMOFLUOROBENZENE (%) 98
URF ATE LIMITS: (80 - 120)
HEM NOTES:
I/A

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

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

EST	: EPA 8021 MODIFIED		
SMSD #	: 121600	PINNACLE I.D.	: 012064
LIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
ROJECT #	: 62800165	DATE ANALYZED	: 12/16/00
ROJECT NAME	: JAQUEZ SVE O & M	SAMPLE MATRIX	: AIR
		UNITS	: MG/M

ARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
ENZENE	<0.05	2.00	2.12	106	1.99	100	6	(80 - 120)	20
OLUENE	<0.05	2.00	1.99	100	1.87	94	6	(80 - 120)	20
THYLBENZENE	<0.05	2.00	2.15	108	2.03	102	6	(80 - 120)	20
OTAL XYLENES	<0.05	6.00	6.18	103	5.95	99	4	(80 - 120)	20

HEM NOTES:
A

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

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

PHILIP ENVIRONMENTAL

Chain of Custody Record

012064

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

COC Serial No. C 2817

Project Name: Jaquez SVE O&M
Project Number: 87800165 Phase . Task 55
Samplers: C. Mayer
Laboratory: Name PINNACLE
Location ALBQ N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Lab ID #	Comments
JAQ-0012-AIR	12-14-00	0943	AIR	1		01	Jaquez SVE

Relinquished by:

Signature	Date	Time
Chris A. Mayer	12-14-00	1630

Received By:

Signature	Date	Time
Jeanine Jaime	12/15/00	1045

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: Greyhound

Airbill No. GLI16691981O

Shipping and Lab Notes:

PE-176 4/95

PHILIP ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2817

Project Name Jaquez SVE Odor

Project Number 63900165 Phase . Task 55 .

Samplers C. Maez

Laboratory Name PINNACLE

Location ALBQ N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle	Comments
JAQ-0012-AIR	12-14-00	0944	Air			Jaquez SVE

Relinquished by:

Signature	Date	Time
Chris A. Maez	12-14-00	

Received By:

Signature	Date	Time

Samples Iced: ☐ Yes ☑ No

Carrier: Airbill No. 816691981 0

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) _____

Shipping and Lab Notes:

Appendix H – Air Emissions Calculations from Soil Vapor Extraction System Effluent

M=CQT

M= CUMULATIVE MASS REMOVED (Kg)
C= VAPOR CONCENTRATION (Kg/M3)
Q= EXTRACTION FLOW RATE (M3/Hr)
T= OPERATIONAL PERIOD (Hr)

AREA 3.141593

C **0.00072**

Q 20.42035 0.002042 **0.038594** 138.9401

t 0.016667

M=CQT 0.001667

MASS REMOVAL AT THE JAQUEZ SVE SYSTEM EFFLUENT IN KILOGRAMS

t=0	BENZENE	0.005795	t=0	B T E X	0.014339
t=5	BENZENE	0.004717	t=5	B T E X	0.012114
t=20	BENZENE	0.00426	t=20	B T E X	0.010471
t=60	BENZENE	0.003587	t=60	B T E X	0.009372
t=120	BENZENE	0.003326	t=120	B T E X	0.009048
t=240	BENZENE	0.004825	t=240	B T E X	0.010264
t=480	BENZENE	0.011347	t=480	B T E X	0.017483
t=1740	BENZENE	0.0088	t=1740	B T E X	0.0113
t=4665	BENZENE	0.0013	t=4665	B T E X	0.00296
t=10500	BENZENE	0.001181	t=10500	B T E X	0.001667

t=0	BENZENE	5.795	t=0	B T E X	14.339
t=5	BENZENE	4.717	t=5	B T E X	12.114
t=20	BENZENE	4.26	t=20	B T E X	10.471
t=60	BENZENE	3.587	t=60	B T E X	9.372
t=120	BENZENE	3.326	t=120	B T E X	9.048

t=240	BENZENE	4.825	t=240	B T E X	10.264
t=480	BENZENE	11.347	t=480	B T E X	17.483
t=1740	BENZENE	8.8	t=1740	B T E X	11.3
t=4665	BENZENE	1.3	t=4665	B T E X	2.96
t=10500	BENZENE	1.181	t=10500	B T E X	1.667

Mass Removal Air Emissions Calculations

M=CQT

M=	CUMULATIVE MASS REMOVED (Kg)
C=	VAPOR CONCENTRATION (Kg/M3)
Q=	EXTRACTION FLOW RATE (M3/Hr)
T=	OPERATIONAL PERIOD (Hr)

22-Aug-00

Benzene	0.06	MG/M3		
Toluene	<0.05	MG/M3		
Ethyl Benzene	<0.05	MG/M3		
Total Xylenes	<0.05	MG/M3		
	C =	0.06		
	Q =	65	3.9	0.111428571
	T =	6.685714		6.68571E-06
	tons/year =	0.058567		

29-Sep-00

Benzene	<0.05	MG/M3		
Toluene	<0.05	MG/M3		
Ethyl Benzene	<0.05	MG/M3		
Total Xylenes	<0.05	MG/M3		
	C =			
	Q =			
	T =			
	tons/year =	0		

Soil Vapor Extraction system shut down October - November

14-Dec-00

Benzene	<0.05	MG/M3		
Toluene	0.06	MG/M3		
Ethyl Benzene	<0.05	MG/M3		
Total Xylenes	0.18	MG/M3	0.24	
	C =	0.24		
	Q =	88	21.12	0.603428571
	T =	36.20571		3.62057E-05
	tons/year =	0.317162		