3R - 248

REPORTS

DATE:



Certified Mail: #Z 211 324 121

March 31, 1999

RECEIVED

APR 0 5 1999

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

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

W. D. HEATH B #5 Meter/Line ID - 87493

SITE DETAILS

Legals - Twn: 30N

Rng: 9W

Sec: 31

Unit: M

NMOCD Hazard Ranking: 30

Land Type: FEDERAL

Operator: AMOCO PRODUCTION COMPANY

PREVIOUS ACTIVITIES

Site Assessment: Apr-94 Excavation: May-94 (50 cy)

Soil Boring: May-95

Monitor Well: May-95 Geoprobe: Jan-97

Quarterly Sampling Initiated: Apr-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.

CONCLUSIONS

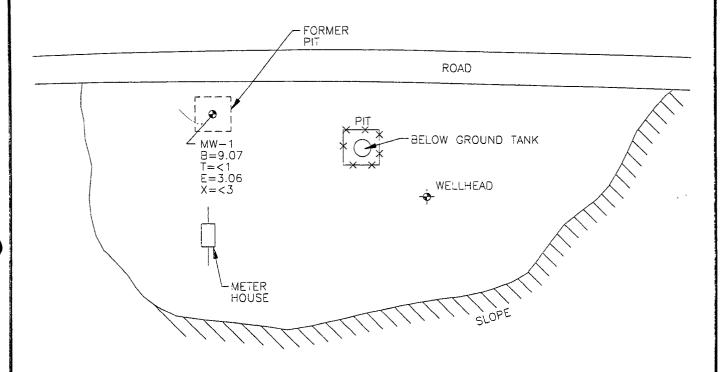
Analytical results of groundwater samples collected from MW-1 show levels of hydrocarbon constituents below New Mexico Groundwater Standards for all analytes during the last two monitoring events in 1998.

Pertinent data from the 1997 groundwater report includes the following: Based on groundwater levels collected from temporary well point data, the groundwater flow trends to the west southwest on this site. Elevated levels of hydrocarbon constituents were observed in the up-gradient monitoring point PH-3. Benzene and toluene levels exceeded New Mexico Groundwater Standards in up-gradient monitoring point PH-2.

RECOMMENDATIONS

- Quarterly sampling will continue at MW-1 until analytical results indicate 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.

WELL LOCATIONS



LEGEND

APPROXIMATE MONITORING WELL LOCATION AND NUMBER **●** MW-1

BENZENE (ug\L) TOLUENE (ug\L) ETHYL BENZENE (ug\L) XYLENE (ug\L) BTEX

ug\L MICROGRAMS PER LITER

NOT TO SCALE





WD HEATH B#5 METER 87493 OCTOBER 8, 1998

	DWN:	DES.:	PROJECT NO .:
	TMM	CI	EPFS
	CHKD:	APPD:	
i	CI		
	DATE:	REV.:	FIG
ļ	2/26/99	0	' ' '

EPFS GW PITS

FIGURE 1

EPFS Groundwater Pits 1998 Annual Groundwater Report

I BTEX	15.0	30.0	12.7	12.1
Tota	ļį.	II	11	П
otal Xylenes (PPB)	3.00 =	90.9	1.40 =	3.00 =
L	3.30 <	5.82 =	3.90 =	> 9
Toluene Ethyl Benzene (PPB)	3.3			3.06 <
	<u> </u>	1 =	= 1	- 1
Toluene (PPB)	٧	V	V	V
Benzene (PPB)	11.7	18.2	7.38 <	> 0.0
	11		11	1
Project	Sample 4 - 8th Quarter	Sample 4 - 9th Quarter =	Sample 4 - 10th Quarter =	Sample 4 - 11th Quarter =
MW#		_	_	-
Sample Date	86/90/10	04/23/98	07/21/98	10/08/98
Site Name	W D Heath B-5	W D Heath B-5	W D Heath B-5	W D Heath B-5
Meter/ Line#	87493	87493	87493	87493
Sample#	680007	980311	980532	980695

1998 GROUNDWATER ANALYTICAL



				Development	Well Number MW-/
Site Name W. D. HEATH B-5			X	Purging	Meter Code 87493
Development Criteria					
3 to 5 Casing Volumes of Water Removel	Water Vo	Volume Calculation	ulation		Instruments
Stabilization of Indicator Parameters Other	Initial Depth of I	of Well (feet)	1/2/		ph Meter
And the second s	Height of Water	/ater Column in Well (feet)	1,	1457	Conductivity Meter
Methods of Development	Diameter (inches): Well of Gravel Pack	ss): Well	Gravel Pac	, ₄	Temperature Meter
Pump Bailer		Water Volume in Well	ne in Well	Gallons to be	Other 0.0.010/15/15/11/
Centrifugal X Bottom Valve	Item	Cubic Feet	Gallons	Removed	
Submersible Double Check Valve	Well Casing		25	94	Water Disposal
Peristaltic Stainless-steel Kemmerer	Gravel Pack				KUTZ SEDARATOR
	Drilling Fluids				
Other	Total				~9

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	Comments									
Dissolved	Oxygen	mg/L	:				07			
Conductivity Dissolved	шро/сш		6.5/ 6580	679	2689 KDY	2110	218 6390			
	Hd		6.51	6.96 6790	7.0%	2110 7110	7.16			
Temperature	ပ		12.1	130	13/	17.8	126			
Product Volume	Removed (gallons)	Cumulative								
Product	Removed	Increment								
olume .	ed (gal)	Cumulative Increment Cumulative		V.	5.0	202	100			
Water Volume	Removed (gal)	Increment		30	2.0	30	20			
Ending Water	Depth	(teet)								
Intake	Depth	(teet)								
Removal	Rate	(gal/min)								
Development	Method	Bailer								
Develo	Met	Pump								
	Time		3/20	2660	5001	8/01	1028			
	Date		9/60 26-9-1	1-6B	26.9-1	2/01 26-9-1	26.8-1			

Developer's Signature Offman's S

Comments

1-6' A Reviewer

Date



SAMPLE IDENTIFICATION

·					
	Field !	D		Lab ID	
SAMPLE NUMBER:	N/A			980007	
MTR CODE SITE NAME:	8749)3	W.	D. Heath B-5	
SAMPLE DATE TIME (Hrs):	1/6/9	98		1038	
PROJECT:		Sample 4 8t	th Quarter		
DATE OF BTEX EXT. ANAL.:	1/12/	98		1/12/98	
TYPE DESCRIPTION:	MW-	1	1	Water	
Field Remarks:	R	ESULTS			
PARAMETER	RESULT	UNITS	DF	QUALIFIERS	
BENZENE	11.7	PPB			
TOLUENE	<1	PPB			
ETHYL BENZENE	3.30	PPB			
TOTAL XYLENES	<3	PPB			
TOTAL BTEX	15	PPB			
		BTEX is by EPA Method 8 for this sample		was acceptable.	
e Surrogate Recovery was at = Dilution Factor Used					

SAMPLE 4 STAPTR

CHAIN OF TODY RECORD

A 2174

Received by: (Signature) Received by: (Signature) Remarks Date Results Reported / by: (Signature) Date/Time Date/Time Requested Analysis Remarks: Relinquished by: (Signature) Relinquished by: (Signature) Date/Time Pechnique de la compansa de la compa Type and No. of Sample Contain-ers <u>/</u>S Received for Laboratory by: (Signature) Received by: (Signature) Date: 1-6-98 Received by: (Signature) 100036 Sample Number Project Name MC#87493 Samplers: (Signature) Program Bush 1698 1652 Date/Time Date/Time Time Comp. GRAB × WATER 16-98 1038 OLL PMMO L Relinquished by: (Signature) Relinquished by: (Signature) Relinquished by: (Signature) MIER 1-678 Date Carrier Co: Air Bill No.: Project No.

san juan repro Form 71-55 A



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ž	֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜
or Rom	֝֝֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜
or Rom	בורים בורים בורים
afor Rom	֓֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜
afor Rom	֓֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜
afor Rom	

		Comments									
	Dissolved	Oxygen	ma/L					1.5			
	Conductivity Dissolved	mho/cm Oxygen		6/6 6820	6.52 6590	6889	7.09 6390	7.14 6240			
		Ŧ.		6/6	6.52	6.83	f		•		
	Lemperature	ပ		16.6	15.8	18.2	18.4	16.6			
		Removed (gallons)	Cumulative Increment Cumulative								
	olume	Removed (gal)	Cumulative		30	5.0	8.0	100			
1 1 1 1	Water Volume	Kemov	Increment		3.0	2.0	3.0	2.0			
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Ending water	nebu	(feet)								
- John I	Flidke	nebru	(feet)							j	
louis and d	Nelitoval Dota	Jale	(gal/min)								
Development	Mothod	2	Bailer								
DovoC	ביים	Mel	Pump								
	Time			0923	0933	0%0	0833	1001			
	Date	3		4-23-72	423-80 0933	4-23-PP	423-88	823.8P			

Developer's Signature demons Bus

Comments

Date 423-98 Reviewer

Date 5/1



	Field	ID	Lab (D	
SAMPLE NUMBER:	N/A	1	9803	11	
MTR CODE SITE NAME:	8749	93	W. D. He	ath B-5	
SAMPLE DATE TIME (Hrs):	4/23/	98	101	2	_
PROJECT:		Sample 4 9th	Quarter		
ATE OF BTEX EXT. ANAL.:		'98	4/29/	98	_
TYPE DESCRIPTION:	MW	-1	Wat	er	
Field Remarks:		RESULTS			
	7.	1200210		· · · · · · · · · · · · · · · · · · ·	
PARAMETER	RESULT	UNITS	O.l DF	JALIFIERS O	91
BENZENE	18.2	PPB			
	<1	}			
TOLUENE	< 1	PPB			
TOLUENE ETHYL BENZENE	5.82	PPB PPB			
ETHYL BENZENE	5.82	PPB			
ETHYL BENZENE TOTAL XYLENES	5.82 6.06 30	PPB PPB		cceptable.	

980311BTEXMW,5/4/98

SAMPLE 4 9THORK



CHAIN OF CUSTODY RECORD **JSD** · set company

259

Received by: (Signature) Received by: (Signature) Remarks W.D. HEATH B-S TRID BLANK Date Results Reported / by: (Signature) Date/Time Date/Time Requested Analysis Remarks: Relinquished by: (Signature) Relinquished by: (Signafure) Date/Time Pieserverion Pechnisque Type and No. of Sample Contain-ers Received for Laboratory by: (Signature) \ \ 15 Date: 4-23-98 Received by: (Signature) Received by: (Signature) Sample Number 115086 MC #87493 Date/Time dennis Eigh WATER 4-23-98 1012 Relinquished by: (Signature) Relinquished by: (Signature) Refinguished by: (Signature) Samplers: (Signature) 1726 425 M Date Air Bill No.: Project No. Carrier Co: MATRIX

san juan repro Form 71-55 A



Site Name W. D. HEATH B-5	ļ	-	☐ Development X Purging	ment	Well Number //W /
Development Criteria				~3	
 3 to 5 Casing Volumes of Water Removel Stabilization of Indicator Parameters Other 	Water Volume Cal	Water Volume Calculation Initial Depth of Well (feet)	ign		Instruments ⊠ pH Meter
	Height of Wate	Height of Water Column in Well (feet)	/ JUKY	-	DO Monitor
velopm	Diameter (inches): Well	es): Well \vec{A} Gra	٧		
Pump Bailer Centrifugal X Bottom Valva	=	I≝L	_	Gallons to be	X Other D. O. CHEMETS K
	III	Cubic Feet Gallons		Removed	
Submersible Double Check Valve	Well Casing	?	5	2.6	Water Disposal
Peristaltic Stainless-steel Kemmerer	Gravel Pack				KUTZ SEDARATOR
	Drilling Fluids				
Other	Total				
Water Removal Data					

		Development	_	Removal	Intake	Intake Ending Water		Water Volume	Product Volume	Tomportium		11 11		
Date	Time	Method		Rate	Depth	Depth		Removed (nat)	Removed (gallops)	o elliperature		Conductivity Dissolved	Uissolved	
	_	Pump	Bailer	(dal/min)	(feet)	(feet)	Increment	Orite Line	Increment Circulation Property Company		<u>.</u>	muo/cum Oxygen	Oxygen	Comments
20	201			- A		ļ	HOLD CHIEF	Curingaliye	moretiem connigative				mg/L	:
100 81-12-1	100									206	2007	2910		
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10/2/ 90	しつい						4	į			1	17.0		
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Developer's Signature of Minimio Bl.

Comments



SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980532
MTR CODE SITE NAME:	87493	W. D. Heath B-5
SAMPLE DATE TIME (Hrs):	7/21/98	1001
PROJECT:	Sample 4	10th Quarter
DATE OF BTEX EXT. ANAL.:	7/27/98	7/27/98
TYPE DESCRIPTION:	MW-1	Water
•		

		RESULTS		
PARAMETER	RESULT	UNITS	 QUALIFIERS Q	
BENZENE	7.38	PPB		
TOLUENE	<1	PPB		

PPB

PPB

PPB

--BTEX is by EPA Method 8020 -ne Surrogate Recovery was at 95.5 % for this sample All

3.90

1.40

12.7

Field Remarks:

_% for this sample All QA/QC was acceptable.

F = Dilution Factor Used

ETHYL BENZENE

TOTAL XYLENES

TOTAL BTEX

arrative:					
	 D			_	

proved By:

980532BTEXMW 7/29/98

SAMPLE 4 10 11 9TR

CHAIN OF COSTODY RECORD

A 2372

MC#87493
Sample Number
980532
Date/Time Received by: (Signature)
A21-981721
Date/Time Received by: (Signature)
Date/Time Recaiped for Laboratory by: (Signature)
Carrier Pylone No.

san juan repro Form 71-55 A



Site Na	me W. L.	Site Name $W.D.HEHTHB-5$	74	2	, 1	-		Development Purging	Well Number MW-/ Meter Code 87493	MW-1		
Develo	Development Criteria	eria										
	3 to 5 Casing Stabilization of Other	3 to 5 Casing Volumes of Water Removel Stabilization of Indicator Parameters Other	er Removel neters		Water Volume Calculation Initial Depth of Well (feet)	ume Calc	ulation 3		Instruments National Properties Propert	uments M pH Meter Do Monitor		
					Height of Water Column in Well (feet)_	Column in Wel	II (feet)	Z/2	, ,	Conductivity Meter	y Meter	
Method	Methods of Development	lopment			Diameter (inches): Well	S): Well	Gravel Pack	, ×			re Meter	
	Pump	Bailer				Water Volume in Well	ne in Well	Gallons to be			000	Other <i>D. O. C. M. C. M. C. I.</i> S.
	Centrifugal	M Bottom Valve	Valve		Item	Cubic Feet	Gallons	Removed	· ·	1		
	Submersible	Double	Double Check Valve		Well Casing		2.5	7.4	Water	Water Disposal	7	(
	Peristaltic	Stainles	Stainless-steel Kemmerer	merer	Gravel Pack				107	KUTZ SEPHRHTOR	DARH	Tok
					Drilling Fluids					•		
	Other				Total							
Water F	Water Removal Data	ata										
		Development	Removal	Intake	Ending Water	Water Volume	olume	Product Volume	Temperature	Conductivity Dissolved	Dissolved	
Date	Time	Method	Rate	Depth	Depth	Removed (gal)	ed (dal)	Removed (gallons)	ъ. О.	шр/очшт	Oxygen	Con

	1	1													
		Development	ment	Removal	Intake	Intake Ending Water	Water Volume	olume	Product Volume	Ė	Temperature		Conductivity Dissolved	Dissolved	
Date	Time	Method	po	Rate	Depth	Depth	Removed (gal)	d (gal)	Removed (gallons)	gallons)	၁	Hd	umho/cm Oxygen	Oxygen	Comments
		Pump	Bailer	(gal/min)	(feet)	(teet)	Increment	Cumulative	Cumulative Increment Cumulative	Cumulative		_		mg/L	
6160 86-8-01	6160										15.5	6.16	08/19		
10-8-13 0939	093						30	30			157	6.3/	6580		
866 8-8-01	A38						2.0	5.0			15.5	157	Q6h9		
10-8-82 0950	0990						3.0	8.0			15.5	6.34	2119		
10-8-80959	6560						20%	10.0			15.6	295	6150	07	
										, ,					
									- The state of the						

Date 10-12 Reviewer

Developer's Signature

Comments



SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980695
MTR CODE SITE NAME:	87493	W D Heath B-5
SAMPLE DATE TIME (Hrs):	10/8/98	1008
PROJECT:	Sample 4	11th Quarter
DATE OF BTEX EXT. ANAL.:	10/12/98	10/12/98
TYPE DESCRIPTION:	MW-1	Water

Field Remarks:

ETHYL BENZENE

TOTAL XYLENES

TOTAL BTEX

		RESULTS				
PARAMETER	RESULT	UNITS	DF	QUALIF O	FIERS	
BENZENE	9.07	PPB				
TOLUENE	<1	PPB				

--BTEX is by EPA Method 8020 --

PPB

PPB

PPB

		21217 20 07 201111122222	· · · · ·
The Surrogate Recovery was at	98.3	% for this sample	All QA/QC was acceptable
)F = Dilution Factor Used		-	

3.06

<3

12.1

Jarrative:				
-				
Approved By:	2 de Follo	Date:	10/15/98	

980695BTEXMW,10/14/98

34611 & 50 grass

CHAIN OF STODY RECORD

A 239

Received by: (Signature) Received by: (Signature) Remarks Date/Time Date/Time Requested Analysis Relinquished by: (Signature) Relinquished by: (Signature) A Sechinian A But of the section of 6.400 Type and No. of Sample Contain-ers 1-5 Date: 13 & F. Received by: (Signature) Received by: (Signature) Sample Number 10.28 1717 Date/Time Time Comp. GRAB Lynn Chr WARST 10 88 1008 Relinguished by: (Signature) Relinquished by: (Signature) Samplers: (Signature) WATER 10 3 TR Date Project No.

san juan repro Form 71-55

Date Results Reported / by: (Signature)

Remarks:

Received for Laboratory by: (Signature)

Date/Time

Relinquished by: (Signature)

Air Bill No.

Carrier Co: