# 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 -

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## RECEIVED

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#### APR 0 5 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,

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

Sec: 4

Legals - Twn: 29NRng: 11WNMOCD Hazard Ranking: 10Operator: BURLINGTON RESOURCES

Unit: P Land Type: FEDERAL

#### **PREVIOUS ACTIVITIES**

Site Assessment: Mar-94Excavation: Apr-94 (65 cy)Monitor Well: Oct-95Geoprobe: Dec-96

Soil Boring: Oct-95 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**

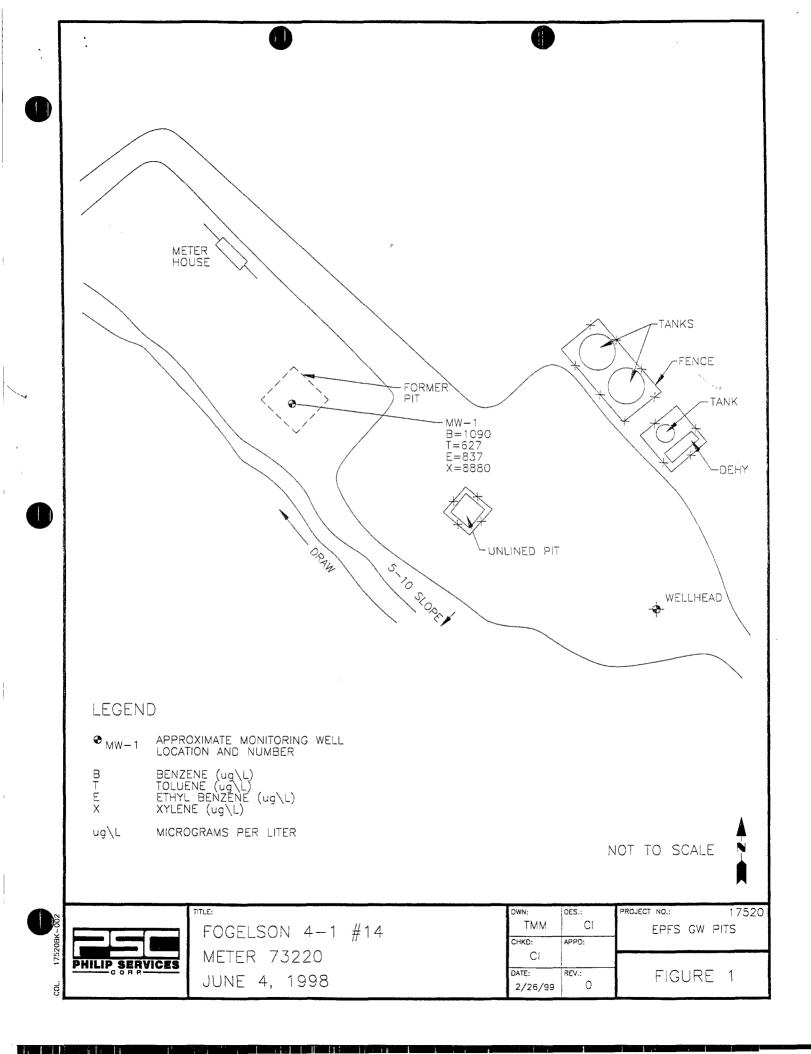
Analytical results of groundwater samples from MW-1 show levels of benzene, ethyl benzene and total xylenes above New Mexico Groundwater Standards. Quarterly sampling was discontinued in June of 1998 while EPFS waits for the operator to investigate the unlined pit associated with their operations at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



1998 Groundwater Report

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**TABLE 1** 

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l Xylenes PPB)	8430	8880
Tota (	11	11
vl Benzene (PPB)	789	837
Ediyi	11	11
uene PB)	522	627
Tol (Pl	-	
Benzene (PPB)	= 1070	= 1090
	er =	er =
ect.	6th Quart	7th Quart
Projecta	mple 4 - 0	nple 4 -
#MW	I Sa	l Sa
Sample Date	03/30/98	06/04/98
	son 4-1 Com. #14	son 4-1 Com. #14
Site Name	Fogelson 4-	Fogelson 4-
Meter/Line#	73220	73220
Sample #	980263	980456

J:\17520\Report98\Table1

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## 1998 GROUNDWATER ANALYTICAL

		services	ŝ			Well De	velopm	Well Development and Purging Data	ging Dat	la				
Site Name_		FOGELSON 4	7	CON,	, con. #14			Development Purging	Well Nu Meter C	Well Number 27W	1-M/			
Develop Develop Methods	Development Criteria 2 3 to 5 Casing Volumes of V 5 stabilization of Indicator Pa Other Methods of Development	ment Criteria 3 to 5 Casing Volumes of Water Removel Stabilization of Indicator Parameters Other of Development	er Removel neters		Water Volume Ca Initial Depth of Well (feet) Initial Depth to Water (feet) Height of Water Column in V Diameter (inches): Well	Water Volume Calculation Initial Depth of Well (feet) 40,79 Initial Depth to Water (feet) 40,68 Height of Water Column in Well (feet) 6 Diameter (inches): Well 4 Gavel P	culation		Г	Instruments PH Me DO Me Cond Cond Cond	ments pH Meter DO Monitor Conductivity Meter Temperature Meter	Ints PH Meter 30 Monitor conductivity Meter Temperature Meter		
	Pump Centrifugal Submersible Peristaltic		iarler 3ottom Valve Double Check Valve Stainless-steel Kemmerer		ltem Well Casing Gravel Pack	Water Volume in Well Cubic Feet Gallons イイ	$\mathcal{H}\mathcal{H}$	Gallons to be Removed /3,3		Water D Ku72		ULANT.	IN CIN	
	Other				Drilling Fluids Total				<del></del> 1					
Water Removal	emoval [	Data												
Date	Time	Development Method Pump Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Incre	Water Volume Removed (gal) ment Cumulative	Product Volume Removed ( gallons) Increment   Cumulative	Temperature °C	ь	Conductivity pumho/cm	Dissolved Oxygen mg/L	Comments	
3-30-98	1007								144	1202	15420			
						5	25		8771	712	0/6-51			
3-20-92	1033					5.0 2015	16.0		15.1	2/2	14760			
3.3098	1043					5.5	2300		15.5	7.73	15370	05		
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Developer's Signature <b>4</b>	Signature	Enni	nis Bi	200				Date 3-30 98 Reviewer	Reviewer	Lote	Kuld	Date	te 4/10/08	
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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	DF	QUALIFIEF	IS
BENZENE	1070	РРВ	50	D	
TOLUENE	522	РРВ	50	D	
ETHYL BENZENE	789	РРВ	50	D	
TOTAL XYLENES	8430	PPB	50	D	
TOTAL BTEX	10811	РРВ			

--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

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

Narrative:

Approved By: _	Jon Ser la	980263BTEXMW,4/7/98	Date:	4[10]G.Z

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Project No. Project Name	15 # 73720		Type		Requested Analysis		•	
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Time Comp. GRAB		Sample Number	Contain-					
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Purging Data	Well Number <u>MW-/</u> . Meter Code <u>73720</u>	Instruments     Instruments       Image: Second child be and the second child	SOLFIDE SMELL. Bale 6-4-99 Reviewer Doll Jake Oate 6/10/49
Well Development and Purging Data	「Development」 「COM、ギバリ	Nature Calculation       Water (feet)     #7,71       Water (feet)     #7,21       er Column in Well (feet)     #7,21       er Column in Well (feet)     #7,21       ress): Well gravel Pack     Water Volume in Well       Water Volume (gal)     Removed (gal)       Increment     Cumulative Increm       5,0     #7,0       5,0     #7,0	PONG HYDROGEN SOLF
FIE SERVICES	Site Name_ <u>F06 &amp; SoN 4-1</u> 001	Development Criteria       3 to 5 Casing Volumes of Water Removel       V         Stabilization of Indicator Parameters       5 casing Volumes of Water Removel       N         Other       Stabilization of Indicator Parameters       D         Other       Development       D         Pump       Bailer       D         Date       Time       Development         Removal       Removal       Intake         Cother       Development       Removal         Cother       D       D         Date       Time       Development         Removal       Intake       D         Cother       D       D         Cother       D       D         Cother       D       D         Cother       D       D	Comments THE WATCH HAD A STAR Developer's Signature Developer's Signature

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**ELPASO** 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:	<b>NW-1</b>	Water

Field Remarks:

#### RESULTS

PARAMETER	RESULT	UNITS	DF	QUALIFIE	RS
BENZENE	1090	РРВ	.10	D	
TOLUENE	627	РРВ	10	D	
ETHYL BENZENE	837	РРВ	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 indiciates 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 Fartch	980456BTEXMW,6/8/98	Date:	6/10/98

JAMPLE 4 THAT	5474		La Per as for	<b>TSU</b> as Company	- - -	:		A 236	
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Project Name	40# 732		Type		, j	Requested Analysis			
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