3R - 228

REPORTS

DATE:
1997

EL PASO ENERGY

Certified Mail: #Z 295 387 297; #Z 295 387 296

February 27, 1998

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

Re: 1997 Groundwater Annual Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual updates for 57 groundwater impacted locations that were identified during our pit closure project of 1994/1995.

Of the 57 reports, EPFS hereby requests your approval for closure of 11 of these locations. The 11 reports for which EPFS requests closure, are in 2 separate binders entitled "Request for Closure".

After you have had an opportunity to review these updates, EPFS would like to schedule a meeting with you to discuss issues related to closure criteria for some of the more complex locations that are currently being addressed.

If you have any questions regarding this information, please call me at 505/599-2141. I will contact you within the next quarter to schedule a meeting.

Sincerely,

Sandra D. Miller
Environmental Manager

xc: Mr. Bill Liesse, BLM w/o enclosures
Mr. Denny Foust, NMOCD - Aztec w/enclosures; **Certified Mail #Z 295 387 298; #Z 295 387 299**
Ms. Charmaine Tso, Navajo EPA w/enclosures; **Certified Mail #Z 295 387 292**

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

El Paso Field Services Pit Project Groundwater Report
Annual Report

March 1998

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 17520

PHILIP ENVIRONMENTAL

EPFS GROUNDWATER PITS
1997 ANNUAL GROUNDWATER REPORT

OHIO C GOVT #3
Meter/Line ID - 72890

SITE DETAILS

Legals - Twn: 28N **Rng:** 11W **Sec:** 26 **Unit:** P
NMOCD Hazard Ranking: 40 **Land Type:** FEDERAL
Operator: MARATHON OIL COMPANY

PREVIOUS ACTIVITIES

Site Assessment: Sep-94 **Excavation:** Sep-94 (50 cy) **Soil Boring:** Sep-95
Re-Excavation: Sep-95 (1,098 cy) **Geoprobe:** Oct-96 **Monitor Well:** May-97

1997 ACTIVITIES

Monitor Well Installation - One groundwater monitor well was installed in the center of the former pit.

Quarterly Groundwater Monitoring - Quarterly groundwater monitoring was initiated on 6/26/97. Groundwater analytical data are presented in Table 1.

CONCLUSIONS

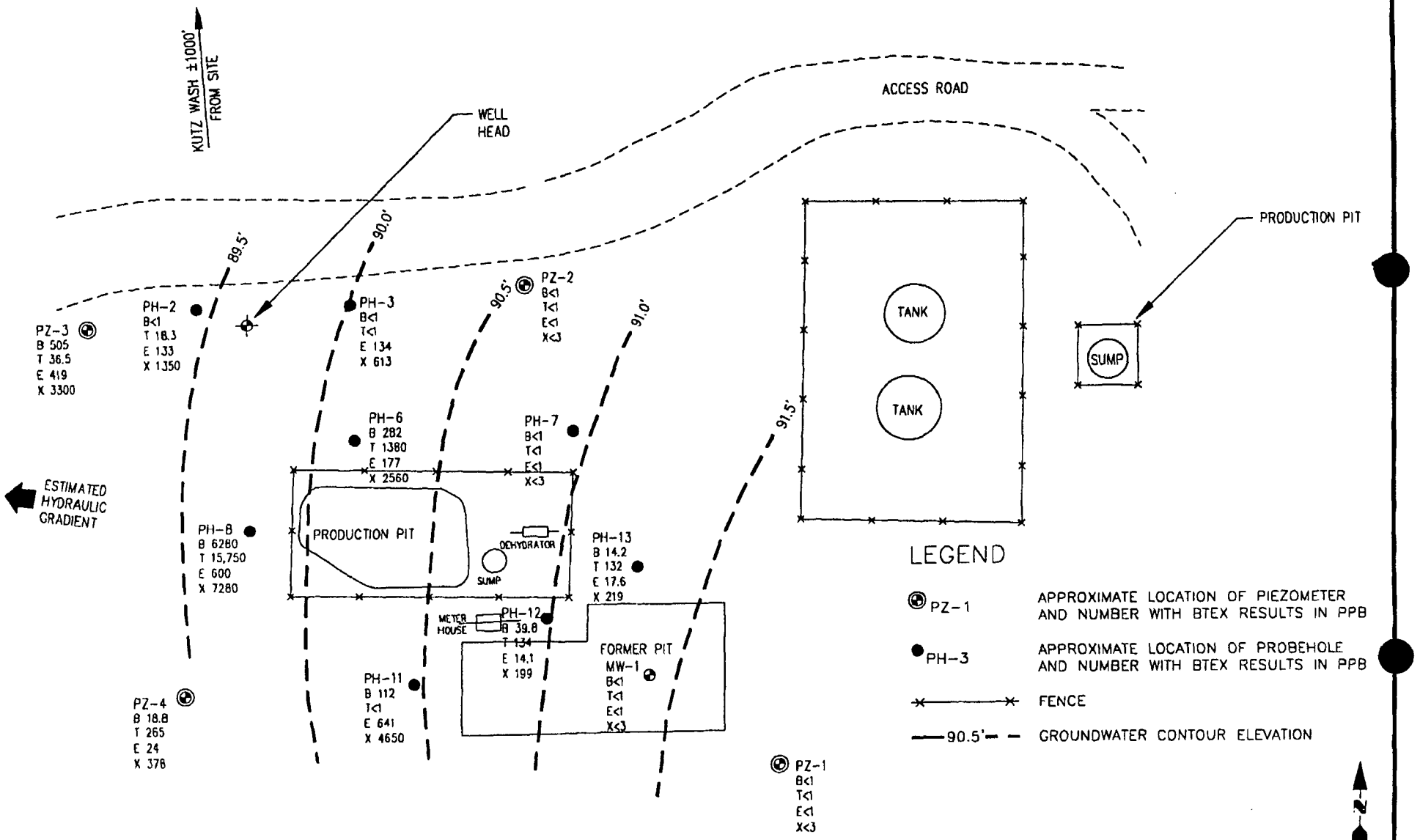
Based on groundwater levels collected from Geoprobe data, the groundwater flow trends to the east on this site, as presented in Figure 1. Groundwater samples collected from MW-1 have been below standards for BTEX since quarterly sampling was initiated. Twelve groundwater samples were collected up and down-gradient of MW-1 using a Geoprobe. One sample collected up-gradient of MW-1 was below standards for BTEX. Two groundwater samples collected down-gradient of MW-1 were slightly above standards for benzene only. The highest concentrations of contaminants were from groundwater samples collected cross-gradient and down-gradient of the operators production pit which is located down-gradient of MW-1.

Based on the high concentrations around the production pit, it appears that samples collected directly downgradient of EPFS's pit may be influenced by the operators production pit.

EPFS has excavated approximately 1,150 cubic yards of contaminated soil from the former pit, and has removed the majority of the source, as evident by four clean quarters of groundwater samples.

RECOMMENDATIONS

- EPFS proposes to conduct no further action at this site, until the operator commences with further remediation of their production pit.
- Quarterly sampling will continue at MW-1 until four consecutive clean quarters are achieved.
- Following OCD approval for closure, MW-1 will be abandoned following OCD approved abandonment procedures.



PHILIP SERVICES CORP.

TITLE:

OHIO C GOVERNMENT #3
METER 72890

DWN:	DES.:	PROJECT NO.: 17520
TMM	CC	EPFS GW PITS
CHKD:	APPD:	
CC		
DATE:	REV.:	FIGURE 1
1/21/98	0	

TABLE 1

Sample #	Meter/ Line #	Site Name	Sample Date	MW #	Project	Benzene (PPB)	Toluene (PPB)	Ethyl Benzene (PPB)	Total Xylenes (PPB)	Total BTEX
970487	72890	Ohio C Govt #3	5/22/97	1	Phase II Drilling - Initial	< 1	< 1	< 1	< 3	< 6
970606	72890	Ohio C Govt #3	6/26/97	1	Sample 4 - 1st Qtr	< 1	< 1	< 1	< 3	< 6
970979	72890	Ohio C Govt #3	9/12/97	1	Sample 4 - 2nd Qtr	< 1	< 1	< 1	< 3	< 6
971272	72890	Ohio C Govt #3	12/4/97	1	Sample 4 - 3rd Qtr	< 1	< 1	< 1	< 3	< 6

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well # MW-1
Page 1 of 1

PHILIP ENVIRONMENTAL SERVICES INC.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS GW PITS
Project Number 17520 Phase 6001
Project Location Ohio C Gas #3 72890

Elevation
Borehole Location T28-R 11-S 26-Ltr P
GWL Depth 12.3' BGS
Logged By CM CHANCE
Drilled By K Padilla
Date/Time Started 5/21/97 - 0845
Date/Time Completed 5/21/97 - 0945

Well Logged By CM CHANCE
Personnel On-Site D CHARLEY, J Penrod
Contractors On-Site
Client Personnel On-Site

Drilling Method 4 1/4 ID HSA
Air Monitoring Method PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM BZ	BH	S	Drilling Conditions & Blow Counts
0				Backfill to 17'						
5										
10										
15				Br silty SAND, vf-f sand, +- med, Saturated						- cuttings
20				TDB 20'						- gravel
25				~~TDB 20'~~ cmc						
30										
35										
40										

Comments: No samples collected. Backfill to GW. Will set well @ 20'. Overdrill ~~to 25' to compensate for Flowing~~. Hard lay @ ~20'.

Geologist Signature Cory Chancy

MONITORING WELL INSTALLATION RECORD

Borehole # BH-1
Well # MW-1
Page 1 of 1

Philip Environmental Services, Inc.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS GW
Project Number 17520 Phase 6002
Site Location Ohio C Gas #2 72890

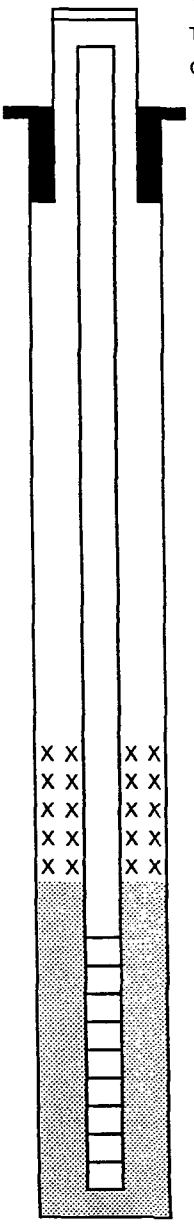
Elevation
Well Location T28 R11 S26 LTR P
GWL Depth 12.3' BGS
Installed By K Padilla

Date/Time Started 5/21/97 - 0945
Date/Time Completed 5/21/97 - 1100

On-Site Geologist CM CHANCE
Personnel On-Site D CHARLEY, J. Pennod
Contractors On-Site
Client Personnel On-Site

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" steel well vault	+3.1
Bottom of Protective Casing		1.9
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete		NA
Bottom of Concrete		NA
Top of Grout	Type I/II Portland cement	NA
Bottom of Grout	Powder Bentonite	NA
Top of Well Riser	4" SCH 40 PVC	+3.0
Bottom of Well Riser	FLUSH THREAD	3.5
Top of Well Screen	4" SCH 40 PVC	3.5
Bottom of Well Screen	0.01 SLOT FLUSH THREAD	18.5
Top of Peltonite Seal	ENVIROPLUG	0
Bottom of Peltonite Seal		2.0
Top of Gravel Pack	10-20 SILICA SAND	2.0
Bottom of Gravel Pack		18.5
Top of Natural Cave-In		18.5
Bottom of Natural Cave-In		20'
Top of Groundwater		12.3
Total Depth of Borehole		20'



Top of Protective Casing +3.1'
Top of Riser +3'
Ground Surface 0

Top of Seal 0

Top of Gravel Pack 2.0

Top of Screen 3.5

Bottom of Screen 18.5
Bottom of Borehole 20'

Comments: Seal hydrated w 10 gal potable water. Locking well cap + padlock placed on well

Geologist Signature Cory Chancy

MWINSTAL.wk1

GEOPROBE

SITE ACTIVITIES

21-Feb-97

Meter/Line #: 72890

Location/Line #: Ohio C Govt 3

MW#:

Depth to GW:

Depth to Product:

Product Thickness:

Date: 10/1-3/96

Activity: Geoprobe. Installed piezos /collected GW samples

Comments: Installed 3 piezos & 10 probe holes. Collected GW samples from all.

SITE ACTIVITIES

21-Feb-97

Meter/Line #: 72890

Location/Line #: Ohio C Govt #3

MW#:

Depth to GW:

Depth to Product:

Product Thickness:

Date: 1/23/97

Activity: Install PZ4

Comments: Install PZ4 north of pit on potentiometric downgradient side.

PIEZOMETER INSTALLATION RECORD

Borehole # PZ - 1
Well #
Page 1 of 1

Philip Environmental Services, Inc.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS PITS
Project Number 16297 Phase 6004
Site Location Ohio C Gov't 3 72890

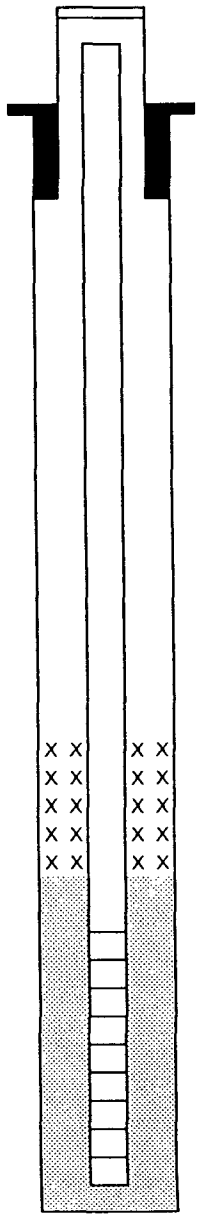
Elevation
Well Location SE of Pit
GWL Depth 13.09 12.7' TOR
Installed By K PADILLA

Date/Time Started 10/1/96
Date/Time Completed 10/1/96

On-Site Geologist CM CHANCE
Personnel On-Site D CHARLEY
Contractors On-Site
Client Personnel On-Site

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete		
Bottom of Concrete		
Top of Grout		
Bottom of Grout		
Top of Well Riser		
Bottom of Well Riser		
Top of Well Screen		
Bottom of Well Screen		
Top of Peltonite Seal		
Bottom of Peltonite Seal		
Top of Gravel Pack		
Bottom of Gravel Pack		
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		
Total Depth of Borehole		



Top of Protective Casing NA
Top of Riser
Ground Surface
Top of Seal
Top of Gravel Pack
Top of Screen 8.5'
Bottom of Screen 13.5'
Bottom of Borehole

Comments:

Geologist Signature

MWINSTAL.wk1

PIEZOMETER INSTALLATION RECORD

Borehole # PZ - 2
Well #
Page 1 of 1

Philip Environmental Services, Inc.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS PITS
Project Number 16297 Phase 6004
Site Location Ohio C Gov't 3 72890

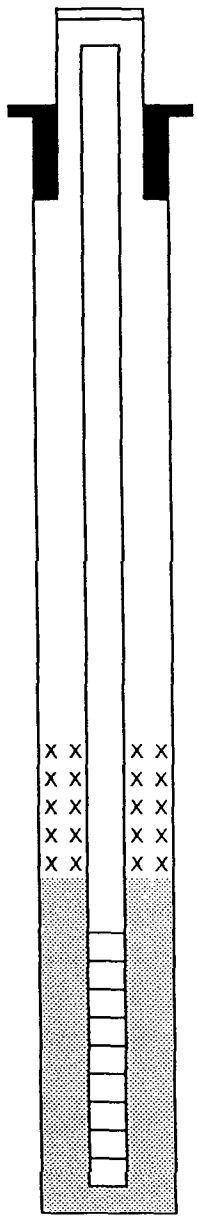
Elevation
Well Location N of PIT
GWL Depth 10.98 TDR
Installed By K PADILLA

Date/Time Started 10/1/96
Date/Time Completed 10/1/96

On-Site Geologist CM CHANCE
Personnel On-Site D CHARLEY
Contractors On-Site
Client Personnel On-Site

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete		
Bottom of Concrete		
Top of Grout		
Bottom of Grout		
Top of Well Riser		
Bottom of Well Riser		
Top of Well Screen		
Bottom of Well Screen		
Top of Peltonite Seal		
Bottom of Peltonite Seal		
Top of Gravel Pack		
Bottom of Gravel Pack		
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		
Total Depth of Borehole		



Top of Protective Casing NA
Top of Riser
Ground Surface
Top of Seal
Top of Gravel Pack
Top of Screen 10.5
Bottom of Screen 13.0'
Bottom of Borehole

Comments:

Geologist Signature

MWINSTAL.wk1

PIEZOMETER INSTALLATION RECORD

Borehole # PZ-3
Well #
Page 1 of 1

Philip Environmental Services, Inc.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS PITS
Project Number 16297 Phase 6004
Site Location Ohio C Gov't 3 72890

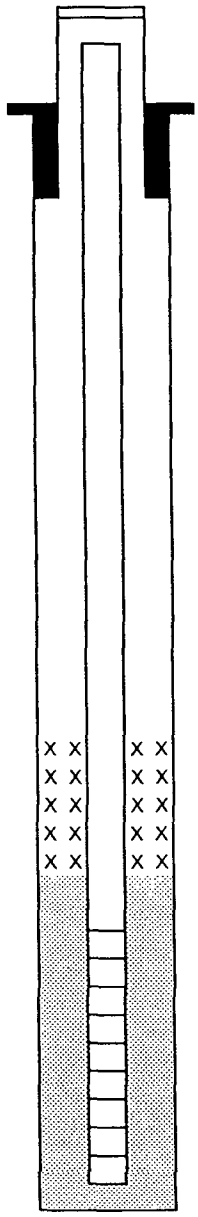
Elevation
Well Location NW of Pit
GWL Depth ~~9.3 BGS~~ 12.29 TOR
Installed By K PADILLA

Date/Time Started
Date/Time Completed

On-Site Geologist CM CHANCE
Personnel On-Site D CHARLEY
Contractors On-Site
Client Personnel On-Site

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete		
Bottom of Concrete		
Top of Grout		
Bottom of Grout		
Top of Well Riser		
Bottom of Well Riser		
Top of Well Screen		
Bottom of Well Screen		
Top of Peltonite Seal		
Bottom of Peltonite Seal		
Top of Gravel Pack		
Bottom of Gravel Pack		
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		
Total Depth of Borehole		



Top of Protective Casing NA
Top of Riser
Ground Surface
Top of Seal
Top of Gravel Pack
Top of Screen 7.0
Bottom of Screen 12.0
Bottom of Borehole

Comments:

Geologist Signature

El Paso Natural Gas Company

A 1964

Geoprobe

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis	Remarks
16297	EPFS GW Pits				

Samplers: (Signature) Cory Chance Date: 1/23/97

mw 0019	Date	Time	Comp.	GRAB	Sample Number					
~~8048~~	1/22/97	1000		✓	CMC285	2	4°C/HCl	X		P24 Ohio (Gov't) 72890 ✓ Prod. Odor
					Trip BLANK	1		X		TRIP BLANK

Cory 1/23/97

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Cory Chance	1/22/97 1150				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
				1-23-97 1147	Mark Armenta
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	

Carrier Co: Carrier Phone No. Date Results Reported / by: (Signature)

Bill No.:

ELPASO NO.REG.LAB 505-599-2261 JAN 23 '97 9:18 No.001 P.03

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC285	970019
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	01/23/97	1000
PROJECT:	Geoprobe	
DATE OF BTEX EXT. | ANAL.:	1/24/97	1/24/97
TYPE | DESCRIPTION:	PZ4	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	18.8	PPB				
TOLUENE	265	PPB		D1		
ETHYL BENZENE	24.0	PPB				
TOTAL XYLENES	378	PPB				
TOTAL BTEX	686	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 83.2 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D1" qualifier indicates that the analyte concentration exceeded the calibration curve limit.

Narrative:

Approved By: John Sabo Date: 1-29-97

Geoprobe

El Paso Natural Gas Company

A 2339

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis: BTEX	Remarks
16297	EPFS Pits (Pit Closure Project)				

Samplers: (Signature): CM Chavez — Date: 10/1/96

	Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	BTEX	Remarks
17910	10/1/96	1215		✓	CMC200	2	HCL	✓	PZ3 Ohio Grant Meter code 72890
17911	↓	1500		✓	CMC201	2	HCL	✓	PH3 "
					Trip Blank	1		✓	Trip Blank

Note - PZ3 sample had strong product odor to it. Potential high dissolve phase

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Coy Chavez	10/1/96 1700	Kelly Starcell	Kelly Starcell	10-2-96 9:45	

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:
	10-1-96 0945	Marla Armenta		

Carrier Co:

Carrier Phone No.

Air Bill No.:

Date Results Reported / by: (Signature)

san juan repro Form 71-55 A

EPFS

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC200	947910
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/1/96	1315
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/4/96	10/7/96
TYPE | DESCRIPTION:	WG	PZ3

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	505	PPB	5	D		
TOLUENE	36.5	PPB	5	D		
ETHYL BENZENE	419	PPB	5	D		
TOTAL XYLENES	3300	PPB	5	D,D1		
TOTAL BTEX	4260	PPB				

–BTEX is by EPA Method 8020 –

The "D" qualifier indicates that the analyte is calculated based on a secondary dilution factor.
The "D1" qualifier indicates that the analyte concentration exceeded the calibration curve limit.

The Surrogate Recovery was at 95.6 % for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By: John Fletcher Date: 10-8-96

PTPRJWTR.XLS,10/7/96

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC201	947911
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/1/96	1500
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/4/96	10/7/96
TYPE | DESCRIPTION:	WG	PH3

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB	1			
TOLUENE	<1	PPB	1			
ETHYL BENZENE	134	PPB	5	D		
TOTAL XYLENES	613	PPB	5	D,J,X3		
TOTAL BTEX	747	PPB				

--BTEX is by EPA Method 8020 --

The "D" qualifier indicates that the analyte is calculated based on a secondary dilution factor.
The "J" qualifier indicates that the analyte was analyzed for and positively identified, but the associated numerical value is an estimated quantity.

The "X3" qualifier indicates that the analyte identification and quantification of peaks was complicated by matrix interference: GC/MS confirmation is recommended.

The Surrogate Recovery was at 95.6 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Laubach Date: 10-8-96

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	10/1/1996 TRIP BLANK
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/1/96	945
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/4/96	10/4/96
TYPE | DESCRIPTION:	Trip Blank	N/A

Field Remarks: TRIP BLANK

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 105 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Fowler Date: 10-8-96

El Paso Natural Gas Company

A 2340

CHAIN OF CUSTODY RECORD

Project No. 16297 | Project Name EPFS PHS

Samplers: (Signature) [signature] | Date: 10/2/96

	Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	Requested Analysis: BTEX				Remarks
7913	10/2/96	0750		✓	CMC 202	2	HCL	✓				PZ2 Ohio C#3 7289D
7914		0900		✓	CMC 203	2		✓				PZ1 "
7915		1020		✓	CMC 204	2		✓				PH7
7916		1240		✓	CMC 205	2		✓				PH9
7917		1330		✓	CMC 206	2		✓				PH11
7918		1450	mdl 10-3-96	✓	CMC 207	2		✓				PH8
					CMC 208	2		✓				PH6 CMC 10/2/96
7919					Trip Blank	1		✓				Trip Blank

Note: PH11, PH8 had product odor & potential dissolved phase product.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	10/2/96 1700	Kelly Stovall	Kelly Stovall	10-3-96 9:40	
[signature]					
	10/3/96 0957	Marla Armenta			

Carrier Co: | Carrier Phone No. | Air Bill No.:

Remarks:

Date Results Reported / by: (Signature)

san juan repro Form 71-55 A

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC202	947913
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/2/96	750
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/4/96	10/4/96
TYPE | DESCRIPTION:	VG	PZ2

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 96.8 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Fowler Date: 10-9-96

EPFS

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC203	947914
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/2/96	900
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/4/96	10/4/96
TYPE | DESCRIPTION:	VG	PZ1

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 94.9 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Faulkner Date: 10-8-96

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC204	947915
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/2/96	1020
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/4/96	10/5/96
TYPE | DESCRIPTION:	VG	PH7

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 95.1 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Fautch Date: 10-8-96

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC205	947916
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/2/96	1240
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/7/96	10/7/96
TYPE | DESCRIPTION:	VG	PH9

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 86.8 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Fowler Date: 10-8-96

947911.XLS,10/8/96

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC206	947917
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/2/96	1330
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/7/96	10/7/96
TYPE | DESCRIPTION:	VG	PH11

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	112	PPB	10	D		
TOLUENE	<1	PPB	10	D		
ETHYL BENZENE	641	PPB	10	D		
TOTAL XYLENES	4650	PPB	10	D		
TOTAL BTEX	5403	PPB				

–BTEX is by EPA Method 8020 –

The "D" qualifier indicates that the analyte is calculated based on a secondary dilution factor.
The Surrogate Recovery was at 82.6 % for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By: John Zaiko Date: 10-8-96

EPFS

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC207	947918
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/2/96	1450
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/5/96	10/5/96
TYPE | DESCRIPTION:	VG	PH8

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	6280	PPB	100	D		
TOLUENE	15750	PPB	100	D		
ETHYL BENZENE	600	PPB	100	D		
TOTAL XYLENES	7280	PPB	100	D		
TOTAL BTEX	29910	PPB				

–BTEX is by EPA Method 8020 –

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

The Surrogate Recovery was at 90.9 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Fordice Date: 10-8-96

EPFS

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	947919
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/2/96	957
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/4/96	10/4/96
TYPE | DESCRIPTION:	Trip Blank	N/A

Field Remarks: TRIP BLANK

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 103 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Davis Date: 10-8-96

El Paso Natural Gas Company

A 2341

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis				Remarks
16297	EPFS PITS							

Samplers: (Signature) CM Chavez Date: 10/3/96

	Date	Time	Comp.	GRAB	Sample Number							
77920	10/3/96	0910		✓	CMC 208	2	HCL	✓				PHb Ohio C# 72890
	CMC	10/3/96			CMC 209							PHS
77921	10/3/96				Trip Blank	1		✓				Trip Blank

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Cmc Chavez	10/3/96 1100	Kelly Stovall	Kelly Stovall	10-4-96 9:30	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	
	10/4/96 0930	Marla Armenta			

Carrier Co: Carrier Phone No. Date Results Reported / by: (Signature)

Air Bill No.:

san juan repro Form 71-55 A

EPFS

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC208	947920
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/3/96	910
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/5/96	10/5/96
TYPE | DESCRIPTION:	VG	PH6

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	282	PPB	50	D		
TOLUENE	1380	PPB	50	D		
ETHYL BENZENE	177	PPB	50	D		
TOTAL XYLENES	2560	PPB	50	D		
TOTAL BTEX	4400	PPB				

–BTEX is by EPA Method 8020 –

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

The Surrogate Recovery was at 91.2 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Fowler Date: 10-8-96

EPFS

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	947921
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/3/96	930
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/4/96	10/4/96
TYPE | DESCRIPTION:	Trip Blank	N/A

Field Remarks: Trip Blank

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 104 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Fulton Date: 10-5-96

El Paso Natural Gas Company

A 2342

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis	Remarks
6297	EPFS PITS				

Samplers: (Signature) Date: 10/4/96

Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	Requested Analysis	Remarks
10/4/96				CMC 209 cmc 10/4/96				FH5 Ohio (#)
7922	1040		✓	CMC 210	2	✓		PH13 Ohio (#)
7923	1150		✓	CMC 211	2	✓		PH12
7924				TRIP BLANK	1	✓		TRIP Blank

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Cory Chavez	10/4/96 1300	Kelly Stovall	Kelly Stovall	10-7-96 955a	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	
	10/8/96 0955	Maria Armenta			

Carrier Co: Carrier Phone No. Date Results Reported / by: (Signature)

Air Bill No.:

san juan repro Form 71-55 A

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC210	947922
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/4/96	1040
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/7/96	10/7/96
TYPE | DESCRIPTION:	VG	PH13

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	14.2	PPB				
TOLUENE	132	PPB				
ETHYL BENZENE	17.6	PPB				
TOTAL XYLENES	219	PPB				
TOTAL BTEX	383	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 87.6 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 10-8-96

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC211	947923
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/4/96	1150
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/7/96	10/8/96
TYPE | DESCRIPTION:	VG	PH12

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	39.8	PPB				
TOLUENE	134	PPB				
ETHYL BENZENE	14.1	PPB				
TOTAL XYLENES	199	PPB				
TOTAL BTEX	387	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 84.4 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Kuehn Date: 10-5-96

947917.XLS,10/8/96

EPFS

EL PASO FIELD SERVICES
FIELD SERVICES LABORATORY

ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	947924
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/4/96	955
PROJECT:	GEOPROBE	
DATE OF BTEX EXT. | ANAL.:	10/7/96	10/7/96
TYPE | DESCRIPTION:	TRIP Blank VG	N/A

Field Remarks: TRIP BLANK

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 98.1 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Loller Date: 10-8-96

El Paso Natural Gas Company

A 2344

CHAIN OF CUSTODY RECORD

Project No.	Project Name
16297	EPFS PITS

Samplers: (Signature) Cory Chavez Date: 10/22/96

	Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	Requested Analysis: BTEX				Remarks
47943	10/22/96	0915		✓	CMC 220	2	HCl/4°C	✓				Ohio C Gov't 3 PH2
47944		1450		✓	CMC 221	2		✓				~~PH5~~ CMC 10/22/96 Mae Gail / 73079 PH1
47945		1505		✓	CMC 222	2		✓				PH2 Mae Gail / 73079
47946		1600		✓	CMC 223	2		✓				PH3 Mae Gail / 73079
47947		1615		✓	CMC 224	2		✓				PH4 Mae Gail / 73079
47948		1655		✓	CMC 225	2		✓				PH5 Mae Gail / 73079
	↓	—			TRIP Blank	1	↓	✓				TRIP Blank

Cory 10/22/96

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Cory Chavez	10/22/96 1730	Kelly Stovall	Kelly Stovall	10-23-96 11:20	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
				10-23-96 1120	Maria Armenta
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	

Carrier Co: | Carrier Phone No. | Date Results Reported / by: (Signature)

Air Bill No.:

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC220	947943
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	10/22/96	915
PROJECT:	Geoprobe	
DATE OF BTEX EXT. | ANAL.:	10/23/96	10/23/96
TYPE | DESCRIPTION:	PH2 ~~Grab~~	~~PH2~~ Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS DF	Q		
BENZENE	<1	PPB				
TOLUENE	18.3	PPB				
ETHYL BENZENE	133	PPB				
TOTAL XYLENES	1350	PPB		F		
TOTAL BTEX	1501	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 110 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used
The "F" qualifier indicates the analyte is taken from the FID.

Narrative:

Approved By: John Loudon Date: 10/29/96

EPFS
EL PASO FIELD SERVICES

QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX

Samples: 947943 - 947948 and 960880 & 960881

QA/QC for 10/23/96 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER ICV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE RANGE	YES	NO
Benzene	Standard	50.0	55.9	112	75 - 125 %	X	
Toluene	Standard	50.0	55.3	111	75 - 125 %	X	
Ethylbenzene	Standard	50.0	55.0	110	75 - 125 %	X	
m & p - Xylene	Standard	100	109	109	75 - 125 %	X	
o - Xylene	Standard	50.0	54.2	108	75 - 125 %	X	
SAMPLE NUMBER LCS LA-45476 25 PPB	**TYPE**	**EXPECTED RESULT PPB**	**ANALYTICAL RESULT PPB**	**%R**	**ACCEPTABLE RANGE**	**YES**	**NO**
Benzene	Standard	25.0	26.7	107	39 - 150	X	
Toluene	Standard	25.0	26.8	107	46 - 148	X	
Ethylbenzene	Standard	25.0	27.2	109	32 - 160	X	
m & p - Xylene	Standard	50.0	54.6	109	Not Given	X	
o - Xylene	Standard	25.0	27.2	109	Not Given	X	
SAMPLE NUMBER CCV LA-52589 50 PPB	**TYPE**	**EXPECTED RESULT PPB**	**ANALYTICAL RESULT PPB**	**%R**	**ACCEPTABLE RANGE**	**YES**	**NO**
Benzene	Standard	50.0	52.7	105	75 - 125 %	X	
Toluene	Standard	50.0	52.2	104	75 - 125 %	X	
Ethylenzene	Standard	50.0	52.1	104	75 - 125 %	X	
m & p - Xylene	Standard	100	104	104	75 - 125 %	X	
o - Xylene	Standard	50.0	52.0	104	75 - 125 %	X	
SAMPLE NUMBER CCV LA-52589 50 PPB	**TYPE**	**EXPECTED RESULT PPB**	**ANALYTICAL RESULT PPB**	**%R**	**ACCEPTABLE RANGE**	**YES**	**NO**
Benzene	Standard	50.0	52.0	104	75 - 125 %	X	
Toluene	Standard	50.0	51.2	102	75 - 125 %	X	
Ethylbenzene	Standard	50.0	50.9	102	75 - 125 %	X	
m & p - Xylene	Standard	100	101	101	75 - 125 %	X	
o - Xylene	Standard	50.0	50.6	101	75 - 125 %	X	

Narrative: Acceptable.

EL PASO FIELD SERVICES LAB
QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX
Samples: 947943 - 947948 and 960880 & 960881

LABORATORY DUPLICATES:

SAMPLE ID 947935	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE RANGE	YES	NO
Benzene	Matrix Duplicate	4.07	3.99	1.99	+/- 20 %	X	
Toluene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X	
Ethylbenzene	Matrix Duplicate	7.81	7.63	2.33	+/- 20 %	X	
m & p - Xylene	Matrix Duplicate	12.7	11.3	11.7	+/- 20 %	X	
o - Xylene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X	

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID 2nd Analysis 947935	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE RANGE	YES	NO
Benzene	50	4.07	57.2	106	75 - 125 %	X	
Toluene	50	<1	53.6	107	75 - 125 %	X	
Ethylbenzene	50	7.81	60.7	106	75 - 125 %	X	
m & p - Xylene	100	12.7	118	105	75 - 125 %	X	
o - Xylene	50	<1	53.1	106	75 - 125 %	X	

Narrative: Acceptable

ADDITIONAL ANALYTICAL BLANKS:

AUTO BLANK	SOURCE	PPB	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 (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.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (Three 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: _____ Approved By: _____ Date: 10/29/96

1997 GROUNDWATER ANALYTICAL

DRILLING INITIAL WELL SAMPLE

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page 1 of 1

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (Signature) Robert Thompson DATE: 5-22-97

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
970484	5-22-97	1035	H_2O	RT4	2			X					PEMENTIA ET AL #1 - 75155
970485	5-22-97	1258	H_2O	RT5	2			X					DE-NA-HAZ-ZA #1 - 74439
970486	5-22-97			TRIP BLANK	1								
970487	5-22-97	1515	H_2O	RT6	2			X					OHIO C GOVERNMENT #3 - 72890

CONTRACT LABORATORY P. O. NUMBER

REQUESTED ANALYSIS

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Robert Thompson	5-22-97 1600	Robert Thompson	Robert Thompson	5-23-97 0935	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)
				5-23-97 0935	Marla Armenta

REQUESTED TURNAROUND TIME:
☐ ROUTINE ☐ RUSH _____

CARRIER CO.

BILL NO.:

SAMPLE RECEIPT REMARKS

CHARGE CODE

RESULTS & INVOICES TO:

FIELD SERVICES LABORATORY
EL PASO NATURAL GAS COMPANY
P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499
505-599-2144 FAX: 505-599-2261

White - *Testing Laboratory* Canary - *EPNG Lab* Pink - *Field Sampler*

EL PASO FIELD SERVICES

6-11-97

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	RT6	970487
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	5/22/97	1515
PROJECT:	Phase II Drilling - Initial	
DATE OF BTEX EXT. | ANAL.:	5/27/97	5/27/97
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

The Surrogate Recovery was at 96.0 for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By: John Ladden Date: 6/3/97

970487,6/2/97

PHILIP ENVIRONMENTAL

Well Number MW-1

Serial No. WDPD-

☒ Development ☐ Purging

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPES GW Pits | Project Manager Cory Chance | Project No. 17520

Client Company El Paso Field Services | Phase.Task No. 6003-77

Site Name OHIO C GOVERNMENT #3 | Site Address SAN JUAN Co., NM

Development Criteria

- ☒ 3 to (5) Casing Volumes of Water Removal
- ☐ Stabilization of Indicator Parameters
- ☐ Other

Methods of Development

Pump	Baller
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 21.75 ToR
Initial Depth to Water (feet) 14.89 ToR
Height of Water Column in Well (feet) 6.86
Diameter (inches): Well ____ Gravel Pack ____

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	6.86	4.49	22.45
Gravel Pack			
Drilling Fluids			
Total			22.45

Instruments

	Serial No. (if applicable)
☒ pH Meter	oyster
☐ DO Monitor	
☒ Conductivity Meter	oyster
☒ Temperature Meter	oyster
☐ Other ~~ORP~~	

Water Disposal

ON Ground ON site

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Baller	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5-22-97	1420		X				5	5			15.8	7.67	3580		Light Brown
5-22-97	1430		X				4	9			16.3	7.97	3490		Light Brown

Circle the date and time that the development criteria are met.

Comments Well Bailed Dry At 9 Gallons, Let Recover. 20 MIN. Bailed Less Than 1 Gal. Before Well Went Dry Again. Well Has Poor Recovery. Will Let Recover And Sample.

Developer's Signature(s) Kent Thompson Date 5-22-97 Reviewer ____ Date ____

PHILIP ENVIRONMENTAL

Location No. MW-1

Serial No. WSD-

WATER SAMPLING DATA

Group List Number _____

Sample Type: ☒ Groundwater ☐ Surface Water ☐ Other _____ Date 5-22-97

Project Name EPFS GW Pits Project No. 17520

Project Manager Cory Chance Phase.Task No. 6003.77

Site Name OHIO C GOVERNMENT #3

Sampling Specifications

Requested Sampling Depth Interval (feet) TOP 3'

Requested Wait Following Development/Purging (hours) NONE

Initial Measurements

Time Elapsed From Final Development/Purging (hours) 45 min

Initial Water Depth (feet) 6.86

Nonaqueous Liquids Present (Describe) NONE

Water Quality/Water Collection

DO = Dissolved Oxygen; Cond. = Conductivity

Date	Time	Sampler Initials	Water Quality Readings				Water Collection Data					Notes (Explain in Comment Below)
			Temp. (°C)	pH	DO (mg/L)	Cond. (µmhos/cm)	Volume Removed (gallons)	Removal Rate (gal/min)	Pump Intake Depth (ft)	Bail	Final Water Depth ft)	
	See well Development AND Purging Data Sheet											

Container Type: G = Clear Glass; A = Amber Glass; P = Plastic; V = VOA Vial (Glass); O = Other (Specify)

Sample Containers

Preservatives: H = HCl; N = HNO_3; S = H_2SO_4; A = NaOH; O = Other (Specify); --- = None

Analytical Parameter List	Container			Field Filtered		Preserved	Cooled During Collection		Comments
	Number	Type	Volume (mL)	Yes	No		Yes	No	
BTEX	2	V	40		X	H	X		SAMPLED AT ISLS

Filter Type NONE Chain-of-Custody Form Number EPFS

Comments _____

Signature Robert Thompson Date 5.22.97 Reviewer _____ Date _____

El Paso Natural Gas Company

A 2017

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis				Remarks
	HUERFANO PIPELINE			BTXE	GENERAL CHEMISTRY	RCRA METALS		
Samplers: (Signature) Dennis Bird	Date: 6.26.97							

MATRIX	Date	Time	Comp.	GRAB	Sample Number							
WATER	6.26.97	1353		X	970606	5-½	4°C	X	X	X		OHIO C GOVT. #3 MW-1 MC 72890

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Dennis Bird	6.26.97 1618				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	
		Marlon E Hogan	6/27/97 0720		
Carrier Co:		Carrier Phone No.		Date Results Reported / by: (Signature)	
Air Bill No.:					

EL PASO FIELD SERVICES

8/7/97

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970606
MTR CODE | SITE NAME:	72890	Ohio C Govt #3 MW-1
SAMPLE DATE | TIME (Hrs):	6/26/97	1353
PROJECT:	Sample 4 - 1st Quarter	
DATE OF BTEX EXT. | ANAL.:	6/27/97	6/27/97
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 99.5 for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: _____ Date: 7-10-97

970606~1.XLS,7/10/97

EL PASO FIELD SERVICES

8/7/97

Field Services Laboratory
Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970606
DATE SAMPLED:	06/26/97
TIME SAMPLED (Hrs):	1353
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	72890
SAMPLE SITE NAME:	Ohio C Govt #3
SAMPLE POINT:	MW-1

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	7.5	Units	07/01/97
Alkalinity as $C0_3$	0.0	PPM	07/01/97
Alkalinity as $HC0_3$	647	PPM	07/01/97
Calcium as Ca	496	PPM	06/27/97
Magnesium as Mg	35	PPM	06/27/97
Total Hardness as $CaC0_3$	1,383	PPM	06/27/97
Chloride as Cl	10	PPM	06/27/97
Sulfate as $S0_4$	1,970	PPM	06/27/97
Fluoride as F	1.1	PPM	06/27/97
Nitrate as $N0_3$-N	<1.1	PPM	06/27/97
Nitrite as $N0_2$-N	<1.1	PPM	06/27/97
Ammonium as NH_4^+	<0.2	PPM	06/27/97
Phosphate as PO_4	<1.1	PPM	06/27/97
Potassium as K	7.16	PPM	06/27/97
Sodium as Na	566	PPM	06/27/97
Total Dissolved Solids	3,560	PPM	07/01/97
Conductivity	3,910	umhos/cm	07/01/97
Anion/Cation %	0.4%	%, <5.0 Accepted	07/10/97

Lab Remarks:

Reported By: Linda

Approved By: John Fowler

Date: 7-10-97

970606GC.XLS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	970606
SAMPLE DATE:	06/26/97
SAMPLE TIME (Hrs):	1353
SAMPLED BY:	D. Bird
MATRIX:	Water
METER CODE:	72890
SAMPLE SITE NAME:	Huerfano Pipeline
SAMPLE POINT:	Ohio C Govt. #3 MW-1

REMARKS: _____

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N. M. WQCC LIMIT (mg/L)
ARSENIC	<0.029	0.100
BARIUM	0.07	1.00
CADMIUM	0.0003	0.010
CHROMIUM	<0.004	0.050
LEAD	<0.003	0.050
MERCURY	<0.0002	0.002
SELENIUM	<0.005	0.050
SILVER	0.0008	0.050

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994.

Method 7061A, Arsenic (Atomic Absorption, Gaseous Hydride), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.

Method 7081, Barium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.

Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.

Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.

Method 7421, Lead (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.

Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA 600/4-91/010, USEPA, June, 1991.

Method 7741A, Selenium (Atomic Absorption, Gaseous Hydride), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1994.

Method 7761, Silver (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.

Reported By: mh Approved By: John Ford Date: 9-4-97

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT

Sample ID: 970606
Date Reported: 08/28/97

STANDARD REFERENCE MATERIAL

Analyte	Found Result (mg/L)	Known Value (mg/L)	% Recovery
Arsenic	0.031	0.032	96.6%
Barium	0.061	0.065	94.6%
Cadmium	0.0026	0.0024	110%
Chromium	0.005	0.005	103%
Lead	0.013	0.012	108%
Mercury	0.0044	0.0046	95.2%
Selenium	0.038	0.041	94.3%
Silver	0.0066	0.0068	97.6%

DUPLICATE ANALYSIS (mg/L)

Analyte	Original Sample Result	Duplicate Sample Result	% RPD
Arsenic	0.0077	0.0084	8.7%
Barium	0.222	0.216	2.7%
Cadmium	ND	ND	NA
Chromium	0.004	0.004	1.0%
Lead	ND	ND	NA
Mercury	ND	ND	NA
Selenium	ND	ND	NA
Silver	0.0004	0.0002	NA

SPIKE ANALYSIS (mg/L)

Analyte	Original Sample Result	Spike Sample Result	Spike Added	Recovery Percent
Arsenic	0.0077	0.126	0.100	118%
Barium	0.222	1.247	1.00	94.2%
Cadmium	ND	0.0117	0.010	117%
Chromium	0.004	0.054	0.050	101%
Lead	ND	0.044	0.050	88.3%
Mercury	ND	0.0017	0.0020	85.0%
Selenium	ND	0.053	0.050	101%
Silver	ND	0.0550	0.050	110%

METHOD BLANK

Analyte	Found Result (mg/L)	Detection Level (mg/L)
Arsenic	ND	0.026
Barium	ND	0.019
Cadmium	ND	0.0002
Chromium	ND	0.004
Lead	ND	0.003
Mercury	ND	0.0002
Selenium	ND	0.005
Silver	ND	0.0004

ND: Not Detected at stated detection level. NA: Not Applicable.

Reported By: mh Approved By: John Seidle Date: 9-4-97

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number MW-1

Site Name OHIO C GOVT. #3

Meter Code 72890

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removed
☐ Stabilization of Indicator Parameters
☐ Other

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 21.70
Initial Depth to Water (feet) 14.01
Height of Water Column in Well (feet) 7.69
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		5.1	15.2
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	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulativ	Increment	Cumulative					
6-26-97	1309										20.1	6.77	4130		
6-26-97	1315						5.0	5.0			18.6	6.95	4100		
6-26-97	1335						4.0	9.0			20.0	7.12	4010	3.0	

Comments BAILED DRY @ 9.0 GALLONS.

Developer's Signature Dennis Bird Date 6-26-97 Reviewer John Labbe Date 7-10-97

SAMPLE 4 2ND QTR

El Paso Natural Gas Company

A 2079

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis				Remarks
	MC #12890			BTXE				
Samplers: (Signature) Dennis Bird	Date: 9-12-97							

MATRIX	Date	Time	Comp.	GRAB	Sample Number							
WATER	9/2/97	1429		X	970979	6-1	4°C	X				OHIO C GOVT. #3 MW-1

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Dennis Bird	9/2/97 1546				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	
		Marlon Hoppe	9/15/97 0800		
Carrier Co:		Carrier Phone No.		Date Results Reported / by: (Signature)	
Air Bill No.:					

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970979
MTR CODE | SITE NAME:	72890	Ohio C Govt #3
SAMPLE DATE | TIME (Hrs):	9/12/97	1429
PROJECT:	*Sample 4 2nd Quarter*	
DATE OF BTEX EXT. | ANAL.:	9/16/97	9/16/97
TYPE | DESCRIPTION:	MW-1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 110.4 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Fowler Date: 9-22-97

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number MW-1

Site Name OHIO C GOVT. #3

Meter Code 72890

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removel
☐ Stabilization of Indicator Parameters
☐ Other

Methods of Development

Pump		Bailer	
☐	Centrifugal	☒	Bottom Valve
☐	Submersible	☐	Double Check Valve
☐	Peristaltic	☐	Stainless-steel Kemmerer

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 21.70
Initial Depth to Water (feet) 13.90
Height of Water Column in Well (feet) 7.80
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		5.2	15.5
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	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulative	Increment	Cumulative					
9-12-97	1343										22.0	6.59	3220		
9-12-97	1349						5.0	5.0			20.6	6.78	3230		
9-12-97	1416						4.0	9.0			21.1	7.04	3320	3.5	

Comments THE WELL BAILED DRY @ 9.0 GALLONS

Developer's Signature Dennis Bird Date 9-12-97 Reviewer John Tadi Date 9-22-97

SAMPLE 4 3RD QTR

El Paso Natural Gas Company

A 2151 CRU 1-7-98

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis			Remarks
	MC #72890			BTXE			
Samplers: (Signature) Dennis Bird	Date: 12-4-97						

MATRIX	Date	Time	Comp.	GRAB	Sample Number							
WATER	12-4-97	1358		X	971272	G-1	4°C	X				OHIO C GOVT. #3 MW-1

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Dennis Bird	12-4-97 1609				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	
		Marlon Hoppen	12/5/97 0740		

Carrier Co:	Carrier Phone No.	Date Results Reported / by: (Signature)
Air Bill No.:		

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971272
MTR CODE | SITE NAME:	72890	Ohio C Govt. #3
SAMPLE DATE | TIME (Hrs):	12/4/97	1358
PROJECT:	Sample 4 3rd Quarter	
DATE OF BTEX EXT. | ANAL.:	12/5/97	12/5/97
TYPE | DESCRIPTION:	MW-1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 98.8 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Fowler Date: 1/6/98

971272BTEXMW,1/6/98

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number MW-1

Site Name OHIO C GOVT. #3

Meter Code 72890

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removel
☐ Stabilization of Indicator Parameters
☐ Other_____

Water Volume Calculation

Initial Depth of Well (feet) 21.70
Initial Depth to Water (feet) 13.72
Height of Water Column in Well (feet) 7.98
Diameter (inches): Well 4 Gravel Pack_____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		5.3	15.8
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other_____

Water Disposal

KOT2 SEPARATOR

Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulative	Increment	Cumulative					
12-4-97	1308										16.4	7.56	4000		
12-4-97	1312						3.0	3.0			14.5	7.19	4360		
12-4-97	1323						2.0	5.0			13.4	7.05	4340		
12-4-97	1333						3.0	8.0			13.2	6.92	4370		
12-4-97	1346						2.0	10.0			12.0	7.00	4460	3.5	

Comments THE WELL BAILED DRY @ 10.0 GALLONS.

Developer's Signature Dennis Bird Date 12-4-97 Reviewer John Landa Date 1/2/98