

3R - 174

REPORTS

DATE:

1998



Certified Mail: #Z 211 324 121

March 31, 1999

Mr. William C. Olson
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87504

RECEIVED

APR 05 1999

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 1998 Pit Project Annual Groundwater Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual updates for the 49 remaining groundwater impacted locations that were identified during our pit closure project of 1994 / 1995.

Of the 49 reports, EPFS hereby requests closure of 18 of these locations. The 18 sites EPFS is requesting closure on are presented in 4 separate binders entitled "Final Closure Report for Groundwater Sites with Four Consecutive Quarters Below Standards".

The Jaquez Com. C #1 and Jaquez Com. E #1 site is included in a separate report which is entitled "Jaquez Com. C #1 and Jaquez Com. E #1 Annual Report for Soil and Groundwater Remediation".

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'.

Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **Certified Mail # Z 211 324 122**
Mr. Bill Liesse, BLM - w / enclosures; **Certified Mail # Z 211 324 123**
Ms. Charmaine Tso, Navajo EPA - w / enclosures; **Certified Mail # Z 211 324 120**

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

El Paso Field Services
Final Closure Report For Groundwater Sites With Four
Consecutive Quarters Below Standards

December 1998

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 17520
Book 1



EPFS GROUNDWATER PITS 1998 ANNUAL GROUNDWATER REPORT

FOGELSON 4-1 COM #14
Meter/Line ID - 73220

SITE DETAILS

Legals - Twn: 29N Rng: 11W Sec: 4 Unit: P
NMOCD Hazard Ranking: 10 Land Type: FEDERAL
Operator: BURLINGTON RESOURCES

PREVIOUS ACTIVITIES

Site Assessment: Mar-94 Excavation: Apr-94 (65 cy) Soil Boring: Oct-95
Monitor Well: Oct-95 Geoprobe: Dec-96 Quarterly Sampling Initiated: Dec-96

1998 ACTIVITIES

Quarterly Groundwater Monitoring - Quarterly groundwater monitoring continued through the first two quarters of 1998. Groundwater analytical data are presented in Table 1. A site map is presented as Figure 1.

Operator Notification- The operator was notified that up-gradient production pits might be causing contamination of groundwater. Quarterly sampling was discontinued in June of 1998 and will resume when operator involvement is initiated.

CONCLUSIONS

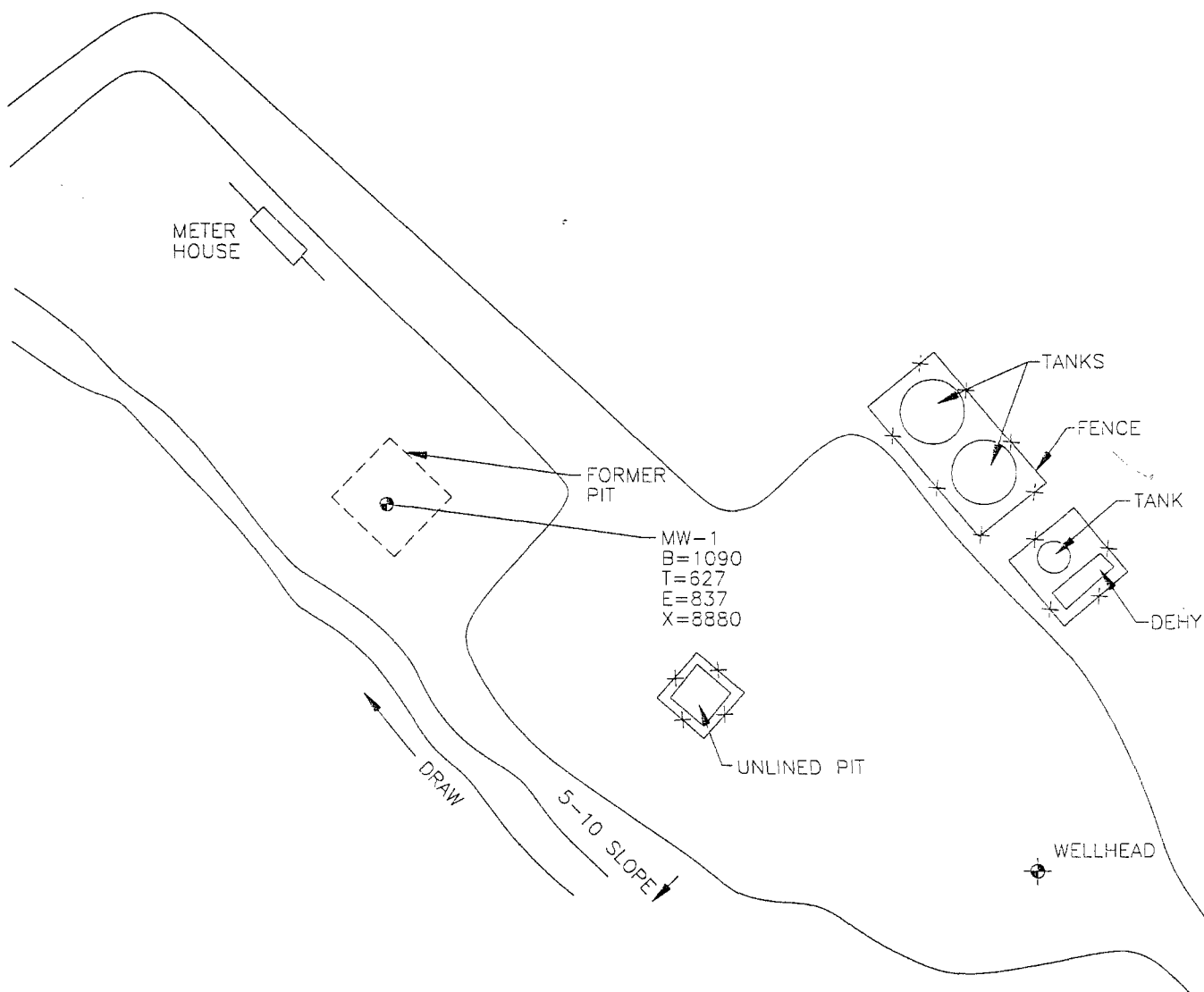
Analytical results of groundwater samples from MW-1 show levels of benzene, ethyl benzene and total xylenes above New Mexico Groundwater Standards. Quarterly sampling was discontinued in June of 1998 while EPFS waits for the operator to investigate the unlined pit associated with their operations at the location.

Pertinent data from the 1997 groundwater report include the following: Based on groundwater levels collected from temporary well point data, the direction of groundwater flow is to the west on this site. Groundwater samples collected from MW-1 have been above standards for benzene, and total xylenes since quarterly sampling was initiated. Down-gradient and up-gradient Geoprobe and temporary well point groundwater samples are also in excess of standards. Off-site work will be required to define extent of migration.

One groundwater sample collected from PZ-1, which is up-gradient of MW-1 and slightly down-gradient of the operators unlined production pit, is in excess of standards for BTEX, indicating the unlined pit may be an up-gradient source.

RECOMMENDATIONS

- Discontinue quarterly sampling at MW-1 and sample annually until operator has performed investigation and remediation of operator pit.
- EPFS will continue to work with the operator at this location and has supplied operator with data collected by EPFS.



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. 17520BK-002



TITLE:

FOGELSON 4-1 #14
METER 73220
JUNE 4, 1998

OWN:

TMM

DES.:

CI

PROJECT NO.:

17520

CHKD:

CI

APPD:

DATE:

2/26/99

REV.:

0

EPFS GW PITS

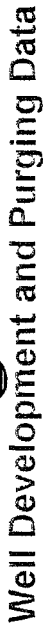
FIGURE 1

EPFS Groundwater Pits
1998 Groundwater Report

TABLE 1

| Sample # | Meter/Line # | Site Name | Sample Date | MW # | Project | Benzene (PPB) | Toluene (PPB) | Ethyl Benzene (PPB) | Total Xylenes (PPB) | Total BTEX |
|----------|--------------|-----------------------|-------------|------|------------------------|------------------|------------------|------------------------|------------------------|------------|
| 980263 | 73220 | Fogelson 4-1 Com. #14 | 03/30/98 | 1 | Sample 4 - 6th Quarter | = 1070 | = 522 | = 789 | = 8430 | = 10811 |
| 980456 | 73220 | Fogelson 4-1 Com. #14 | 06/04/98 | 1 | Sample 4 - 7th Quarter | = 1090 | = 627 | = 837 | = 8880 | = 11434 |

**1998 GROUNDWATER
ANALYTICAL**



| | |
|-------------------------------------|-------------|
| <input type="checkbox"/> | Development |
| <input checked="" type="checkbox"/> | Purging |

Well Number *AW-1*

Site Name FOGELSON 4-1 COM. #14

Meter Code 73720

Development Criteria

- | | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | 3 to 5 Casing Volumes of Water Removal |
| <input type="checkbox"/> | Stabilization of Indicator Parameters |
| <input type="checkbox"/> | Other |

Water Volume Calculation

Initial Depth of Well (feet) 47.79

Initial Depth to Water (feet) 41.08

Height of Water Column in Well (feet) 6.7

Diameter (inches): Well 4 Gravel Pack

Methods of Development

- | | | |
|--------------------------|-------------|---|
| <input type="checkbox"/> | Pump | Bailer |
| <input type="checkbox"/> | Centrifugal | Bottom Valve <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | Submersible | Double Check Valve <input type="checkbox"/> |
| <input type="checkbox"/> | Peristaltic | Stainless-steel Kemmerer <input type="checkbox"/> |

Instruments

- | | |
|-------------------------------------|---------------------|
| <input checked="" type="checkbox"/> | pH Meter |
| <input type="checkbox"/> | DO Monitor |
| <input checked="" type="checkbox"/> | Conductivity Meter |
| <input checked="" type="checkbox"/> | Temperature Meter |
| <input checked="" type="checkbox"/> | Other <u>DO, CR</u> |

Water Disposal

KUTZ SEPARATOR

| Item | Water Volume in Well | | Gallons to be Removed |
|-----------------|----------------------|---------|-----------------------|
| | Cubic Feet | Gallons | |
| Well Casing | | 4.4 | 13.3 |
| Gravel Pack | | | |
| Drilling Fluids | | | |
| Total | | | |

Water Removal Data

[illegible]

Comments TR/E WATER + 140 A STRONG HYDROGEN SULFIDE SMELL.

Developer's Signature *Dennis Bird*

Date 3-30-98 Reviewer _____

John F. Kelly

Date 4/10/98



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

| | Field ID | Lab ID |
|----------------------------|----------------------|----------------------|
| SAMPLE NUMBER: | N/A | 980263 |
| MTR CODE SITE NAME: | 73220 | Fogelson 4-1 Com #14 |
| SAMPLE DATE TIME (Hrs): | 3/30/98 | 1052 |
| PROJECT: | Sample 4 6th Quarter | |
| DATE OF BTEX EXT. ANAL.: | 4/6/98 | 4/6/98 |
| TYPE DESCRIPTION: | MW-1 | Water |

Field Remarks: _____

RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|---------------|--------|-------|------------|---|--|--|
| | | | DF | D | | |
| BENZENE | 1070 | PPB | 50 | D | | |
| TOLUENE | 522 | PPB | 50 | D | | |
| ETHYL BENZENE | 789 | PPB | 50 | D | | |
| TOTAL XYLENES | 8430 | PPB | 50 | D | | |
| TOTAL BTEX | 10811 | PPB | | | | |

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 102.2 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indicates that the analyte calculated is based on a secondary dilution factor.

Narrative: _____

Approved By: _____

Date: 4/10/98

980263BTEXMW,4/7/98

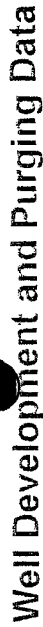


Nature as Company

CHAIN OF CUSTODY RECORD

A 2649

[illegible]



| | |
|-------------------------------------|-------------|
| <input type="checkbox"/> | Development |
| <input checked="" type="checkbox"/> | Purging |

Well Number 7W-1
Meter Code 73220

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

| | Pump | Bailer |
|-------------|--------------------------|---|
| Centrifugal | <input type="checkbox"/> | <input checked="" type="checkbox"/> Bottom Valve |
| Submersible | <input type="checkbox"/> | <input type="checkbox"/> Double Check Valve |
| Peristaltic | <input type="checkbox"/> | <input type="checkbox"/> Stainless-steel Kemmerer |

☐ Other

| | |
|---------------------------------------|-------|
| Initial Depth of Well (feet) | 47.79 |
| Initial Depth to Water (feet) | 47.02 |
| Height of Water Column in Well (feet) | 6.77 |

| Diameter (inches): | Well | Gravel Pack |
|--------------------|------|-------------|
| 4 | | |

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

Water Disposal

K072 SEPATAOP

[illegible]

Comments THE WATER HAD A STRONG HYDROGEN SULFIDE SMELL.

Developer's Signature *Dennis Bird*

Date 6-4-98 Reviewer _____

John Fardie Date 6/10/08



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

| | Field ID | Lab ID |
|----------------------------|----------------------|----------------------|
| SAMPLE NUMBER: | N/A | 980456 |
| MTR CODE SITE NAME: | 73220 | Fogelson 4-1 Com #14 |
| SAMPLE DATE TIME (Hrs): | 6/4/98 | 1612 |
| PROJECT: | Sample 4 7th Quarter | |
| DATE OF BTEX EXT. ANAL.: | 6/6/98 | 6/6/98 |
| TYPE DESCRIPTION: | MW-1 | Water |

Field Remarks:

RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|---------------|--------|-------|------------|-------|--|--|
| | | | DF | Q | | |
| BENZENE | 1090 | PPB | 10 | D | | |
| TOLUENE | 627 | PPB | 10 | D | | |
| ETHYL BENZENE | 837 | PPB | 10 | D | | |
| TOTAL XYLENES | 8880 | PPB | 10 | D, D1 | | |
| TOTAL BTEX | 11434 | PPB | | | | |

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 96.2 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indicates that the analyte calculated is based on a secondary dilution factor.

The "D1" qualifier indicates that the analyte concentration exceeded the calibration curve limit.

Narrative:

Approved By:

John Linder

Date:

6/10/98

980456BTEXMW,6/8/98

CHAIN OF CUSTODY RECORD

| Project No. | | Project Name | | Requested Analysis | | Remarks | |
|---|------|--------------|------|---|----|------------------------|---|
| Samplers: (Signature) | | Date | | Type and No. of Sample Containers | | Preservation Technique | |
| Date | Time | Comp. | GRAB | Sample Number | | | |
| DATE 6-4-98 | 1612 | | X | 980456 | 51 | 4°C | X |
| DATE 6-4-98 | | | | FOGELSON 4-1 COM #44 MW-1 | | | |
| <div style="display: flex; justify-content: space-between;"> <div> Relinquished by: (Signature) Relinquished by: (Signature) Relinquished by: (Signature) </div> <div> Date/Time Date/Time Date/Time </div> <div> Received by: (Signature) Received by: (Signature) Received for Laboratory by: (Signature) </div> <div> Date/Time Date/Time Date/Time </div> <div> Relinquished by: (Signature) Relinquished by: (Signature) Relinquished by: (Signature) </div> <div> Date/Time Date/Time Date/Time </div> <div> Received by: (Signature) Received by: (Signature) Received by: (Signature) </div> </div> | | | | | | | |
| Carrier Co: | | | | Date Results Reported / by: (Signature) | | | |