

3R - 214

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 black 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**

EPFS GROUNDWATER PITS 1998 ANNUAL GROUNDWATER REPORT

LINDRITH B #24
Meter/Line ID - 94967

RECEIVED

APR 05 1999

SITE DETAILS

Legals - Twn: 24N Rng: 3W
NMOCD Hazard Ranking: 40
Operator: MOBIL

Sec: 9 Unit: N
Land Type: FEE

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

PREVIOUS ACTIVITIES

Site Assessment: Aug-94 Excavation: Oct-94 (60 cy) Soil Boring: Jun-95
Re-Excavation: Aug-95 (180 cy) Monitor Well: May-97 Quarterly Sampling Initiated: Aug-97

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.

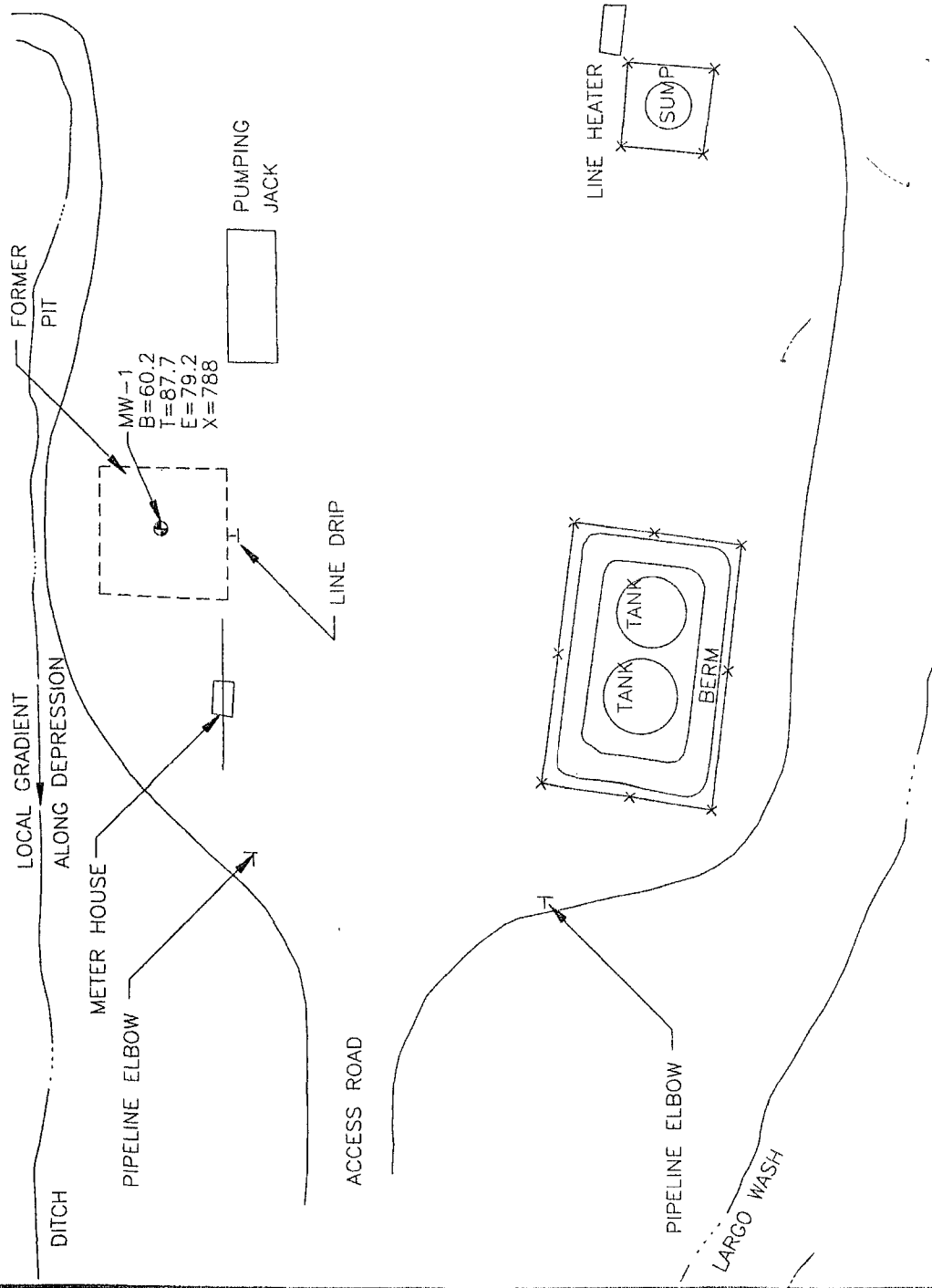
CONCLUSIONS

Analytical results of groundwater samples from MW-1 show levels of benzene and total xylenes above New Mexico Groundwater Standards. Hydrocarbon constituent concentrations are remaining stable at the location. Groundwater gradient has not been established at this site, and BTEX levels have remained constant since quarterly sampling was initiated.

Pertinent data from the 1997 groundwater report include the following: The initial analytical sample from MW-1 was above New Mexico Groundwater Standards for benzene and total xylenes.

RECOMMENDATIONS

- The OCD requests that EPFS install groundwater monitoring wells at this site to determine the extent of groundwater contamination.
- Install temporary groundwater monitoring wells to determine groundwater gradient and to evaluate other potential sources at the site.
- Site may be a candidate for nutrient injection or air sparging.
- Quarterly sampling will continue at MW-1 until analytical results show hydrocarbon constituents are below New Mexico Groundwater Standards for four consecutive quarters.
- Following OCD approval for closure, MW-1 will be abandoned using OCD approved abandonment procedures.



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

PHILIP SERVICES CORP	TITLE: LINDRITH B No. 24 METER 94967 NOVEMBER 16, 1998		DWN: TMM	DES: CI	PROJECT NO.: 175
			CHKD: CI	APPD:	EPFS GW PITS
			DATE: 2/9/99	REV: 0	
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
980135	94967	Lindrith B #24	02/04/98	1	Sample 4 - 3rd Quarter	= 67.5	= 282.0	= 122.0	= 1350	= 1822
980386	94967	Lindrith B #24	05/11/98	1	Sample 4 - 4th Quarter	= 63.9	= 65.6	= 66.0	= 575	= 770
980544	94967	Lindrith B #24	08/05/98	1	Sample 4 - 5th Quarter	= 61.2	= 156.0	= 84.8	= 874	= 1176
980805	94967	Lindrith B #24	11/16/98	1	Sample 4 - 6th Quarter	= 60.2	= 87.7	= 79.2	= 788	= 1015

1998 GROUNDWATER ANALYTICAL



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980135
MTR CODE SITE NAME:	94967	Lindrith B #24
SAMPLE DATE TIME (Hrs):	2/4/98	1226
PROJECT:	Sample 4 3rd 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	67.5	PPB				
TOLUENE	282	PPB				
ETHYL BENZENE	122	PPB				
TOTAL XYLENES	1350	PPB	2	D1		
TOTAL BTEX	1822	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 92.2 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

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

Narrative:

Approved By:

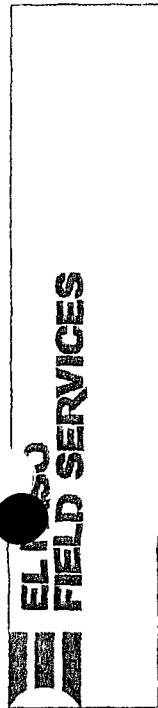
John F. Latch

Date:

2/17/98

980135BTEXMW, 2/17/98

FD-302a (Rev. 7-16-63)



Well Development and Purging Data

Well Number MW-1
Meter Code 94967

Development	☐
Purging	☒

Site Name C110R1TH B #24

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 31.75
Initial Depth to Water (feet) 24.27
Height of Water Column in Well (feet) 7.48

Diameter (inches): Well 4 Gravel Pack

Methods of Development

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

instruments

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

Temperature Meter
Other D.O. CHEMETS KIT

Water Disposal

K072 SEPAPAPOR

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		4.9	14.8
Gravel Pack			
Drilling Fluids			
Total			

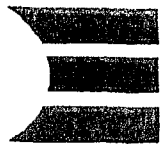
Water Removal Data

[illegible]

Comments: THE WATER HAD A LIGHT HYDROCARBON SMELL, WITH OILY APPEARANCE.

Developer's Signature Dennis Bird Date 5-11-98 Reviewer _____

Date 5/20/98



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980386
MTR CODE SITE NAME:	94967	Lindrith B #24
SAMPLE DATE TIME (Hrs):	5/11/98	1140
PROJECT:	Sample 4 4th Quarter	
DATE OF BTEX EXT. ANAL.:	5/15/98	5/15/98
TYPE DESCRIPTION:	MW-1	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	63.9	PPB	2	D		
TOLUENE	65.6	PPB	2	D		
ETHYL BENZENE	66.0	PPB	2	D		
TOTAL XYLENES	575	PPB	2	D		
TOTAL BTEX	770	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 99.2 % 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:

John Farden

Date:

5/20/98

980386BTEXMW,5/26/98

Sample 4 - 4th Quarter



E-50
Natural Gas Company

A 2354

CHAIN OF CUSTODY RECORD

Project No.		Project Name		Requested Analysis		Remarks									
Samplers: (Signature)		Date: 5-11-98		Type and No. of Sample Containers		Preservation Technique									
Date	Time	Comp.	GRAB	Sample Number											
5-11-98	1140		X	980386	5-1 4°C	X	LINCOLN B-244 MW-1								
5-11-98			X		5-1 4°C	X	TRIP BURN								
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time									
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time									
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time									
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time									
Carrier Co:		Carrier Phone No.		Date Results Reported / by: (Signature)		Remarks:									



Well Number MW-1
Meter Code 94967

☐	Development
☒	Purging

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

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

Initial Depth of Well (feet) 31.75
Initial Depth to Water (feet) 27.45
Height of Water Column in Well (feet) 2.27
Diameter (inches): Well 4 Gravel Pack

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

KUTZ SEPARATOR

[illegible]

Developer's Signature Tennia Bird

Date 8-5-98 Reviewer John Fawcett Date 8/12/98



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980544
MTR CODE SITE NAME:	94967	Lindrith B #24
SAMPLE DATE TIME (Hrs):	8/5/98	1215
PROJECT:	Sample 4 5th 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	Q		
BENZENE	61.2	PPB	2	D		
TOLUENE	156	PPB	2	D		
ETHYL BENZENE	84.8	PPB	2	D		
TOTAL XYLENES	874	PPB	2	D		
TOTAL BTEX	1176	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 90.8 % 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:

John Swick

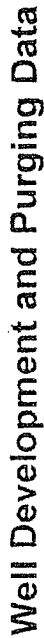
Date:

8/12/98

980544BTEXMW, 8/12/98

CHAIN OF CUSTODY RECORD

[illegible]



Well Number MW-1
Meter Code 94967

Site Name CINDRITH B #24

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 3175
Initial Depth to Water (feet) 2421
Height of Water Column in Well (feet) 754

Diameter (inches):	Well	Gravel Pack
	4	

Methods of Development

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

☐ Other

Instruments

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

Water Disposal

KUTZ SEPARATOR

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		5.0	15.0
Gravel Pack			
Drilling Fluids			
Total			

Water Removal Data

[illegible]

Comments THE WATER HAD A LIGHT HYDROCARBON SMELL, WITH OILY APPEARANCE.

Developer's Signature Dennis Bird

Date 11-16-98

Reviewer:

Date 11/20/98



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980805
MTR CODE SITE NAME:	94967	Lindrith B #24
SAMPLE DATE TIME (Hrs):	11/16/98	1141
PROJECT:	Sample 4 6th Quarter	
DATE OF BTEX EXT. ANAL.:	11/20/98	11/20/98
TYPE DESCRIPTION:	MW-1	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	D		
BENZENE	60.2	PPB				
TOLUENE	87.7	PPB				
ETHYL BENZENE	79.2	PPB				
TOTAL XYLENES	788	PPB	2	D		
TOTAL BTEX	1015	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 99.7 % 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:

John L. Linder

Date:

11/20/98

980805BTEXMW,11/20/98

Sample 4 6749R



EPSON
Natural Gas Com

A 2413

CHAIN OF CUSTODY RECORD

[illegible]