

3R - 213

REPORTS

DATE:

1999 - 1998



Certified Mail: #Z 213 707 666 (Box 1 of 2)
#Z 213 707 664 (Box 2 of 2)

March 24, 2000

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

RECEIVED

MAR 20 2000

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 1999 Pit Project Annual Groundwater Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual updates for the 32 remaining groundwater impacted locations that were identified during our pit closure project of 1994 / 1995.

Of the 32 reports, EPFS hereby requests closure of 4 of these locations. The 4 sites EPFS is requesting closure on are presented in one separate binder entitled "San Juan Basin Pit Closures, El Paso Field Services, Pit Closure Reports".

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".

EPFS has also included for your information five Navajo sites in a separate binder and a separate report for the Bisti Flare Pit #1.

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 that reads "Scott T. Pope".

Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **Certified Mail # Z 213 707 667**
Mr. Bill Liesse, BLM - w / enclosures; **Certified Mail # Z 213 707 668**
Mr. John Jaquez, - w / Jaquez enclosures; **Certified Mail # Z 213 707 669**
Ms. Charmaine Tso, Navajo EPA - w / enclosures; **Certified Mail # Z 213 707 670**

bc: J. A. Lambdin w / enclosures

Philip Services Corp. – Cecil Irby, w / o enclosures

B. B. McDaniel / 24321 – NMOCD Regulatory w / o

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

El Paso Field Services Pit Project Groundwater Report
Annual Report

March 2000

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MAR 29 2000

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 62800158



EPFS GROUNDWATER PITS 1999 ANNUAL GROUNDWATER REPORT

LATERAL 0-21 LINE DRIP Meter/Line ID - LD151

SITE DETAILS

Legals - Twn: 30N Rng: 9W Sec: 12 Unit: O
NMOCD Hazard Ranking: 40 Land Type: FEDERAL
Operator: EL PASO FIELD SERVICES

PREVIOUS ACTIVITIES

Site Assessment: Jan-95 Test Excavation: Jan-95 Soil Boring: Oct-95
Monitor Well: Oct-95 Geoprobe: Nov-96 Quarterly Sampling Initiated: Nov-96

1999 ACTIVITIES

Annual Groundwater Monitoring - Annual groundwater monitoring was conducted during May 1999.

Additional Monitor Wells - Two off-site monitor wells were planned for 1999. The proposed locations for the additional wells are shown on Figure 1. The wells were not completed in 1999 because BLM took over three months to approve the drilling locations. The two off-site wells will be installed this year.

SUMMARY TABLES

Groundwater analytical data are presented in Table 1. Copies of the laboratory data sheets and associated quality assurance/quality control data are presented as Attachment 1.

SITE MAP

A site map is presented as Figure 1 with the proposed locations of the two additional monitoring wells.

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

There were no drilling activities at this site in 1999.

DISPOSITION OF GENERATED WASTES

There were no wastes generated at this site in 1999.

ISOCONCENTRATION MAPS

None generated for this site.

CONCLUSIONS

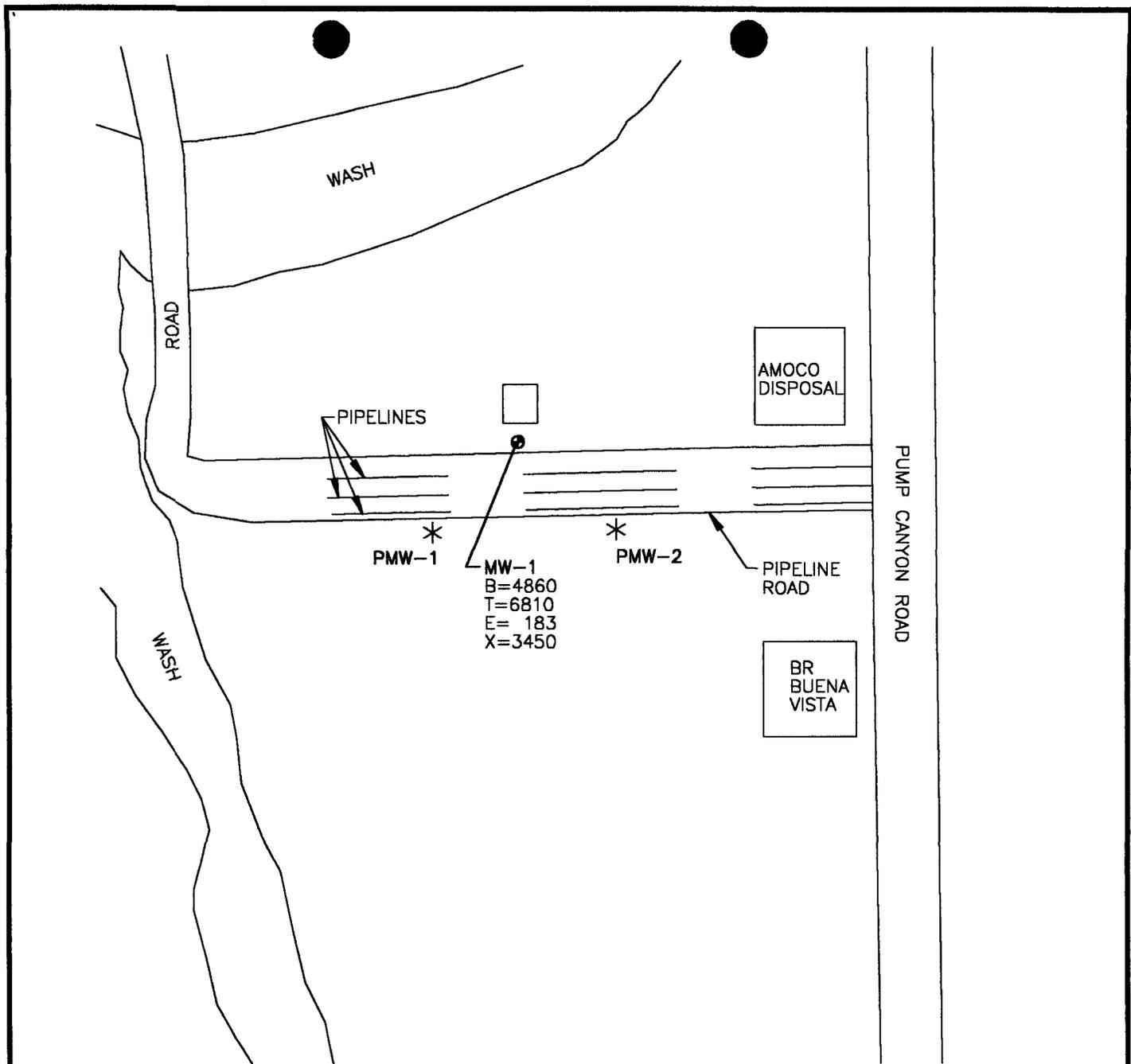
Analytical results of groundwater samples collected from MW-1 show levels of benzene, toluene and xylenes above New Mexico Groundwater Standards. Hydrocarbon constituent concentrations have decreased since the last sampling event conducted in 1998.

EPFS GROUNDWATER PITS 1999 ANNUAL GROUNDWATER REPORT

Pertinent data from past groundwater reports include the following: Based on groundwater levels collected from temporary well point data, the groundwater flow trends to the southeast at this site. A pipeline corridor and other gas production facilities are just south and southeast of MW-1.

RECOMMENDATIONS

- Install two off-site wells as shown on Figure 1.
- Collect the data necessary to determine if other sources may be contributing to hydrocarbon concentrations in the groundwater at this site.
- EPFS will conduct annual sampling at the site until BTEX constituents fall below New Mexico Groundwater Standards.
- After BTEX constituents fall below New Mexico Groundwater Standards, quarterly sampling will be conducted until analytical results show BTEX constituents are below New Mexico Groundwater Standards for four consecutive quarters.
- Following OCD approval for closure, all monitor wells associated with the site will be abandoned using OCD approved abandonment procedures.



MW-1
 B=4860
 T=6810
 E= 183
 X=3450

LEGEND

- MW-1 MONITORING WELL NUMBER
AN APPROXIMATE LOCATION
- * PMW-1 PROPOSED LOCATIONS OF
ADDITIONAL MONITORING WELLS
- 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. 17520BE-002



TITLE:
 LAT O-21 LINE DRIP
 LD 151
 MAY 18, 1999

DWN: CJG	DES.: CI
CHKD: CI	APPD:
DATE: 02/08/00	REV.: 0

PROJECT NO.: 17520
EPFS GW PITS
FIGURE 1

EPFS Groundwater Report
 1999 Annual 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
990222	LD151	Lat 0-21 Line Drip	05/18/99	1	Sample 4 - 8th Quarter	= 4860	= 6810	= 183	= 3450	= 15303

ATTACHMENT 1
1999 GROUNDWATER ANALYTICAL



STAMP 4 8TH QTR

CHAIN OF CUSTODY RECORD

Project Number		Project Name		Contract Laboratory P.O. Number	
Samplers: (Signature) <i>Dennis Bial</i>		MC# LD151			
Date		Date			
5-18-99		5-18-99			
Time		Sample Number			
1315		990222			
Matrix		Composite or Grab			
WATER		G			
WATER		G			
Total No. of Containers		Requested Analysis		Remarks	
3		X BTK		LATERAL O-21 LINE DRIP MW-1	
1		X		TRIP BLANK	
Relinquished by: (Signature)		Relinquished by: (Signature)		Received by: (Signature)	
<i>Dennis Bial</i>					
Date/Time		Date/Time		Date/Time	
5-18-99 1735					
Requested Turnaround Time:		Sample Receipt Remarks		Results & Invoices to:	
<input type="checkbox"/> Routine <input type="checkbox"/> Rush		TEMP 340F		North Region Laboratory	
Carrier Co.		Charge Code		El Paso Natural Gas Company	
				P. O. Box 4990	
Bill No.:				Farmington, New Mexico 87499	
				505-599-2144	
				FAX: 505-599-2261	



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	NA	990222
MTR CODE SITE NAME:	LD151	Lateral O-21 Line Drip
SAMPLE DATE TIME (Hrs):	5/18/99	1315
PROJECT:	Sample 4 - 8th Quarter	
DATE OF BTEX EXT. ANAL.:	NA	5/19/99
TYPE DESCRIPTION:	MW-1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	4860	PPB	100	D		
TOLUENE	6810	PPB	100	D		
ETHYL BENZENE	183	PPB	5	D		
TOTAL XYLENES	3450	PPB	100	D		
TOTAL BTEX	15303	PPB				

-BTEX is by EPA Method 8021 -

The Surrogate Recovery was at 94.8 % 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 Lard

Date: _____

5/20/99



Well Development and Purging Data

Well Number MW-1
 Meter Code LD151

Development
 Purging

Site Name LATERAL 0-21 CINE DRIP

Development Criteria

- 3 to 5 Casing Volumes of Water Removal
- Stabilization of Indicator Parameters
- Other _____

Methods of Development

- Pump
 - Centrifugal
 - Submersible
 - Peristaltic
- Bailor
 - Bottom Valve
 - Double Check Valve
 - Stainless-steel Kemmerer
- Other _____

Water Volume Calculation

Initial Depth of Well (feet) 46.52
 Initial Depth to Water (feet) 34.84
 Height of Water Column in Well (feet) 11.68
 Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>7.9</u>	<u>23.6</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- pH Meter
- DO Monitor
- Conductivity Meter
- Temperature Meter
- Other D.O. CHEMISTS KIT

Water Disposal

KOTE SEPARATOR

Water Removal Data

Date	Time	Development Method		Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer			Removal Rate (gal/min)	Increment	Cumulative	Increment					
5-18-99	1233					5.0	5.0			19.2	4.71	1594		
5-18-99	1239					5.0	10.0			18.0	4.77	2370		
5-18-99	1247					5.0	15.0			17.8	5.72	2840		
5-18-99	1254					5.0	20.0			17.7	6.17	3010		
5-18-99	1300					5.0	25.0			17.6	6.29	3010		
5-18-99	1308					5.0	30.0			17.7	6.07	2790	0.5	

Comments _____

Developer's Signature Dennis Bird

Date 5-18-99 Reviewer [Signature]

Date 5/20/99

QUALITY CONTROL REPORT - EPA METHOD 8021 BTEX

Samples: 990213, 214, 218 - 224

QA/QC for 05/18/99 & 05/19/99 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
ICV LA-52589 5/18/99 50 PPB					RANGE	
Benzene	Standard	50.0	48.4	96.8	75 - 125 %	X
Toluene	Standard	50.0	48.2	96.3	75 - 125 %	X
Ethylbenzene	Standard	50.0	48.3	96.7	75 - 125 %	X
m & p - Xylene	Standard	100	97.0	97.0	75 - 125 %	X
o - Xylene	Standard	50.0	48.5	96.9	75 - 125 %	X

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
CCV LA-52589 5/19/99 50 PPB					RANGE	
Benzene	Standard	50.0	47.7	95.5	75 - 125 %	X
Toluene	Standard	50.0	47.6	95.2	75 - 125 %	X
Ethylbenzene	Standard	50.0	47.9	95.7	75 - 125 %	X
m & p - Xylene	Standard	100	97.4	97.4	75 - 125 %	X
o - Xylene	Standard	50.0	48.1	96.1	75 - 125 %	X

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
CS LA-45476 5/18/99 25 PPB					RANGE	
Benzene	Standard	25.0	23.3	93	39 - 150	X
Toluene	Standard	25.0	23.3	93	46 - 148	X
Ethylbenzene	Standard	25.0	23.7	95	32 - 160	X
m & p - Xylene	Standard	50.0	47.4	95	Not Given	X
o - Xylene	Standard	25.0	23.6	94	Not Given	X

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
990218					RANGE	
Benzene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X
Toluene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	<2.0	<2.0	0.00	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
990223					RANGE	
Benzene	Matrix Duplicate	376.9	366.1	2.90	+/- 20 %	X
Toluene	Matrix Duplicate	17.75	18.29	2.97	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	142.93	153.12	6.88	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	599.51	583.60	2.69	+/- 20 %	X
o - Xylene	Matrix Duplicate	5.57	8.31	39.42	+/- 20 %	X

Narrative: Acceptable. O-Xylene out due to matrix interference.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
2nd Analysis 990218						
Benzene	25	<1.0	23.9	96	75 - 125 %	X
Toluene	25	<1.0	23.2	93	75 - 125 %	X
Ethylbenzene	25	<1.0	23.1	92	75 - 125 %	X
m & p - Xylene	50	<2.0	45.9	92	75 - 125 %	X
o - Xylene	25	<1.0	23.4	93	75 - 125 %	X
2nd Analysis 990223						
Benzene	25	376.9	374.1	-11	75 - 125 %	X
Toluene	25	17.75	37.2	78	75 - 125 %	X
Ethylbenzene	25	142.93	155.2	49	75 - 125 %	X
m & p - Xylene	50	599.51	562.8	-73	75 - 125 %	X
o - Xylene	25	5.57	37.6	128	75 - 125 %	X

Narrative: Acceptable. SPK 990223 out due to matrix interference and high levels.

LABORATORY AND FIELD BLANKS:

AUTO BLANK	SOURCE	PPB (none analyzed with set)	STATUS
Benzene	Boiled Water		ACCEPTABLE
Toluene	Boiled Water		ACCEPTABLE
Ethylbenzene	Boiled Water		ACCEPTABLE
Total Xylenes	Boiled Water		ACCEPTABLE
SOIL VIAL BLANK	SOURCE	PPB (two analyzed with set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE
CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (two analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE
TRIP: 5/11, 5/17 and 5/19/99	SOURCE	PPB (three analyzed with this set)	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

Reported By: J.F.

Approved By: John Saldin

Date: 5/20/99

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,



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**

**LATERAL 0-21 LINE DRIP
Meter/Line ID - LD151**

RECEIVED

APR 05 1999

SITE DETAILS

**Legals - Twn: 30N Rng: 9W
NMOCD Hazard Ranking: 40
Operator: EL PASO FIELD SERVICES**

**Sec: 12 Unit: O
Land Type: FEDERAL**

**ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION**

PREVIOUS ACTIVITIES

**Site Assessment: Jan-95 Test Excavation: Jan-95
Monitor Well: Oct-95 Geoprobe: Nov-96**

**Soil Boring: Oct-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. Quarterly sampling was discontinued after the second quarter, the site will now be sampled annually.

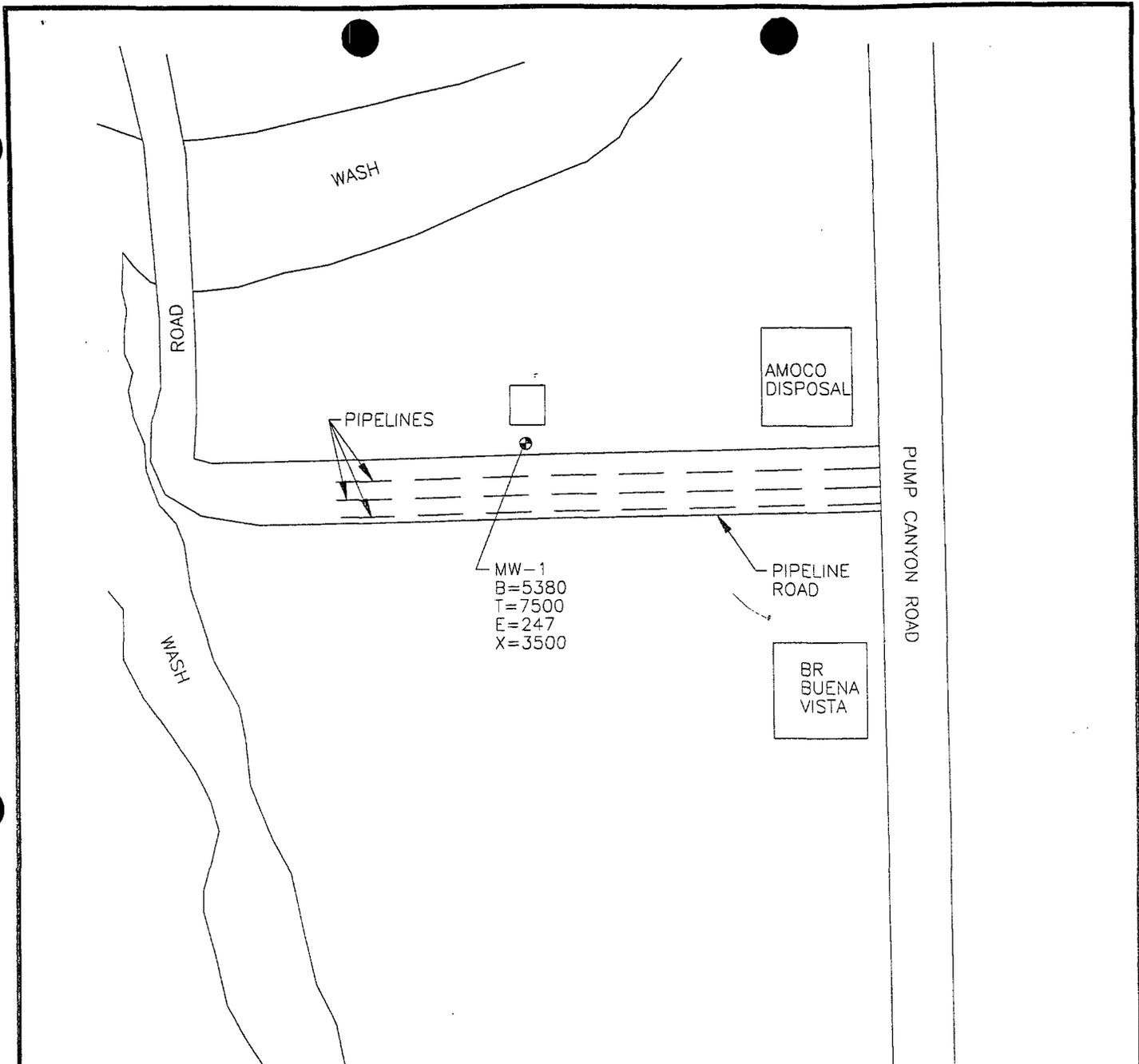
CONCLUSIONS

Analytical results of groundwater samples, collected from MW-1 during the first and second quarter of 1998, show levels of benzene, toluene and xylenes that are above New Mexico Groundwater Standards. Hydrocarbon constituent concentrations are increasing at the location.

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 southeast at this site. A pipeline corridor and other gas production facilities are just south and southeast of MW-1.

RECOMMENDATIONS

- The OCD requests that EPFS determine the extent of groundwater contamination.
- Obtain permission to conduct an off-site investigation and define plume size.
- Collect the data necessary to determine if other sources may be contributing to hydrocarbon concentrations in the groundwater at this site.
- Continue sampling on an annual basis.



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. 17520BE-002



TITLE:
LAT 0-21 LINE DRIP
LD 151
MAY 7, 1998

DWN: TMM	DES.: CI
CHKD: CI	APPD:
DATE: 2/9/99	REV.: 0

PROJECT NO.: 17520
EPFS GW PITS

FIGURE 1

EPFS Groundwater Report
 1998 Annual Groundwater Report

TABLE 1

Sample #	Meter/Line #	Site Name	Sample Date	MV #	Project	Benzene (PPB)	Toluene (PPB)	Ethyl Benzene (PPB)	Total Xylenes (PPB)	Total BTEX
980131	LD151	Lat 0-21 Line Drip	02/03/98	1	Sample 4 - 6th Quarter	= 3000	= 3600	= 138	= 2180	= 8918
980357	LD151	Lat 0-21 Line Drip	05/07/98	1	Sample 4 - 7th Quarter	= 5380	= 7500	= 247	= 3500	= 16627

**1998 GROUNDWATER
ANALYTICAL**



Well Development and Purging Data

Site Name LATERAL 0-21 LINE DRP Well Number MW-1
 Development Purging
 Meter Code LD151

Development Criteria

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

Methods of Development

- Pump
 - Centrifugal
 - Submersible
 - Peristaltic
 - Other
- Bailor
 - Bottom Valve
 - Double Check Valve
 - Stainless-steel Kemmerer

Water Volume Calculation

Initial Depth of Well (feet) 46.53
 Initial Depth to Water (feet) 35.08
 Height of Water Column in Well (feet) 11.44
 Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>7.6</u>	<u>22.7</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- pH Meter
- DO Monitor
- Conductivity Meter
- Temperature Meter
- Other D.O. CHEMETS KIT

Water Disposal

KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		pH	Conductivity $\mu\text{mho/cm}$	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative				
2-3-98	0928						5.0	5.0			5.54	1710		
2-3-98	0935						5.0	10.0			6.57	3060		
2-3-98	0943						5.0	15.0			6.74	3210		
2-3-98	0951						5.0	20.0			6.99	3320		
2-3-98	0958						5.0	25.0			6.94	3200		
2-3-98	1006						5.0	30.0			7.07	3440	0.5	

Comments

Developer's Signature Dominic Bird

Date 2-3-98

Reviewer John Fitch

Date 3/2/98



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980131
MTR CODE SITE NAME:	LD151	Lateral 0-21 Line Drip
SAMPLE DATE TIME (Hrs):	2/3/98	1018
PROJECT:	Sample 4 6th Quarter	
DATE OF BTEX EXT. ANAL.:	2/18/98	2/18/98
TYPE DESCRIPTION:	MW-1	Water

Field Remarks: Exceeded Holding Time

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	3000	PPB	50	D		
TOLUENE	3600	PPB	50	D		
ETHYL BENZENE	138	PPB	50	D		
TOTAL XYLENES	2180	PPB	50	D		
TOTAL BTEX	8918	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 86.9 % 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:

Exceeded Holding Time.

Approved By: John Larchi

Date: 3/2/98

980131BTEXMW,2/19/98



Well Development and Purging Data

Well Number MW-1
 Meter Code LD151

Development
 Purging

Site Name LATERAL 0-21 CUNE DRIP

Development Criteria

- 3 to 5 Casing Volumes of Water Removal
- Stabilization of Indicator Parameters
- Other _____

Methods of Development

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

Water Volume Calculation

Initial Depth of Well (feet) 45.52
 Initial Depth to Water (feet) 34.83
 Height of Water Column in Well (feet) 11.69
 Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.7	23.2
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- pH Meter
- DO Monitor
- Conductivity Meter
- Temperature Meter
- Other D.O. CHEMETS KIT

Water Disposal

KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
						Increment	Cumulative	Increment	Cumulative					
5-7-98	0959					5.0	5.0			15.9	5.61	1377		
5-7-98	1006					5.0	10.0			15.8	6.51	2850		
5-7-98	1013					5.0	15.0			15.8	6.31	2370		
5-7-98	1023					5.0	20.0			16.0	6.60	2830		
5-7-98	1030					5.0	25.0			16.1	6.46	2710		
5-7-98	1039					5.0	30.0			16.6	6.66	2990	0.5	

Comments _____

Developer's Signature Dennis Bird

Date 5-7-98

Reviewer _____

John Stutch

Date 5/12/98



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980357
MTR CODE SITE NAME:	LD151	Lateral 0-21 Line Drip
SAMPLE DATE TIME (Hrs):	5/7/98	1050
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	D		
BENZENE	5380	PPB	100	D		
TOLUENE	7500	PPB	100	D		
ETHYL BENZENE	247	PPB	10	D		
TOTAL XYLENES	3500	PPB	10	D		
TOTAL BTEX	16627	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 92.4 % 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 Furbach

Date: _____

5/12/98

980357BTEXMW,5/11/98

