

3R - 179

REPORTS

DATE:

1999



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 23 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

GALLEGOS CANYON UNIT COM A #142E
Meter/Line ID - 03906

SITE DETAILS

Legals - Twn: 29N Rng: 12W Sec: 25 Unit: G
NMOCD Hazard Ranking: 10 Land Type: FEE
Operator: AMOCO PRODUCTION COMPANY

PREVIOUS ACTIVITIES

Site Assessment: Apr-94 Excavation: Apr-94 (20 cy) Soil Boring: Oct-95
Re-Excavation: Oct-96 (882 cy) Monitor Well: Feb-97 Quarterly Sampling Initiated: Aug-97

1999 ACTIVITIES

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

Operator Notification - The operator was notified of the results observed in the 1997 groundwater report that indicate production pits may be the source of continued contamination of groundwater at the site.

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.

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 from MW-1 show levels of benzene above New Mexico Groundwater Standards. Benzene levels in 1999 are less than half the benzene levels observed during the 1998 sampling events.

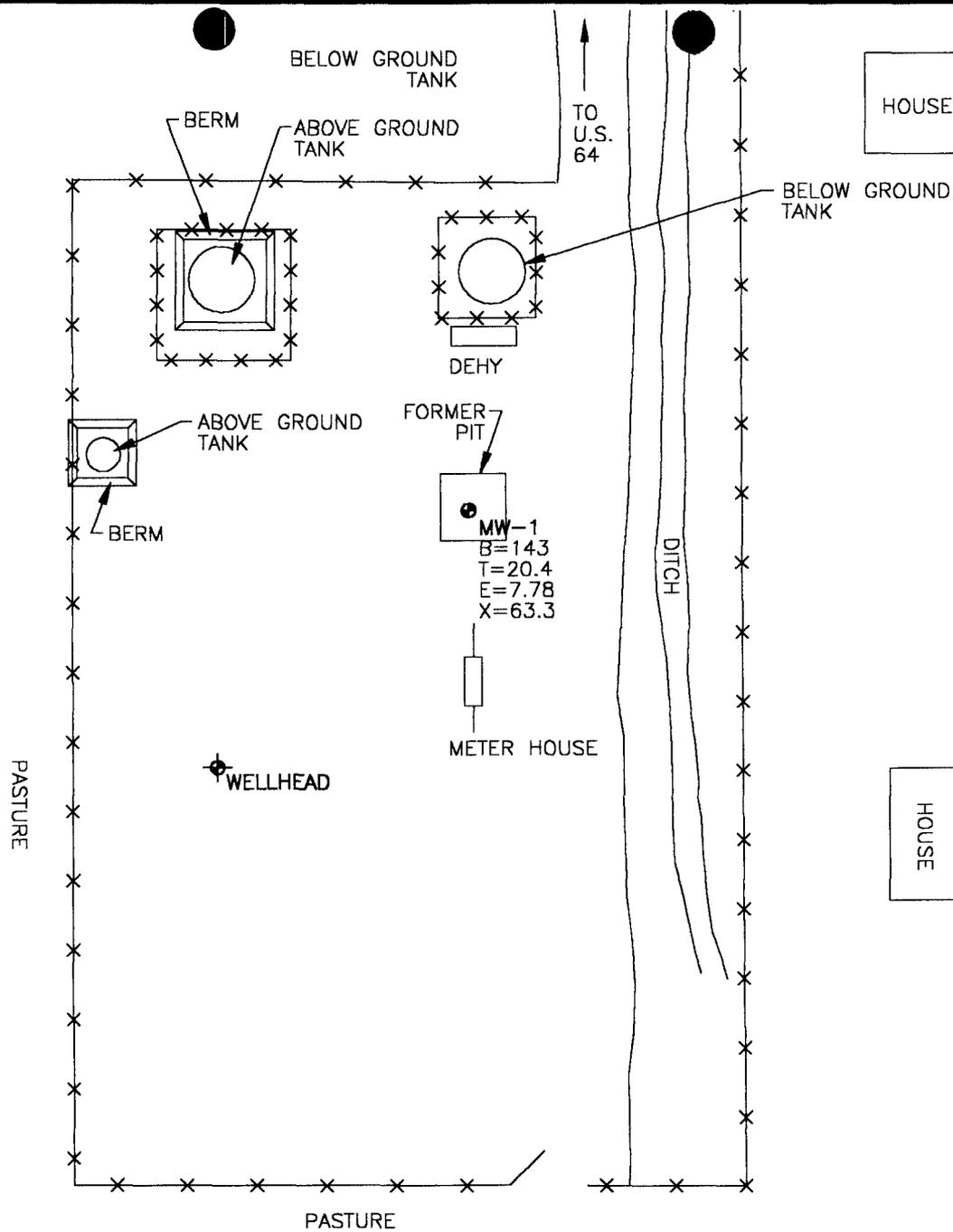
Pertinent data from past groundwater reports include the following: Groundwater measurements taken from temporary Geoprobe holes indicate that production pits are up-gradient of the EPFS MW-1. Up-gradient Geoprobe hole shows levels of benzene, toluene, and total xylenes in the groundwater above New Mexico Groundwater Standards. Levels of hydrocarbon constituents in

EPFS GROUNDWATER PITS 1999 ANNUAL GROUNDWATER REPORT

groundwater from up-gradient Geoprobe holes are two orders of magnitude greater than hydrocarbon levels from MW-1. The production pits may be a source of hydrocarbon constituents in the groundwater at this site.

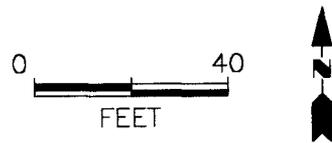
RECOMMENDATIONS

- EPFS proposes to continue annual sampling at the site.
- EPFS will continue to provide the operator with pertinent site data regarding EPFS activities at the site.



LEGEND

- MW-1 MONITORING WELL NUMBER AND APPROXIMATE LOCATION
- B BENZENE (ug\L)
- T TOLUENE (ug\L)
- E ETHYL BENZENE (ug\L)
- X XYLENE (ug\L)
- ug\L MICROGRAMS PER LITER



COL. 17520L-002



TITLE:
 GALLEGOS CANYON UNIT A142E
 METER 03906
 MAY 4, 1999

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

PROJECT NO.: 17520
 EPFS GW PITS

FIGURE 1

EPFS Groundwater Pits
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
990209	03906	GCU Com A #142E	05/04/99	1	Sample 4 - 5th Quarter	= 143	= 20	= 7.78	= 63.3	= 234

ATTACHMENT 1
1999 GROUNDWATER ANALYTICAL



Natural Gas Company

SAMPLE 4 STAFF

CHAIN OF CUSTODY RECORD

Project Number		Project Name		Requested Analysis		Contract Laboratory P.O. Number	
Samplers: (Signature) <i>Blind</i>		Date: 5-4-99					
Lab ID	Date	Time	Matrix	Sample Number	Total No. of Containers	Composite or Grab	Remarks
	5-4-99	1447	WATER	790209	2	G	GCU COM A #1425 ADV

Relinquished by: (Signature) <i>Blind</i>		Date/Time		Received by: (Signature)		Date/Time	
Relinquished by: (Signature)		5-4-99 1630					
Requested Turnaround Time:		<input type="checkbox"/> Routine <input type="checkbox"/> Rush		Sample Receipt Remarks		Results & Invoices to:	
Carrier Co.				Cool & Intact		North Region Laboratory El Paso Natural Gas Company P. O. Box 4990 Farmington, New Mexico 87499	
Bill No.:				Charge Code		505-599-2144 505-599-2261	



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	NA	990209
MTR CODE SITE NAME:	3906	GCU COM A #142E
SAMPLE DATE TIME (Hrs):	5/4/99	1447
PROJECT:	Sample 4 - 5th Quarter	
DATE OF BTEX EXT. ANAL.:	NA	5/7/99
TYPE DESCRIPTION:	MW-1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	143	PPB				
TOLUENE	20.4	PPB				
ETHYL BENZENE	7.78	PPB				
TOTAL XYLENES	63.3	PPB				
TOTAL BTEX	234	PPB				

-BTEX is by EPA Method 8021 -

The Surrogate Recovery was at 98.4 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

John Savich

Date: _____

5/21/99



Well Development and Purging Data

Well Number MW-1
 Meter Code 03906

Development
 Purging

Site Name GCU COMA #742E

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 21.72
 Initial Depth to Water (feet) 12.81
 Height of Water Column in Well (feet) 8.91

Methods of Development

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

Instruments

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

Water Disposal

KVTC SEPARATOR

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>2.7</u>	<u>8.9</u>
Gravel Pack			
Drilling Fluids			
Total			

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
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
5-4-99	1348										14.7	5.98	1871		
5-4-99	1355						3.0	3.0			12.9	5.39	1285		
5-4-99	1408						2.0	5.0			13.7	5.73	1223		
5-4-99	1420						2.0	7.0			14.0	6.03	1269		
5-4-99	1436						3.0	10.0			12.6	6.13	1177	1.0	

Comments THE WATER HAD A LIGHT HYDROCARBON SMELL.

Developer's Signature Dennis Bird

Date 5-4-99 Reviewer _____

John Sells

Date 5/14/99



EL PASO FIELD SERVICES

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

Samples: 990206 to 990209

QA/QC for 05/07/99 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
ICV LA-52589 25 PPB					RANGE	
Benzene	Standard	25.0	23.8	95.2	75 - 125 %	X
Toluene	Standard	25.0	23.7	94.7	75 - 125 %	X
Ethylbenzene	Standard	25.0	23.8	95.3	75 - 125 %	X
m & p - Xylene	Standard	50.0	47.8	95.6	75 - 125 %	X
o - Xylene	Standard	25.0	23.9	95.5	75 - 125 %	X
SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
LCS LA-45476 25 PPB					YES	NO
Benzene	Standard	25.0	22.8	91.3	RANGE	
Toluene	Standard	25.0	22.7	91.0	39 - 150	X
Ethylbenzene	Standard	25.0	23.1	92.4	46 - 148	X
m & p - Xylene	Standard	50.0	46.2	92.4	32 - 160	X
o - Xylene	Standard	25.0	23.0	91.8	Not Given	X

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
990206					RANGE	
Benzene	Matrix Duplicate	56.4	57.3	1.47	+/- 20 %	X
Toluene	Matrix Duplicate	94.8	96.56	1.79	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	64.7	61.82	4.62	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	637.9	638.2	0.04	+/- 20 %	X
o - Xylene	Matrix Duplicate	156.5	159.6	1.95	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
2nd Analysis 990206					RANGE	
Benzene	25	56.4	73.4	68	75 - 125 %	X
Toluene	25	94.8	112.6	71	75 - 125 %	X
Ethylbenzene	25	64.7	78.2	54	75 - 125 %	X
m & p - Xylene	50	637.9	658.1	40	75 - 125 %	X
o - Xylene	25	156.5	174.3	71	75 - 125 %	X

Narrative: See Spike Dup.

SPIKE DUPLICATE:

SAMPLE ID 2nd Analysis 990206	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					RANGE	YES NO
Benzene	25	56.4	68.9	50	75 - 125 %	X
Toluene	25	94.8	100.4	22	75 - 125 %	X
Ethylbenzene	25	64.7	71.3	26	75 - 125 %	X
m & p - Xylene	50	637.9	583.7	-108	75 - 125 %	X
o - Xylene	25	156.5	155.7	-3	75 - 125 %	X

Narrative: Matrix interference confirmed. The sample had a strong odor of Hydrogen Sulfide.

LABORATORY BLANKS:

AUTO BLANK	SOURCE	PPB (1 analyzed with 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.

SOIL VIAL BLANK	SOURCE Lot MB1461	PPB (one 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

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (one 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

Narrative: Acceptable.

TRIP BLK 05/03, 05/0499	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

Narrative: Acceptable.

Reported By: J.L.

Approved By: John Lardner

Date: 5/10/99