

3R - 176

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 29 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,


Scott T. Pope P.G.
Senior Environmental Scientist

cc: 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

RECEIVED

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 124E Meter/Line ID -95608

SITE DETAILS

Legals - Twn: 28N Rng: 12W Sec: 35 Unit: N
NMOCD Hazard Ranking: 20 Land Type: NAVAJO
Operator: AMOCO PRODUCTION COMPANY

PREVIOUS ACTIVITIES

Site Assessment: Jan-95 Excavation: Oct-95 (196 cy) Soil Boring: Mar-98
Monitor Well: Jun-98 Quarterly Sampling Initiated: Jun-98 PSH Removal: Apr-99

1999 ACTIVITIES

Quarterly Groundwater Monitoring - Quarterly groundwater monitoring was discontinued due to the presence of phase separated hydrocarbons (PSH).

Phase Separated Hydrocarbon (PSH) Removal - PSH removal from MW-1 was initiated on April 30, 1999.

Additional Monitor Wells - Additional monitor wells will be installed in the year 2000. EPFS has requested permission to drill offsite on Navajo Ag. Products Inc. (NAPI) land for downgradient monitor well installation.

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 in Attachment 1. Groundwater level data and PSH recovery data are presented in Table 2.

SITE MAP

A site map is presented as Figure 1 and shows the location of the two proposed off-site monitoring wells.

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

There were no drilling activities conducted at this site in 1999.

DISPOSITION OF GENERATED WASTES

All PSH has been disposed of at the EPFS Kutz Separator in Bloomfield, New Mexico.

ISOCONCENTRATION MAPS

Currently, there is only one monitor well at this site and isoconcentration maps could not be generated.

CONCLUSIONS

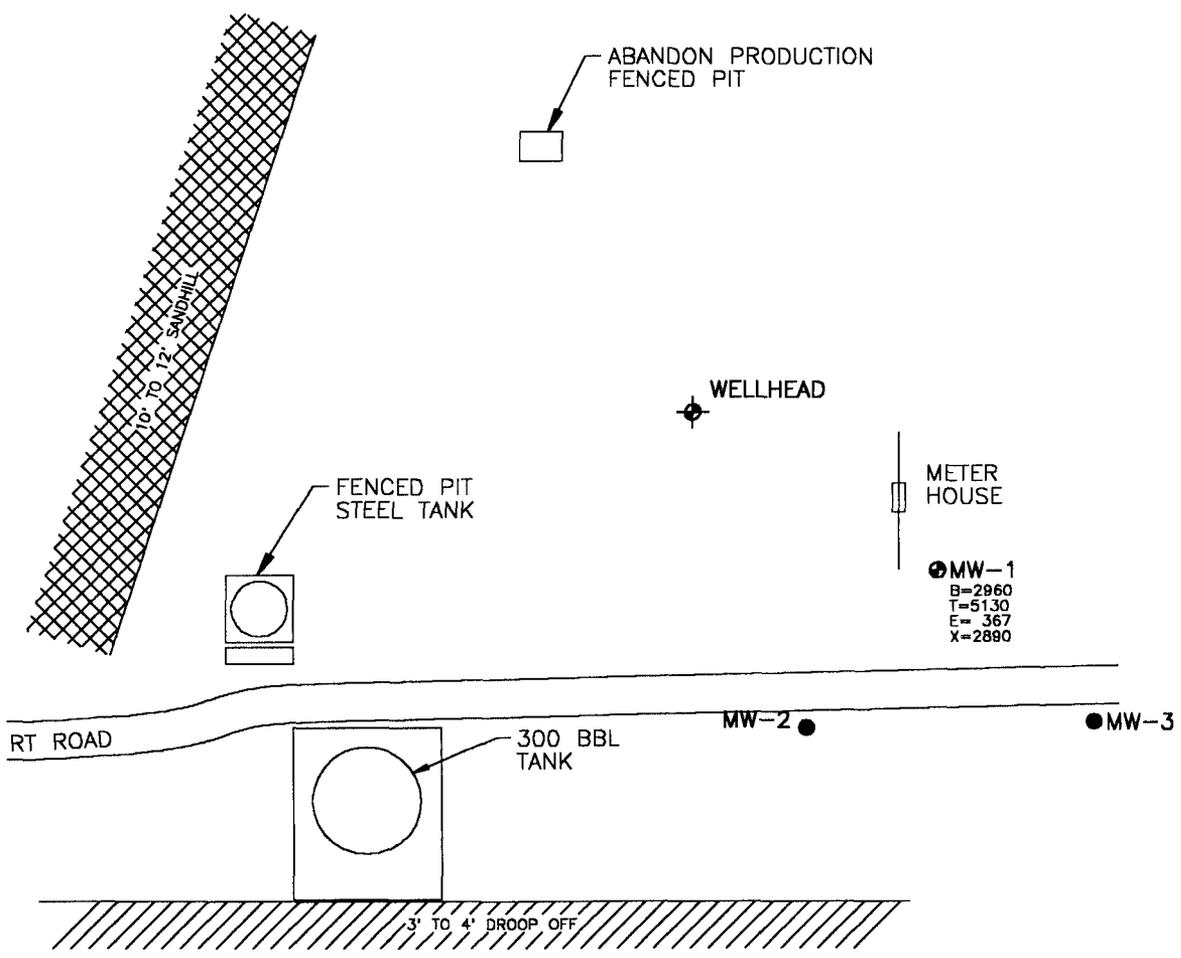
Analytical results of groundwater samples collected from MW-1 during March of 1999 show levels of benzene, toluene and total xylenes above New Mexico Groundwater Standards.

EPFS GROUNDWATER PITS 1999 ANNUAL GROUNDWATER REPORT

Quarterly sampling was discontinued due to the presence of PSH. A total of 9.96 gallons of PSH has been recovered from MW-1 to date. All of the PSH removed to date was removed during 1999. Up to 1.33 feet of product was measured in MW-1 this year. All PSH has been disposed of at the EPFS Kutz Separator in Bloomfield, NM. MW-1 continues to have phase separated hydrocarbons.

RECOMMENDATIONS

- Install two temporary monitor wells to identify the groundwater gradient and identify other potential sources of hydrocarbon constituents in the groundwater.
- Continue annual sampling.
- Continue PSH removal.



● MW-1
 B=2960
 T=5130
 E= 367
 X=2890

LEGEND

- MW-1 MONITORING WELL NUMBER AND APPROXIMATE LOCATION
- MW-2 PROPOSED MONITORING WELL LOCATION AND NUMBER
- B BENZENE (ug\L)
- T TOLUENE (ug\L)
- E ETHYL BENZENE (ug\L)
- X XYLENE (ug\L)



COL. 825\000186-002

	TITLE: GALLEGOS CANYON UNIT 124E METER 95608 MARCH 16, 1999	DWN: CJG	DES.: CI	PROJECT NO.: 62800018 EPFS GW PITS
		CHKD: CI	APPD:	
		DATE: 02/24/00	REV.: 0	FIGURE 1

EPFS Groundwater Pits
1998 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
990091	95608	GCU #124E	03/16/99	1	Sample 4 - 3rd Qtr	= 2960	= 5130	= 367.0	= 2890	= 11347

ATTACHMENT 1
1999 GROUNDWATER ANALYTICAL

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

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	990091
MTR CODE SITE NAME:	95608	GCU #124E
SAMPLE DATE TIME (Hrs):	3/16/99	1528
PROJECT:	Sample 4 3rd Quarter	
DATE OF BTEX EXT. ANAL.:	NA	3/22/99
TYPE DESCRIPTION:	MW-1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	2960	PPB	100	D		
TOLUENE	5130	PPB	100	D		
ETHYL BENZENE	367	PPB	10	D		
TOTAL XYLENES	2890	PPB	10	D		
TOTAL BTEX	11347	PPB				

-BTEX is by EPA Method 8020 -

The Surrogate Recovery was at 105.9 % 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:

Approved By: _____

John Larchi

Date: _____

4/5/99



Well Development and Purging Data

Well Number MW-1
 Meter Code 95608

Development
 Purging

Site Name GCL #124E

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) 36.81
 Initial Depth to Water (feet) 29.03
 Height of Water Column in Well (feet) 7.79

Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>5.1</u>	<u>15.4</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

KOTZ SEPARATOR

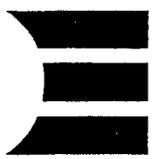
Water Removal Data

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
		Pump	Bailor				Increment	Cumulative	Increment	Cumulative					
3-16-99	1449						5.0	5.0			18.3	6.43	1108		
3-16-99	1455						5.0	10.0			17.8	6.51	1073		
3-16-99	1505						5.0	15.0			18.3	6.66	1124		
3-16-99	1518										20.0	6.93	1081	2.5	

Comments THE WELL HAD 1.45' OF FREE FLOATING HYDROCARBON WITH OILY APPEARANCE.

Developer's Signature Kennio Bied

Date 3-16-99 Reviewer John Jarbo Date 4/5/99



EL PASO FIELD SERVICES

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

Samples: 990088 to 990091

QA/QC for 03/22/99 Sample Set #1

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
ICV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	51.2	102.4	75 - 125 %	X
Toluene	Standard	50.0	51.1	102.3	75 - 125 %	X
Ethylbenzene	Standard	50.0	52.1	104.3	75 - 125 %	X
m & p - Xylene	Standard	100	104.5	104.5	75 - 125 %	X
o - Xylene	Standard	50.0	51.8	103.6	75 - 125 %	X
SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
LCS LA-45476 25 PPB					RANGE	
Benzene	Standard	25.0	24.5	98	39 - 150	X
Toluene	Standard	25.0	24.5	98	46 - 148	X
Ethylbenzene	Standard	25.0	24.8	99	32 - 160	X
m & p - Xylene	Standard	50.0	49.7	99	Not Given	X
o - Xylene	Standard	25.0	24.9	100	Not Given	X

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
990088					RANGE	
Benzene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
Toluene	Matrix Duplicate	10.4	9.8	5.31	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	94.1	89.2	5.42	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	610	581	4.86	+/- 20 %	X
o - Xylene	Matrix Duplicate	56.7	53.7	5.47	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
990088					RANGE	
Benzene	24	<1	18.9	79	75 - 125 %	X
Toluene	24	10.4	31.0	86	75 - 125 %	X
Ethylbenzene	24	94	114	82	75 - 125 %	X
m & p - Xylene	48	610	646	76	75 - 125 %	X
o - Xylene	24	56.7	77.0	84	75 - 125 %	X

Narrative: Acceptable.

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 BLANK 031699	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.

Reported By: JL

Approved By: John Fadden

Date: 3/23/99