

3R - 179

REPORTS

DATE:

2000



Certified Mail: #7000 1670 0012 7260 6739

February 26, 2001

Mr. William C. Olson
New Mexico Oil Conservation Division
1220 St. Francis Dr.
Santa Fe, NM 87504

RECEIVED

FEB 28 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 2000 Pit Project Annual Groundwater Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual updates for the 32 remaining groundwater impacted sites that were identified during our pit closure project of 1994 / 1995.

Of the 32 reports (Volumes 1-4), EPFS hereby requests closure of six sites. The six sites EPFS is requesting closure on are presented in one separate binder entitled "San Juan Basin Pit Closures, El Paso Field Services, Pit Closure Reports". Four of the six sites were submitted in last years report and a decision has not been made on closure. The remaining two sites have been submitted in previous years and denied closure.

The Jaquez Com. C #1 and Jaquez Com. E #1 site is not included in with this years report and will be submitted by the required deadline of April 1, 2001

EPFS has also included for your information six Navajo sites in a separate binder.

If you have any questions concerning the enclosed reports or closure requests, please call me at (505) 599-2124.

Sincerely,

Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; Certified Mail # 7000 1670 0012 7260 6722
Mr. Bill Liesse, BLM - w / enclosures (federal sites only), Certified Mail # 7000 1670 0012 7260 6715

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

El Paso Field Services
Pit Project Groundwater Report
Annual Report
Volume II

March 2001

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 62800398



EPFS GROUNDWATER PITS 2000 ANNUAL GROUNDWATER REPORT

GALLEGOS CANYON UNIT COM A #142E
Meter/Line ID - 03906

SITE DETAILS

Legals - Twn: 29N Rng: 12W Sec: 25 Unit: G
NMOCD Hazard Ranking: 10 Land Type: FEE
Operator: AMOCO PRODUCTION COMPANY

PREVIOUS ACTIVITIES

Site Assessment: Apr-94 Excavation: Apr-94 (20 cy) Soil Boring: Oct-95
Re-Excavation: Oct-96 (882 cy) Monitor Well: Feb-97 Quarterly Sampling Initiated: Aug-97

2000 ACTIVITIES

Annual Groundwater Monitoring - Annual groundwater monitoring was conducted during May of 2000.

SUMMARY TABLES

Groundwater analytical data are presented in Table 1. Copies of the laboratory data sheets and associated quality assurance/quality control data are presented as Attachment 1.

SITE MAP

A site map is presented as Figure 1.

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

There were no drilling activities at this site in 2000.

DISPOSITION OF GENERATED WASTES

There were no wastes generated at this site in 2000.

ISOCONCENTRATION MAPS

Isoconcentration maps were not generated for this site.

CONCLUSIONS

Analytical results of groundwater samples from MW-1 show levels of benzene above New Mexico groundwater standards.

Pertinent data from past groundwater reports include the following:

Groundwater measurements taken from temporary Geoprobe holes indicate that production pits are upgradient of the EPFS MW-1. Up-gradient Geoprobe hole shows levels of benzene, toluene, and total xylenes in the groundwater above NMWQCC groundwater standards. Levels of hydrocarbon constituents in groundwater from up-gradient Geoprobe holes are two orders of magnitude greater than hydrocarbon levels from MW-1. The production pits may be a source of hydrocarbon constituents in the groundwater at this site.

EPFS GROUNDWATER PITS 2000 ANNUAL GROUNDWATER REPORT

The operator was notified of the results observed in the 1997 groundwater report that indicate production pits may be the source of continued contamination of groundwater at the site.

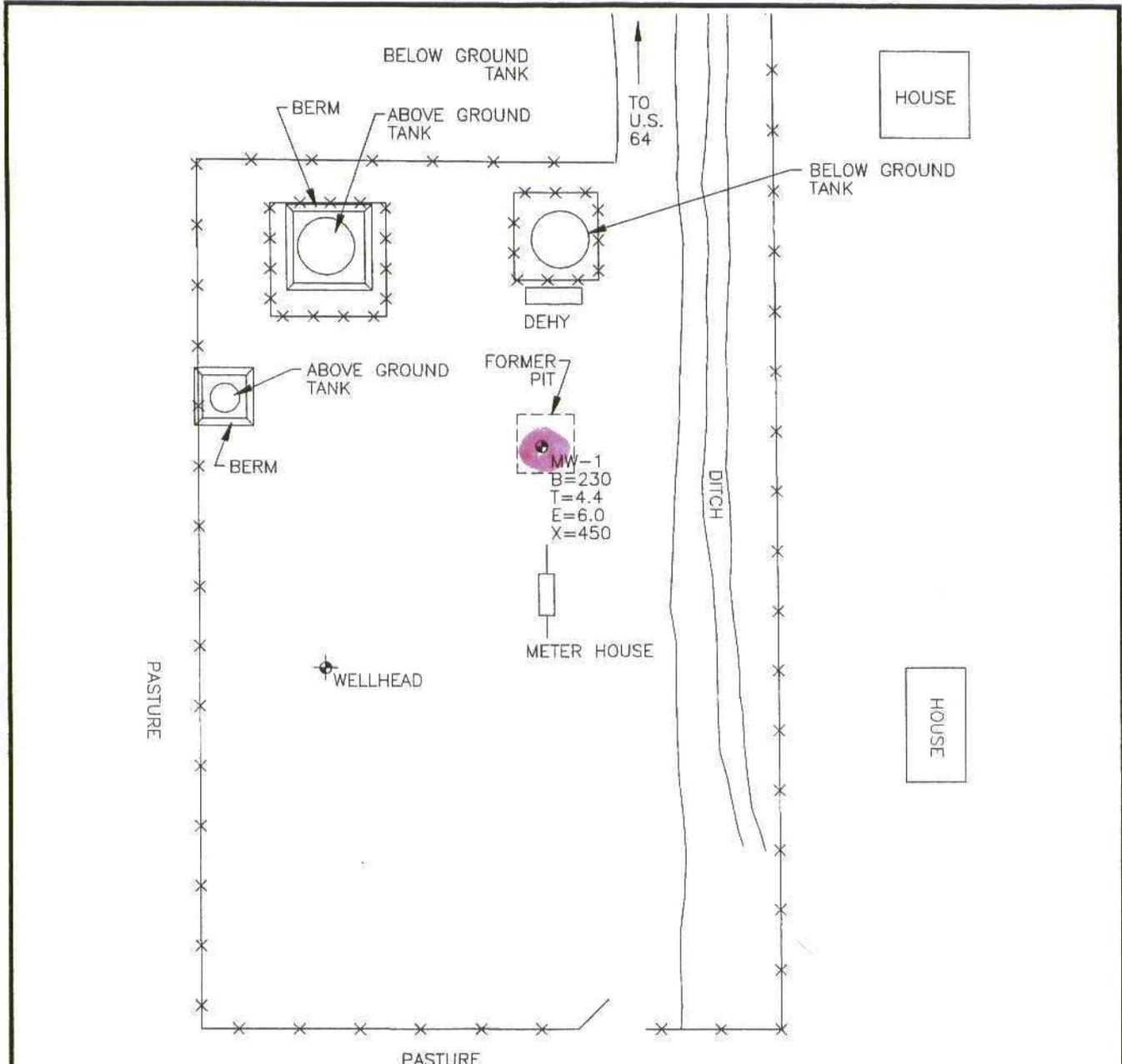
RECOMMENDATIONS

- EPFS proposes to continue annual sampling at the site until BTEX levels are lowered.
- Quarterly sampling will follow until BTEX levels are below NMWQCC standards for four consecutive quarters.
- EPFS will continue to provide the operator with pertinent site data regarding EPFS activities at the site.

Table 1

| Sample # | Meter./ Line # | Site Name | Sample Date | MW # | Project | Benzene (PPB) | Toluene (PPB) | Ethyl Benzene (PPB) | Total Xylenes (PPB) | Total BTEX (PPB) |
|--------------|-------------------|---------------------------------|----------------|---------|----------------------|------------------|------------------|---------------------------|---------------------------|------------------------|
| GCV-0005-MW1 | 03906 | Gallegos Canyon Unit A 142 E | 05/25/2000 | 1 | Sample 1 - 6th Event | = 230.0 | = 4.4 | = 6.0 | = 450.0 | = 690.4 |

Sample 1 - Annual Sampling



LEGEND

- MW-1 APPROXIMATE MONITORING WELL LOCATION AND NUMBER
- B BENZENE (ug\L)
- T TOLUENE (ug\L)
- E ETHYL BENZENE (ug\L)
- X XYLENE (ug\L)
- ug\L MICROGRAMS PER LITER



COL. 628\00219L-003



TITLE:
GALLEGOS CANYON UNIT A142E
METER 03906
MAY 25, 2000

| | |
|------------------|-------------|
| DWN: TMM | DES.: LW |
| CHKD: LW | APPD: MN |
| DATE: 1/30/01 | REV.: 0 |

PROJECT NO.: 62800219
EPFS GW PITS

FIGURE 1

ATTACHMENT 1

2000 GROUNDWATER ANALYTICAL

Project Name EPES QUARTERLY SAMPLING

Project Manager ROBERT THOMASON

Project No. 6280007

Client Company EL PASO FIELD SERVICES

Phase Task No. 0301

Site Name GCU COM A # 142 E (03906) Site Address RURAL SAN JUAN COUNTY

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 21.72 DR
 Initial Depth to Water (feet) 16.44 DR
 Height of Water Column in Well (feet) 5.28
 Diameter (inches): Well 4 Gravel Pack _____

| Item | Water Volume in Well | | Gallons to be Removed |
|-----------------|----------------------|----------|-----------------------|
| | Cubic Feet | Gallons | |
| Well Casing | 5.28 | 3.45 x 3 | 10.3 |
| Gravel Pack | | | |
| Drilling Fluids | | | |
| Total | | | 10.3 |

Methods of Development

- Pump 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 | Removal Rate (gal/min) | Intake Depth (feet) | Ending Water Depth (feet) | Water Volume Removed (gallons) | | Temperature (°C) | pH | Conductivity (umhos/cm) | Dissolved Oxygen (mg/l) | Comments |
|---------|------|--------------------|------------------------|---------------------|---------------------------|--------------------------------|------------|------------------|------|-------------------------|-------------------------|-------------------|
| | | | | | | Incremental | Cumulative | | | | | |
| 5/25/00 | 1448 | X | | | | 2 | 2 | 21.6 | 6.67 | 1250 | | DARK BROWN / GREY |
| " | 1452 | X | | | | 2 | 4 | 18.2 | 6.69 | 1110 | | " |
| " | 1458 | X | | | | 2 | 6 | 18.8 | 7.09 | 1070 | | " |
| " | 1502 | X | | | | 2 | 8 | 16.9 | 7.17 | 1030 | | CLEAR |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

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

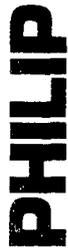
Comments WELL BAILED DRY AT 8'; LET RECHARGE + SAMPLED FOR BTEX AT 1508

Developer's Signature(s) Jan Wagner

Date 5/25/00

Reviewer RT

Date 5/25/00



Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2556

| | | | |
|---|-----------------------------------|-----------------------------|------|
| Project Name <i>EPIS QUARTERLY SAMPLING</i> | | Type of Analysis and Bottle | |
| Project Number <i>62800107 Phase 1 Task 0301</i> | | Total Number of Bottles | |
| Samplers <i>R Thompson</i> | Name <i>PINNACLE LABS</i> | Matrix | |
| Laboratory | Location <i>ALBUQUERQUE NM</i> | Time | |
| Sample Number <i>6CU0005 MUI-1 S/S/06/1508</i> | Date <i>5/25/06</i> | Date | Time |
| Comments <i>6CU COM A #142E 03906</i> | | | |

Relinquished by:

Received By:

| | |
|--------------------------------|-----------|
| Signature <i>R Thompson</i> | Signature |
| Date <i>5/25/06</i> | Date |
| Time <i>1612</i> | Time |

Samples Iced: Yes No

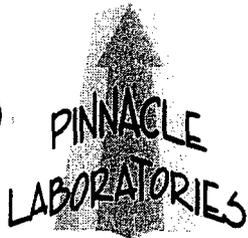
Preservatives (ONLY for Water Samples)

- Cyanide
- Sodium hydroxide (NaOH)
- Volatile Organic Analysis
- Hydrochloric acid (HCl)
- Metals
- Nitric acid (HNO₃)
- TPH (418.1)
- Sulfuric acid (H₂SO₄)
- Other (Specify)
- Other (Specify)

Carrier: *EXPRESS MAIL*

Airbill No. *628001070301*

Shipping and Lab Notes:



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

Pinnacle Lab ID number **005109**
May 31, 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

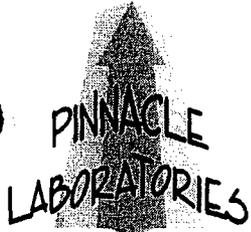
On 05/26/00 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are 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



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

| | | | |
|--------------|---------------------------|---------------|------------|
| CLIENT | : PHILIP ENVIRONMENTAL | PINNACLE ID | : 005109 |
| PROJECT # | : 62800107 | DATE RECEIVED | : 05/26/00 |
| PROJECT NAME | : EPFS QUARTERLY SAMPLING | REPORT DATE | : 05/31/00 |
| PIN | | DATE | |
| ID. # | CLIENT DESCRIPTION | MATRIX | COLLECTED |
| 01 | GCV 0005-MW01 | AQUEOUS | 05/25/00 |



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

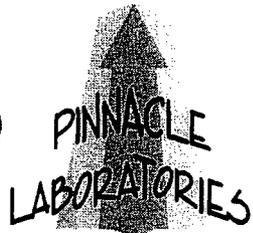
PINNACLE I.D.: 005109

| SAMPLE ID. # | CLIENT I.D. | MATRIX | DATE SAMPLED | DATE EXTRACTED | DATE ANALYZED | DIL. FACTOR |
|--------------|---------------|---------|--------------|----------------|---------------|-------------|
| 01 | GCV 0005-MW01 | AQUEOUS | 05/25/00 | NA | 05/27/00 | 2 |

| PARAMETER | DET. LIMIT | UNITS | GCV 0005-MW01 |
|---------------|------------|-------|---------------|
| BENZENE | 0.5 | UG/L | 230 |
| TOLUENE | 0.5 | UG/L | 4.4 |
| ETHYLBENZENE | 0.5 | UG/L | 6.0 |
| TOTAL XYLENES | 0.5 | UG/L | 450 |

SURROGATE:
BROMOFLUOROBENZENE (%) 104
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A



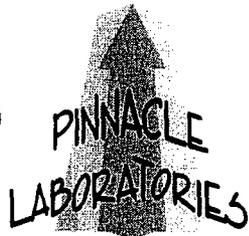
2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST : EPA 8021 MODIFIED PINNACLE I.D. : 005109
BLANK I. D. : 052600 DATE EXTRACTED : NA
CLIENT : PHILIP ENVIRONMENTAL DATE ANALYZED : 05/26/00
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



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

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST : EPA 8021 MODIFIED PINNACLE I.D. : 005109
BLANK I. D. : 052700 DATE EXTRACTED : NA
CLIENT : PHILIP ENVIRONMENTAL DATE ANALYZED : 05/27/00
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 |

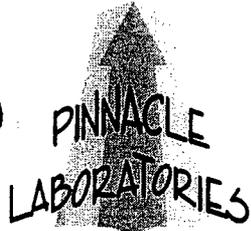
SURROGATE:

1,2,4-TRIFLUOROBENZENE (%) 100

SPURIOUS GATE LIMITS: (80 - 120)

CHEMIST NOTES:

N/A



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

GAS CHROMATOGRAPHY QUALITY CONTROL
 MSMSD

| | | | |
|--------------|---------------------------|----------------|------------|
| TEST | : EPA 8021 MODIFIED | PINNACLE I.D. | : 005109 |
| MSMSD # | : 005101-04 | DATE EXTRACTED | : NA |
| CLIENT | : PHILIP ENVIRONMENTAL | DATE ANALYZED | : 05/26/00 |
| PROJECT # | : 62800107 | SAMPLE MATRIX | : AQUEOUS |
| PROJECT NAME | : EPFS QUARTERLY SAMPLING | 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 | 18.8 | 94 | 3 | (80 - 120) | 20 |
| TOLUENE | <0.5 | 20.0 | 18.2 | 91 | 18.9 | 95 | 4 | (80 - 120) | 20 |
| ETHYLBENZENE | <0.5 | 20.0 | 20.2 | 101 | 20.6 | 103 | 2 | (80 - 120) | 20 |
| TOTAL XYLENES | <0.5 | 60.0 | 61.4 | 102 | 61.1 | 102 | 0 | (80 - 120) | 20 |

CHEMIST NOTES:
 N/A

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

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

