

3R - 196

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 dark ink, appearing to read 'Scott T. Pope', written over a horizontal line.

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**

10

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

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

March 2001

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 62800398



196

EPFS GROUNDWATER PITS

2000 ANNUAL GROUNDWATER REPORT

JAMES F BELL # 1E
Meter/Line ID - 94715

SITE DETAILS

Legals - Twn: 30N **Rng:** 13W **Sec:** 10 **Unit:** P
NMOCD Hazard Ranking: 40 **Land Type:** FEDERAL
Operator: AMOCO PRODUCTION COMPANY

PREVIOUS ACTIVITIES

Site Assessment: Mar-94 **Excavation:** Apr-94 (0 cy) **Soil Boring:** Oct-95
Monitor Well: Oct-95 **Down-gradient MW's:** Nov-95 **PSH Removal Initiated:** Jul-97
Additional Monitor Wells: June-99

2000 ACTIVITIES

Phase Separated Hydrocarbon (PSH) Removal - PSH removal from MW-1 continued through 2000 and product thickness was monitored in MW-2, MW-3, and MW-4.

Groundwater Monitoring - Annual samples were obtained from MW-2 and MW-4 in January 2000.

SUMMARY TABLES

Groundwater levels and PSH recovery data are presented in Table 1. Groundwater analytical data are presented in Table 2. Copies of the laboratory data sheets and the associated quality assurance/quality control data are presented as Attachment 1.

SITE MAP

A site map is included as Figure 1. Groundwater gradient maps were not generated due to the presence of product and product skimmer.

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

There were no drilling activities at this site during 2000.

DISPOSITION OF GENERATED WASTES

The phase-separated hydrocarbons removed from MW-1 were disposed of at the EPFS Kutz Separator in Bloomfield, New Mexico.

ISOCONCENTRATION MAPS

With the presence of phase separated hydrocarbons at this site, isoconcentration maps were not generated.

CONCLUSIONS

A total of 431.14 gallons of PSH have been removed from MW-1 to date with approximately 45 gallons of the cumulative total removed in 2000. During 1999 approximately 80 gallons of PSH was removed from MW-1, indicating a reduction of almost half the volume of product recovered the year before. Laboratory analyses of groundwater samples from MW-2 indicate benzene levels

EPFS GROUNDWATER PITS 2000 ANNUAL GROUNDWATER REPORT

above the NMWQCC groundwater standards and no detectable levels of BTEX in the groundwater from MW-4.

Pertinent data from past groundwater reports include the following:

The northeastern edge of the site was drilled and two borings were drilled to a total depth of over 30 feet. Both of the borings resulted in dry holes, which confirms information collected in the past that assumes the aquifer is a very localized perched zone. Based on groundwater levels collected from the four monitoring wells, the groundwater flow trends to the south and the west on this site.

RECOMMENDATIONS

- Continue product removal at MW-1.
- Collect water samples annually until BTEX levels are below New Mexico groundwater standards, then sample quarterly for closure.
- Collect static water level data quarterly.
- Following OCD approval for closure, all monitor wells will be abandoned using OCD approved abandonment procedures.

Table 1

March 2001

Meter/Line #	Location/Line Name	Date	MW	Depth to Product	Depth to Water	Product Thickness	Volume Removed Gallons	Cumulative Gallons
94715	J.F. BELL #1 E	05/19/2000	1	27.15	29.16	2.01	0	386.14
94715	J.F. BELL #1 E	06/08/2000	1	27.15	29.34	2.19	45	431.14
94715	J.F. BELL #1 E	01/17/2001	1	27.96	28.19	0.23	0	431.14
94715	J.F. BELL #1 E	01/26/2000	2	25.835	25.834	0.005	0	0
94715	J.F. BELL #1 E	02/14/2000	2	25.08	25.09	0.01	0	0
94715	J.F. BELL #1 E	10/29/2000	2	NA	26.37	0	0	0
94715	J.F. BELL #1 E	01/17/2001	2	NA	26.52	0	0	0
94715	J.F. BELL #1 E	01/26/2000	3	26.97	28.41	1.44	0	0
94715	J.F. BELL #1 E	02/14/2000	3	27.06	28.59	1.53	0	0
94715	J.F. BELL #1 E	10/29/2000	3	27.49	29.04	1.55	0	0
94715	J.F. BELL #1 E	01/17/2001	3	27.66	29.15	1.49	0	0
94715	J.F. BELL #1 E	01/26/2000	4	26.03	26.035	0.005	0	0
94715	J.F. BELL #1 E	02/14/2000	4	26.18	26.18	<0.01	0	0
94715	J.F. BELL #1 E	10/29/2000	4	NA	26.55	0	0	0
94715	J.F. BELL #1 E	01/17/2001	4	NA	26.7	0	0	0

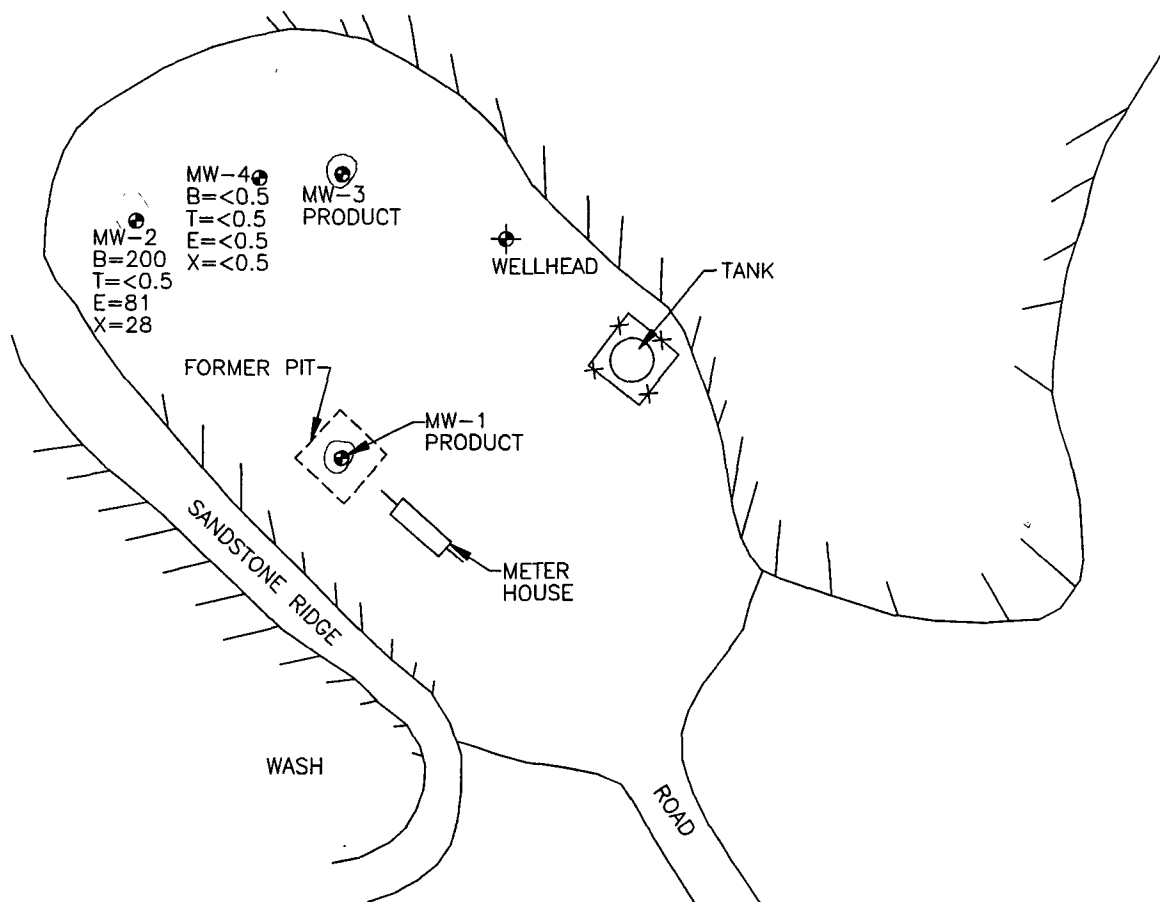
Table 2

March 2001

Sample #	Meter / Line #	Site Name	Sample Date	MW #	Project	Benzene (PPB)	Toluene (PPB)	Ethyl Benzene (PPB)	Total Xylenes (PPB)	Total BTEX (PPB)
JFB-0010-MW2	94715	J.F. Bell	01/11/2000	2	Sample 1 - 1st Annual	= 200	< 0.5	= 81	= 28	309
JFB-0010-MW3	94715	J.F. Bell	01/11/2000	4	Sample 1 - 1st Annual	< 0.5	< 0.5	< 0.5	< 0.5	ND

ND- No Detectable Levels

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

NOT TO SCALE



COL 628\00219AF-002



TITLE:
J.F. BELL #1E
METER 94715
OCTOBER 11, 2000

DWN: TMM	DES.: LW
CHKD: LW	APPD: MN
DATE: 2/19/01	REV.: 0

PROJECT NO.: 62800219
EPFS GW PITS

FIGURE 1

ATTACHMENT 1

2000 GROUNDWATER ANALYTICAL

Project Name EpFS Quarterly Sampling
 Client Company EpFS
 Site Name J.F. Bell #1E (94715)
 Project Manager R Thompson
 Project No. 62800107
 Phase/Task No. 0301
 Site Address Rural Sun Jean Co.

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 35.07
Initial Depth to Water (feet) 26.41
Height of Water Column in Well (feet) 8.66
Diameter (inches): Well 4" Gravel Pack

Instruments

☒ pH Meter	<u>Hydax</u>
☐ DO Monitor	
☒ Conductivity Meter	<u>Hydax</u>
☒ Temperature Meter	<u>Hydax</u>
☐ Other	

Water Disposal

KATZ September Bloomfield N.M.

Water Removal Data

[illegible]

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

Comments Sampled for BTEX 0927

Developer's Signature(s) Chris A. May

Date 10-11-00

Reviewer
RT

Date 10/18/00

Chain of Custody, Record

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2431

[illegible]

Relinquished by:

Received By:

Received by:		Signature		Date	Time
		<i>[Signature]</i>		10-16-80	1170

Samples Iced:

Samples Iced: ☒ Yes ☐

Preservatives (ONLY for Water Samples)

Samples Iced: ☒ Yes ☐ No

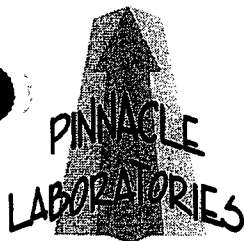
Reservatives (ONLY for Water Samples)

☐ Cyanide	 Sodium hydroxide (NaOH)
☐ Volatile Organic Analysis	 Hydrochloric acid (HCl)
☐ Metals	 Nitric acid (HNO ₃)
☐ TPH (418.1)	 Sulfuric acid (H ₂ SO ₄)
☒ Other (Specify) <u>HgCl₂</u>	
☐ Other (Specify) _____	

Carrier: 6034

Shipping and Lab Notes:

Airbill No. 611606918710



OCT 27 2000

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

Pinnacle Lab ID number **010058**
October 23, 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/SCOTT POPE

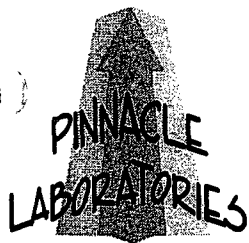
On 10/16/00 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

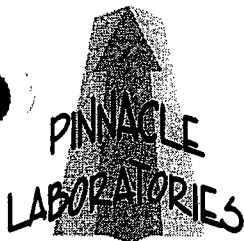
MR: jt

Enclosure



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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 010058
PROJECT #	: 62800107	DATE RECEIVED	: 10/16/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 10/23/00
PIN			DATE
ID. #	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	JFB-0010-MW 02	AQUEOUS	10/11/00
02	JFB-0010-MW 04	AQUEOUS	10/11/00



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GAS CHROMATOGRAPHY RESULTS

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

PINNACLE I.D.: 010058

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JFB-0010-MW 02	AQUEOUS	10/11/00	NA	10/18/00	1
02	JFB-0010-MW 04	AQUEOUS	10/11/00	NA	10/18/00	1

PARAMETER	DET. LIMIT	UNITS	JFB-0010-MW 02	JFB-0010-MW 04
BENZENE	0.5	UG/L	200	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5
BENZENE	0.5	UG/L	81	< 0.5
TOTAL XYLENES	0.5	UG/L	28	< 0.5

SURROGATE:

BROMOFLUOROBENZENE (%)

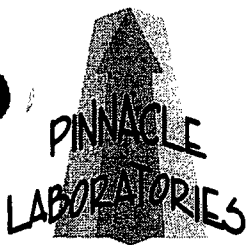
81

95

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

N/A



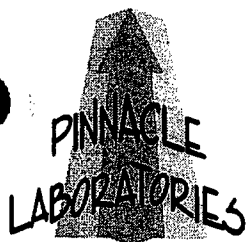
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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 010058
BLANK I. D.	: 101800	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 10/18/00
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

SPRINT GATE:
BROMOFLUOROBENZENE (%) 94
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 # : 101800
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D. : 010058
DATE EXTRACTED : NA
DATE ANALYZED : 10/18/00
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	17.3	87	18.2	91	5	(80 - 120)	20
TOLUENE	<0.5	20.0	18.9	95	18.3	92	3	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.2	101	19.6	98	3	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	58.7	98	57.1	95	3	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

