

3R - 238

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

STANDARD OIL COM #1
Meter/Line ID - 70445

SITE DETAILS

Legals - Twn: 29N Rng: 9W Sec: 36 Unit: N
NMOCD Hazard Ranking: 30 Land Type: STATE
Operator: BURLINGTON RESOURCES

PREVIOUS ACTIVITIES

Site Assessment: May-94 Excavation: May-94 (60 cy) Soil Boring: Sep-95
Monitor Well: Sep-95 Quarterly Sampling Initiated: Nov-96

1998 ACTIVITIES

Quarterly Groundwater Monitoring - Quarterly groundwater monitoring continued through 1998. Groundwater analytical data are presented in Table 1. A site map is presented as Figure 1.
Provided Operator with Site Data - EPFS has provided operator with all pertinent site data generated to date.

CONCLUSIONS

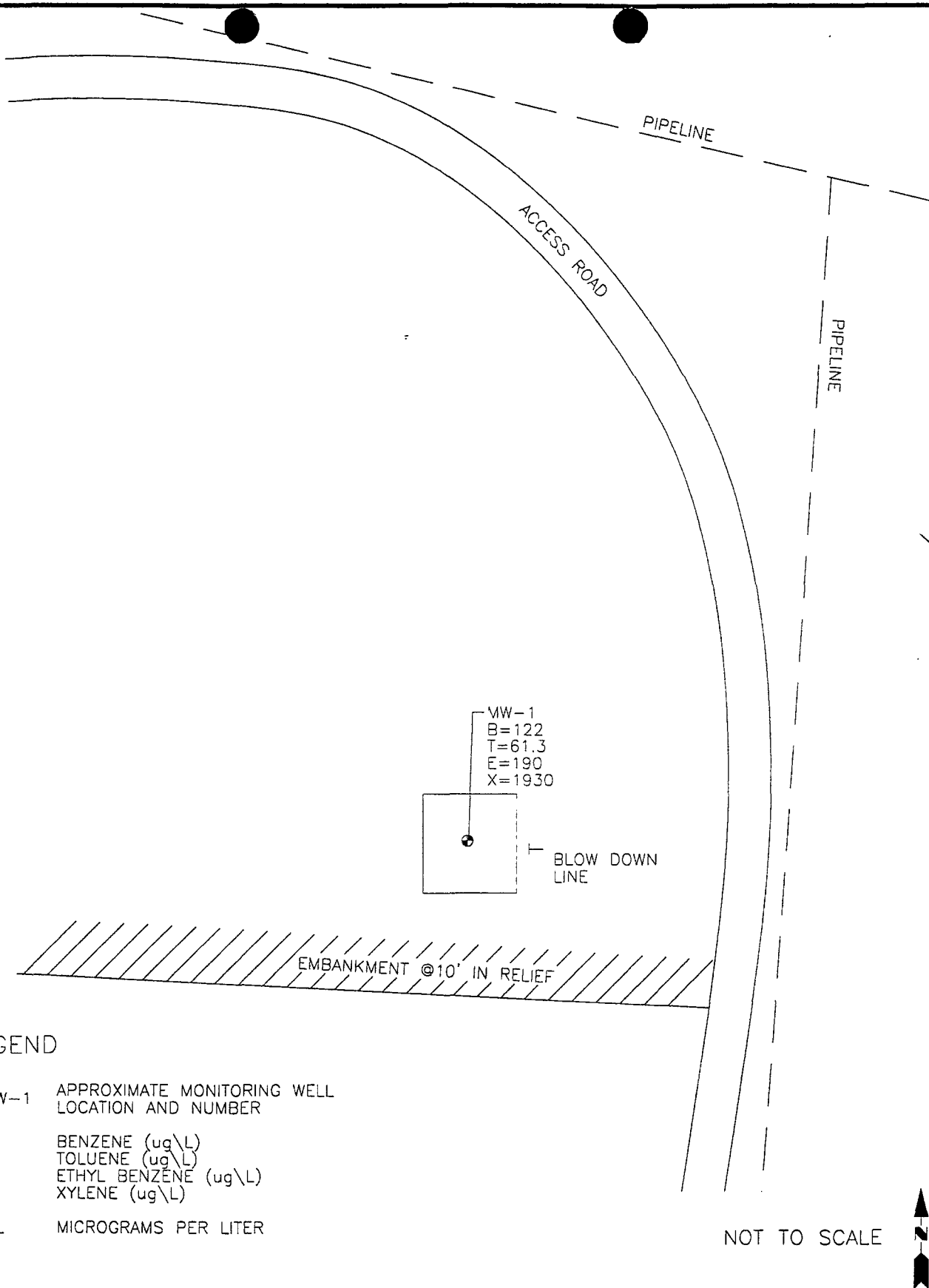
Analytical results of groundwater samples from MW-1 show levels of benzene and total xylenes above New Mexico Groundwater Standards.

Pertinent data from the 1997 groundwater report include the following: Based on groundwater levels collected from temporary well point data, the groundwater flow trends to the northwest on this site.

Groundwater samples collected from MW-1 have been in excess of standards for benzene and total xylenes since quarterly sampling was initiated. One sample collected from PZ-5, located up-gradient of MW-1, was in excess of standards for benzene at 10,400 ppb and total xylenes at 5,500 ppb, indicating a second source.

RECOMMENDATIONS

- EPFS proposes to conduct semi-annual monitoring at this site.
- EPFS will continue to work with the operator at this site.



COL. 17520BD-002



TITLE:
STANDARD OIL COM #1
METER 70445
NOVEMBER 11, 1998

DWN: TMM	DES.: CI
CHKD: CI	APPD:
DATE: 2/26/99	REV.: 0

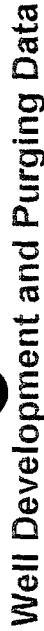
PROJECT NO.: 17520 EPFS GW PITS
FIGURE 1

**1998 GROUNDWATER
ANALYTICAL**

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
980134	70445	Standard Oil Com #1	02/03/98	1	Sample 4 - 6th Quarter	= 109	= 31.0	= 163	= 1680	= 1983.0
980361	70445	Standard Oil Com #1	05/07/98	1	Sample 4 - 7th Quarter	= 107	= 24.2	= 161	= 1640	= 1932.0
980542	70445	Standard Oil Com #1	08/04/98	1	Sample 4 - 8th Quarter	= 113	= 48.7	= 167	= 1580	= 1908.0
980768	70445	Standard Oil Com #1	11/03/98	1	Sample 4 - 9th Quarter	= 122	= 61.3	= 190	= 1930	= 2303.7



☐ Development

☒ Purging

Well Number MW-1
Meter Code 70445

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

Initial Depth of Well (feet) 32.93
Initial Depth to Water (feet) 20.61
Height of Water Column in Well (feet) 12.32

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

☒	pH Meter
☐	DO Monitor
☒	Conductivity Meter
☒	Temperature Meter
☒	Other <u>D.O.C.</u>

KUTZ SEPARATOR

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		8.1	24.4
Gravel Pack			
Drilling Fluids			
Total			

[illegible]

Comments

THE WATER HAD A STRONG HYDROGEN SULFIDE SMELL.

Developer's Signature *James Bird*

Date 2-3-98

John F. Felt

Date 2/17/48



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980134
MTR CODE SITE NAME:	70445	Standard Oil Com #1
SAMPLE DATE TIME (Hrs):	2/3/98	1535
PROJECT:	Sample 4 6th Quarter	
DATE OF BTEX EXT. ANAL.:	2/7/98	2/7/98
TYPE DESCRIPTION:	MW-1	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	109	PPB				
TOLUENE	31.0	PPB				
ETHYL BENZENE	163	PPB				
TOTAL XYLENES	1680	PPB	5	D		
TOTAL BTEX	1983	PPB				

--BTEX is by EPA Method 8020 --

Surrogate Recovery was at 97.3 % for this sample All QA/QC was acceptable.

= Dilution Factor Used

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

ative:

proved By:

John L. Larch

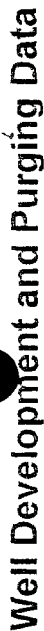
Date:

2/17/98

980134BTEXMW,2/17/98

CHAIN OF CUSTODY RECORD

[illegible]



☐	Development
☒	Purging

Well Number MW-1

Meter Code 10445

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 32.93
Initial Depth to Water (feet) 20.47
Height of Water Column in Well (feet) 12.46

4 Diameter (inches): Well Gravel Pack

Methods of Development

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

Instruments

- | | |
|-------------------------------------|----------------------------|
| ☒ | pH Meter |
| ☐ | DO Monitor |
| ☒ | Conductivity Meter |
| ☒ | Temperature Meter |
| ☒ | Other <u>DO Controller</u> |

Water Disposal
KUTZ SEPARATOR

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		8.3	24.7
Gravel Pack			
Drilling Fluids			
Total			

Other ☐

Water Removal Data

[illegible]

Comments THE WATER HAD A STRONG HYDROGEN SULFIDE SMELL.

Developer's Signature Dennis Bied

Date 5-7-98

Reviewer

James F. Smith

Date 5/12/48



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

Field ID

N/A

Lab ID

980361

MTR CODE | SITE NAME:

70445

Standard Oil Com #1

SAMPLE DATE | TIME (Hrs):

5/7/98

1538

PROJECT:

Sample 4 7th Quarter

DATE OF BTEX EXT. | ANAL.:

5/8/98

5/8/98

TYPE | DESCRIPTION:

MW-1

Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	107	PPB				
TOLUENE	24.2	PPB				
ETHYL BENZENE	161	PPB				
TOTAL XYLENES	1640	PPB	5X	D1		
TOTAL BTEX	1932	PPB				

--BTEX is by EPA Method 8020 --

Surrogate Recovery was at 90.4 % for this sample All QA/QC was acceptable.

= Dilution Factor Used

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

Narrative:

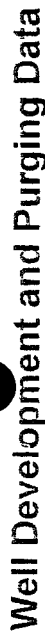
Approved By:

John Lewis

Date:

5/12/98

980361BTEXMW,5/12/98



Site Name STANDARDS o/c com

☐	Development
☒	Purging

Well Number MW-1
Meter Code 70445

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 |

Water Volume Calculation

Initial Depth of Well (feet) 32.93
Initial Depth to Water (feet) 20.85
Height of Water Column in Well (feet) 12.08

4 Diameter (inches): Well Gravel Pack

Instruments

- | | |
|-------------------------------------|-----------------------|
| ☒ | pH Meter |
| ☐ | DO Monitor |
| ☒ | Conductivity Meter |
| ☒ | Temperature Meter |
| ☒ | Other <i>P.O. C/A</i> |

Water Disposal

KUTZ SEPARATOR

Water Removal Data

[illegible]

Comments THE WATER HAD A STRONG HYDROGEN SULFIDE SMELL.

Developer's Signature Dennis Bird

Date 8-4-98

Reviewer

John Ladd

Date _____

8/21/8



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

Field ID

Lab ID

N/A

980542

MTR CODE | SITE NAME:

70445

Standard Oil Com #1

SAMPLE DATE | TIME (Hrs):

8/4/98

1200

PROJECT:

Sample 4 8th Quarter

DATE OF BTEX EXT. | ANAL.:

8/10/98

8/10/98

TYPE | DESCRIPTION:

MW-1

Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	D		
BENZENE	113	PPB	2	D		
TOLUENE	48.7	PPB	2	D		
ETHYL BENZENE	167	PPB	2	D		
TOTAL XYLENES	1580	PPB	2	D		
TOTAL BTEX	1908	PPB				

--BTEX is by EPA Method 8020 --

Surrogate Recovery was at 94.5 % for this sample All QA/QC was acceptable.

Dilution Factor Used

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

ive:

red By:

John L. Linder

Date:

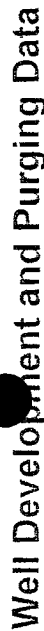
8/12/98

980542BTEXMW, 8/11/98

A. 2370

CHAIN OF CUSTODY RECORD

[illegible]



Well Number MW-1
Meter Code 70445

Site Name STANDARD OIL COM #1

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) 32.93
Initial Depth to Water (feet) 20.62
Height of Water Column in Well (feet) 12.31

4
Diameter (inches): Well Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		8.1	24.4
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- | | |
|-------------------------------------|---------------------|
| ☒ | pH Meter |
| ☐ | DO Monitor |
| ☒ | Conductivity Meter |
| ☒ | Temperature Meter |
| ☒ | Other <u>D.O. C</u> |

Water Disposal
KUTZ SEPARATOR

Water Removal Data

[illegible]

Comments THE WATER HAD A STRONG HYDROGEN SULFIDE SMELL.

Developer's Signature *Jennia Bird*

Date 11-3-98

John F. Lutz

Date 11/9/95-



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

Field ID

Lab ID

N/A

980768

MTR CODE | SITE NAME:

70445

Standard Oil Com #1

SAMPLE DATE | TIME (Hrs):

11/3/98

1210

PROJECT:

Sample 4 9th Quarter

DATE OF BTEX EXT. | ANAL.:

11/5/98

11/5/98

TYPE | DESCRIPTION:

MW-1

Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	122	PPB	5	D		
TOLUENE	61.3	PPB	5	D		
ETHYL BENZENE	190	PPB	5	D		
TOTAL XYLENES	1930	PPB	5	D		
TOTAL BTEX	2303.7	PPB				

--BTEX is by EPA Method 8020 --

Surrogate Recovery was at 101.6 % for this sample All QA/QC was acceptable.

= Dilution Factor Used

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

arrative:

Approved By:

John Lorch

Date:

11/9/98

980768BTEXMW,11/6/98

