

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,

A handwritten signature in black ink, appearing to read 'Scott T. Pope', with a stylized flourish at the end.

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

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## GALLEGOS CANYON UNIT COM A #142E

Meter/Line ID - 03906

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### SITE DETAILS

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

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### 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**

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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**

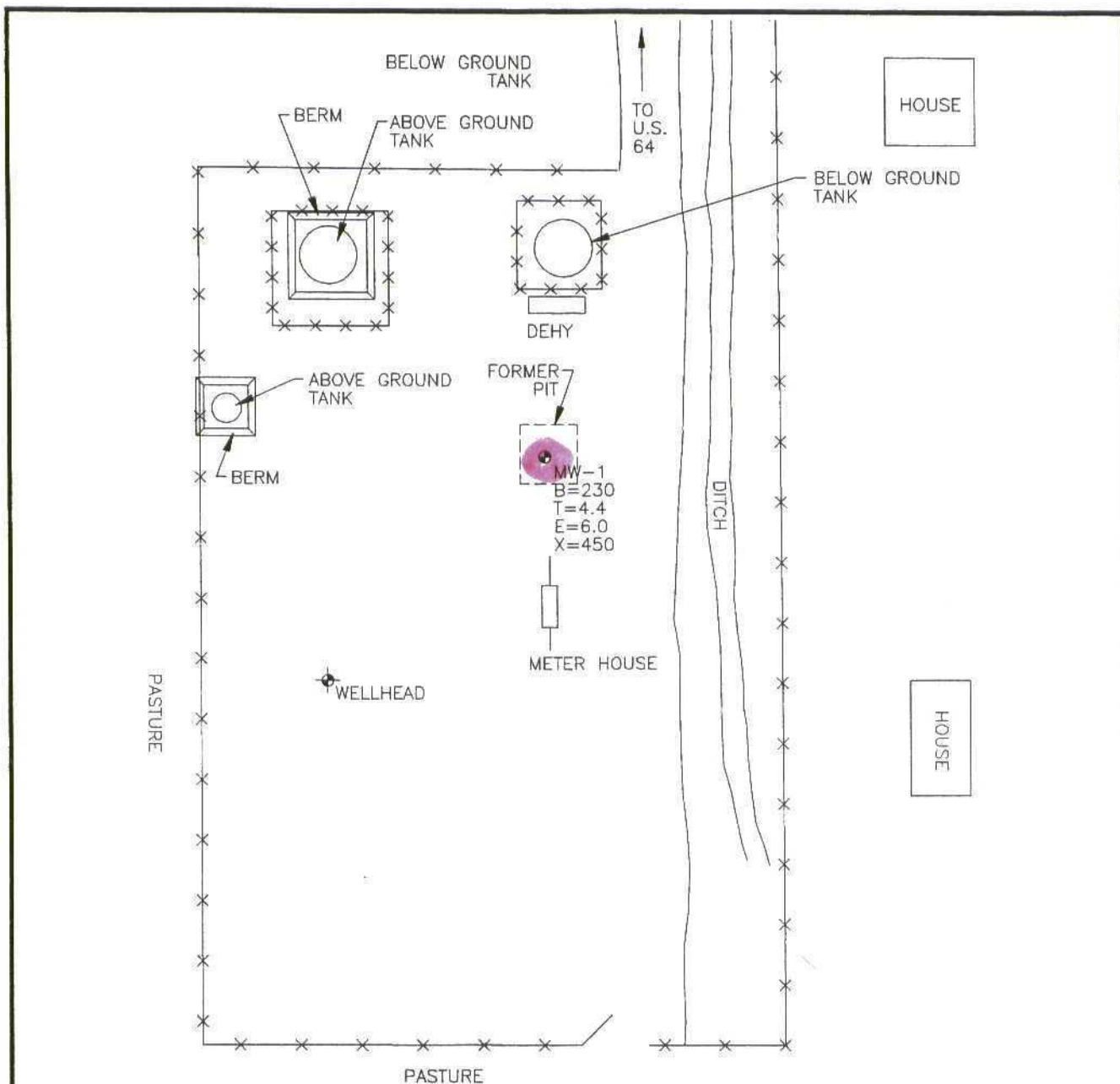
- EPFS proposes to continue annual sampling at the site until BTEX levels are lowered.
- Quarterly sampling will follow until BTEX levels are below NMWQCC standards for four consecutive quarters.
- EPFS will continue to provide the operator with pertinent site data regarding EPFS activities at the site.

**Table 1**

March 2001

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

0 40  
FEET



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

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**ATTACHMENT 1**

**2000 GROUNDWATER ANALYTICAL**

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Project Name EPS QUARTERLY SAMPLING

Project Manager Robert Thompson

Project No. 6280007

Client Company EL PASO FIELD SERVICES

Phase.Task No. 0301

Site Name GCU COM A # 142 E (63906) Site Address RURAL SAN JUAN COUNTY

## 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) 21.72 Tds

Initial Depth to Water (feet) 16.44 708

Height of Water Column in Well (feet) 5.38

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

## Instruments

11-11-11

~~2~~ pH meter

☐ DO Monitor

2000

☐ Conductivity Meter☒ Temperature Meter

1994

☐ Other

## Water Disposal

KURT SEPALATO, Bloomfield, NM.

## Water Removal Data

[illegible]

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

Comments WELL BASED DRY AT 8'; LET RECHARGE + SAMPLER FOR BTEX AT 1508

Developer's Signature(s) James Wagon

Date 5/25/02

Reviewer RT Date 5/25/00

# Chain of Custody Record

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

COC Serial No. C 2556

[illegible]

Relinquished by:

Received By:

<b>Transmitted by:</b>		<b>Received by:</b>	
<b>Signature</b>	<b>Date</b>	<b>Signature</b>	<b>Date</b>
Jean Lapierre	5/8/90		

**Samples Iced:**

☐ No ☐ S

**Samples Iced:** ☒ Yes ☐ No

**Preservatives (ONLY Y for Water Samples)**

### Shipping and Lab Notes:

**Carrier:**

1. The first step is to identify the key components of the system. This includes understanding the hardware, software, and data involved. For example, in a web application, this might involve identifying the server, database, and client-side code.

2. The second step is to analyze the system's behavior. This involves observing how the system responds to different inputs and outputs. This can be done through manual testing or automated testing tools.

3. The third step is to identify potential vulnerabilities. This involves looking for weaknesses in the system that could be exploited by an attacker. This can be done through a variety of techniques, including code review, penetration testing, and vulnerability scanning.

4. The fourth step is to develop a plan to address the identified vulnerabilities. This involves determining the severity of each vulnerability and developing a strategy to mitigate the risk. This might involve patching the system, changing configuration settings, or implementing additional security controls.

5. The fifth step is to implement the plan. This involves making the necessary changes to the system to address the vulnerabilities. This might involve updating software, changing configuration settings, or implementing new security controls.

6. The sixth step is to verify the effectiveness of the plan. This involves testing the system to ensure that the vulnerabilities have been successfully addressed. This can be done through a variety of techniques, including manual testing, automated testing, and penetration testing.

7. The seventh step is to document the results of the audit. This involves creating a report that summarizes the findings of the audit and the actions taken to address the vulnerabilities. This report can be used to inform management and other stakeholders of the system's security status.

8. The eighth step is to review the audit process. This involves reflecting on the audit process and identifying areas for improvement. This can be done through a variety of techniques, including debriefing sessions, retrospectives, and continuous improvement processes.

9. The ninth step is to maintain the system's security. This involves ongoing monitoring and maintenance of the system to ensure that it remains secure over time. This can be done through a variety of techniques, including regular security audits, vulnerability scanning, and incident response planning.

10. The tenth step is to communicate the results of the audit. This involves sharing the findings of the audit with relevant stakeholders, including management, users, and the public. This can be done through a variety of channels, including reports, presentations, and public disclosures.

Airbill No. 66TUB0650749

PINNACLE  
LABORATORIES

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

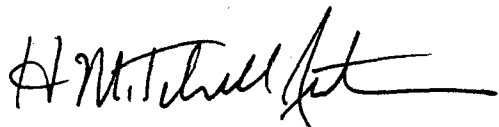
EL PASO FIELD SERVICES  
614 RIELY STREET  
FARMINGTON, NM 87401

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.

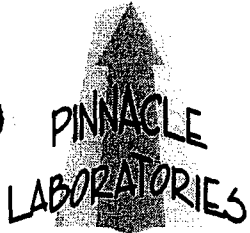
If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.



H. Mitchell Rubenstein, Ph. D.  
General Manager

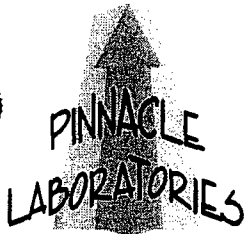
MR: jt

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



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

### GAS CHROMATOGRAPHY RESULTS

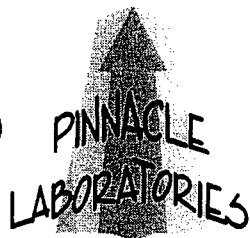
TEST : EPA 8021 MODIFIED  
CLIENT : PHILIP ENVIRONMENTAL  
PROJECT # : 62800107  
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 005109

SAMPLE		DATE		DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	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



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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:

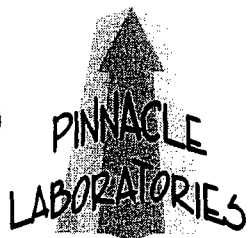
PERMETHYLBENZENE (%)

102

SPURIOUS LIMITS: ( 80 - 120 )

CHEMIST NOTES:

N/A



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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 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 # : 005101-04  
CLIENT : PHILIP ENVIRONMENTAL  
PROJECT # : 62800107  
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D. : 005109  
DATE EXTRACTED : NA  
DATE ANALYZED : 05/26/00  
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	18.8	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

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

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



