3R - 228

REPORTS

DATE:
1998

EL PASO FIELD SERVICES

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

RE: 1998 Pit Project Annual Groundwater Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual updates for the 49 remaining groundwater impacted locations that were identified during our pit closure project of 1994 / 1995.

Of the 49 reports, EPFS hereby requests closure of 18 of these locations. The 18 sites EPFS is requesting closure on are presented in 4 separate binders entitled "Final Closure Report for Groundwater Sites with Four Consecutive Quarters Below Standards".

The Jaquez Com. C #1 and Jaquez Com. E #1 site is included in a separate report which is entitled "Jaquez Com. C #1 and Jaquez Com. E #1 Annual Report for Soil and Groundwater Remediation".

If you have any questions concerning the enclosed reports or closure requests, please call me at (505) 599-2124.

Sincerely,

Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **Certified Mail # Z 211 324 122**
Mr. Bill Liesse, BLM – w / enclosures; **Certified Mail # Z 211 324 123**
Ms. Charmaine Tso, Navajo EPA – w / enclosures; **Certified Mail # Z 211 324 120**

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

El Paso Field Services
Final Closure Report For Groundwater Sites With Four Consecutive Quarters Below Standards

RECEIVED
APR 0 5 1999
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

December 1998

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 17520
Book 1

PHILIP SERVICES CORP.

EPFS GROUNDWATER PITS
1998 CLOSURE REPORT

OHIO "C" GOVERNMENT #3 (Pits 1 & 2)
Meter/Line ID - 72890

RECEIVED
APR 0 5 1999
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

SITE DETAILS

Legals - Twn: 28 **Rng:** 11 **Sec:** 26 **Unit:** P
NMOCD Hazard Ranking: 40 **Land Type:** BLM
Operator: Marathon Oil Company

PREVIOUS ACTIVITIES

Site Assessment: Sep-94/ Aug-95
Excavation Pit 1: Sept-94 (50cy)
Re-Excavation Pit 1: Aug-95 (1184cy)
Soil Boring: Sep-95
Excavation Pit 2: Sep-95 (1098cy)
Geoprobe: October-96
Monitor Well: May-97

Pit #1 was excavated to 12 feet beneath ground surface (bgs). Approximately 50 cubic yards were removed during excavation. The headspace soil reading from the excavation bottom was 328 ppm. Soil analytical were as follows; benzene – 150 mg/kg, total BTEX – 1840, and TPH (418.1) 11,800.

Pit #1 was re-excavated to 17 feet beneath ground surface (bgs). The headspace soil reading from the excavation bottom was 197 ppm. Approximately 1183 cubic yards of contaminated soil was removed from the excavation. Soil analytical were as follows; benzene - <0.5 mg/kg, total BTEX – 1840 mg/kg, and TPH (418.1) 632 mg/kg.

One soil boring was drilling in the center of Pit #1 and a sample was collected from 13-15 feet bgs. The sample results were as follows: benzene – <0.5 mg/kg, total BTEX <3 mg/kg and TPH (418.1) 54.8 mg.

Pit #2, which is adjacent to Pit #1, was excavated to 13-17 feet beneath ground surface (bgs) where groundwater was encountered. Approximately 1098 cubic yards of contaminated soil was removed from the excavation. The headspace soil reading from the excavation bottom was 72 ppm. Soil analytical were as follows; benzene - <0.5 mg/kg, total BTEX <3 mg/kg, and TPH (418.1) 66.0 mg/kg. Due to the size of the excavation of Pit #1 and Pit #2, the excavation was joined as shown in figure 1.

One soil boring was drilled in the center of Pit #2 and a monitoring well was installed. No soil samples were collected. Groundwater sampling was initiated on 6/26/97 and continued through 3/27/98. Groundwater analytical data are presented in Table 1. Groundwater analytical data prior to 1998 has been previously submitted in the 1997 Annual Report, along with well diagrams and borings logs.

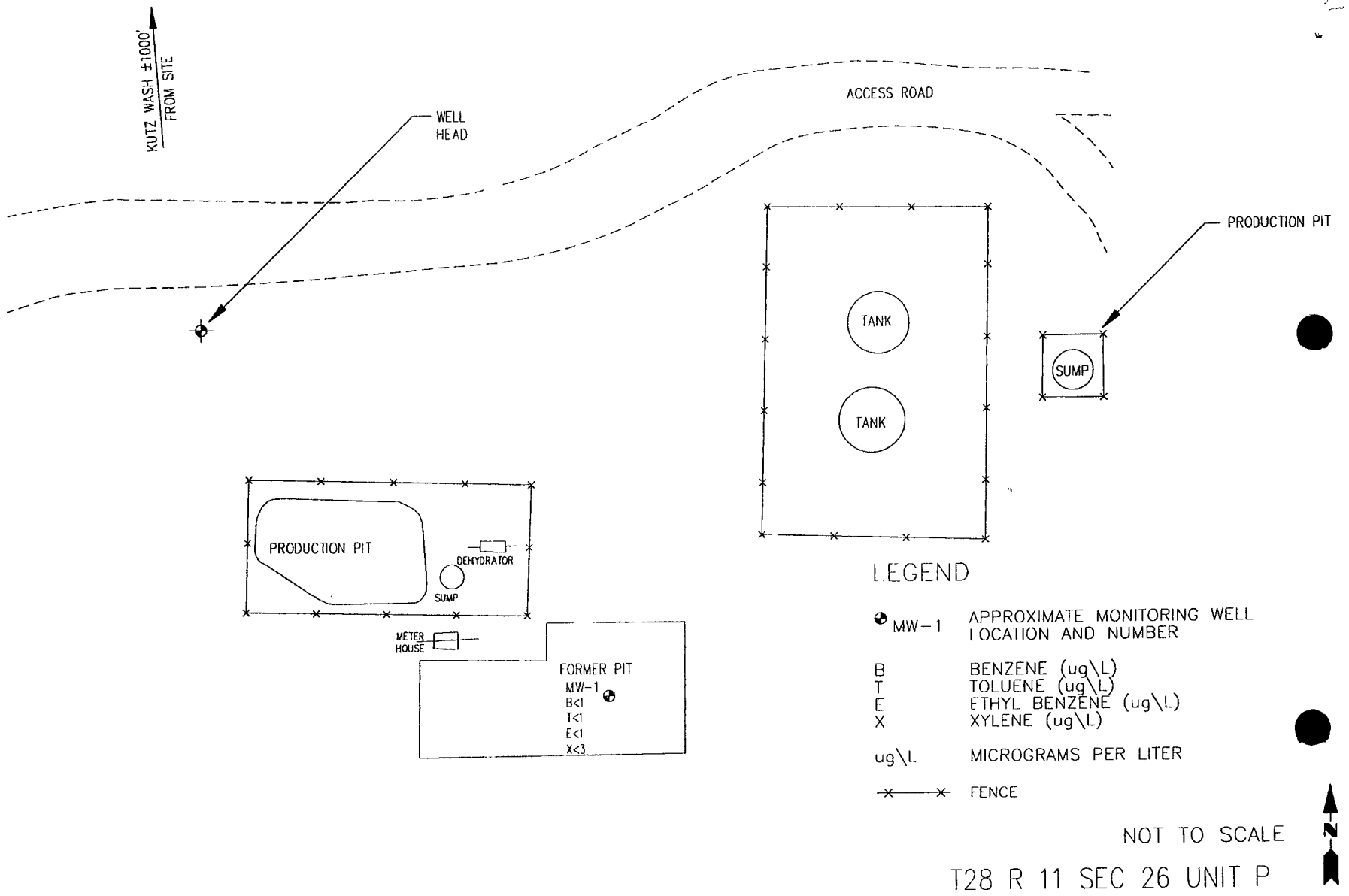
CONCLUSIONS

EPFS has excavated over 2,332 cubic yards contaminated soil from Pit #1 and Pit #2. Soil Samples below standard were collected from both pits.

Groundwater encountered in Pit #2 monitoring well has been below standards for 4 consecutive quarters since quarterly sampling was initiated. Additional geoprobe groundwater sampling has shown that around the operator's pit, BTEX levels are above standards. As stated in the 1997 Annual Groundwater report, EPFS feels they have remediated the bulk of the impacted soils and has proven this by showing 4 consecutive quarters of groundwater sample below standard in MW-1.

RECOMMENDATIONS

- EPFS request closure at this site.
- 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
MARCH 25, 1998

DWN:	DES.:
TMM	CI
CHKD:	APPD:
CI	
DATE:	REV.:
2/26/99	0

PROJECT NO.: 17520
EPFS GW PITS

FIGURE 1

COL 175200-002

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 72890 Location: Ohio "C" Government #3 (TD)
Operator #: 5860 Operator Name: Marathon Oil Co. P/L District: Angel Peak
Coordinates: Letter: P Section 26 Township: 28 Range: 11
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: ✓ Line Drip: ___ Other: _____
Site Assessment Date: 9/14/94 Area: 01 Run: 63

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)
Inside ☒ (1)
Outside ☐ (2)

Land Type:
BLM ☒ (1)
State ☐ (2)
Fee ☐ (3)
Indian _____

Depth to Groundwater
Less Than 50 Feet (20 points) ☒ (1)
50 Ft to 99 Ft (10 points) ☐ (2)
Greater Than 100 Ft (0 points) ☐ (3)

Wellhead Protection Area :
Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☐ (1) YES (20 points) ☒ (2) NO (0 points)

Horizontal Distance to Surface Water Body
Less Than 200 Ft (20 points) ☒ (1)
200 Ft to 1000 Ft (10 points) ☐ (2)
Greater Than 1000 Ft (0 points) ☐ (3)
Name of Surface Water Body Kutz Canyon
(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 40 **POINTS**

REMARKS

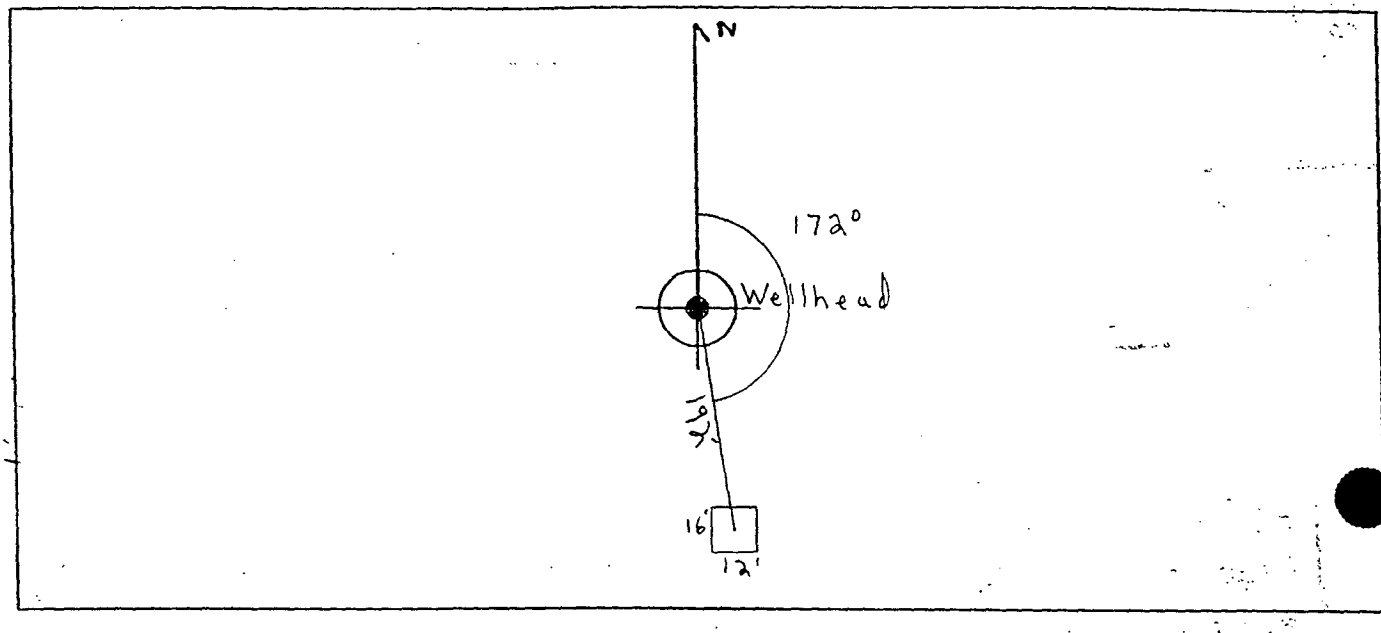
Remarks : Redline Book - Inside Vulnerable Zone Topo - Inside
4 pits. Will close 1. Pit dry. Meter # was obtained by using Coordinates in Redline book. Angel Peak office did not have meter # because well is T.D.

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 172° Footage from Wellhead 192'

b) Length : 16' Width : 12' Depth : 4'



REMARKS

Remarks :

Pictures @ 1241

Completed By:

Corey Chase
Signature

9/14/94
Date

FIELD PIT SITE ASSESSMENT FORM

South Pit

Meter: 72-890 Location: MA OHIO C GOV'T #3 (2nd Pit)
Operator #: 5860 Operator Name: MARATHON OIL COMPANY P/L District: ANGEL PEAK
Coordinates: Letter: P Section 26 Township: 28 Range: 11
Or Latitude _____ Longitude _____
Pit Type: Dehydrator X Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 8-31-95 Area: 01 Run: 63

NMOCD Zone: (From NMOCD Maps) Inside ☒ (1) Outside ☐ (2)

Land Type: BLM ☒ (1) State ☐ (2) Fee ☐ (3) Indian _____

Depth to Groundwater
Less Than 50 Feet (20 points) ☒ (1)
50 Ft to 99 Ft (10 points) ☐ (2)
Greater Than 100 Ft (0 points) ☐ (3)

Wellhead Protection Area :
Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☐ (1) YES (20 points) ☒ (2) NO (0 points)

Horizontal Distance to Surface Water Body
Less Than 200 Ft (20 points) ☒ (1)
200 Ft to 1000 Ft (10 points) ☐ (2)
Greater Than 1000 Ft (0 points) ☐ (3)
Name of Surface Water Body KUTZ CANYON
(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

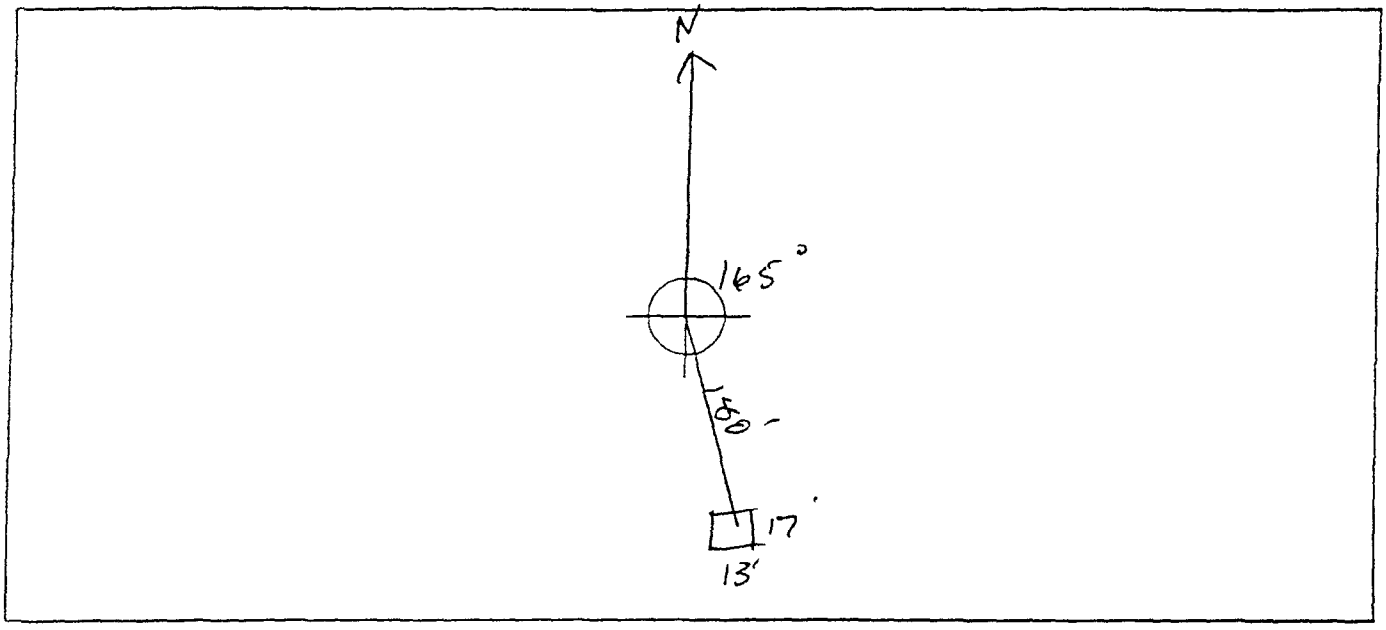
TOTAL HAZARD RANKING SCORE: 40 POINTS

Remarks : PGA, NORTH PIT, MARATHON PRODUCTION PIT DOWN-

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 165° Footage from Wellhead 180'

b) Length : 17 Width : 13 Depth : 4'



Remarks :

Completed By:

Signature

8-31-95

Date

PHASE I EXCAVATION
PIT 1

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 72890 Location: Ohio "C" Goverment #3 TD

Coordinates: Letter: P Section 26 Township: 28 Range: 11

Or Latitude _____ Longitude _____

Date Started : 9-23-94 Run: 01 63

FIELD OBSERVATIONS

Sample Number(s): KP 249 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 328 PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 50

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 9-23-94 Pit Closed By: B.E.I

REMARKS

Remarks : Some Line markers started Remediating to 12' Soil Turned Light gray with a small. At 12' soil still The Same.

Signature of Specialist: Kelly Padilla

(SP3191) 03/16/94

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (Signature) Kelly Padilla DATE: 9-23-94

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	REQUESTED ANALYSIS: TPH EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
	9-23-94	1000	Soil	KP 249	1	VC	X	X				225	
	9-23-94	1150	Soil	KP 250	1	VC	X	X				226	

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Kelly Padilla	9-23-94 1530	Brenda Kiess	Brenda Kiess	9/26/94 1515	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)

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*

FM-08-0565 A (Rev. 05-94)

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP249	946206
MTR CODE | SITE NAME:	72890	Ohio C Government #3
SAMPLE DATE | TIME (Hrs):	09/23/94	1000
PROJECT:	Phase I	
DATE OF TPH EXT. | ANAL.:	09/27/94	09/27/94
DATE OF BTEX EXT. | ANAL.:	09/29/94	10/02/94
TYPE | DESCRIPTION:	VC	Black/gray course sand

Field Remarks: Pit #1

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	150	MG/KG	50			
TOLUENE	930	MG/KG	50			
ETHYL BENZENE	61	MG/KG	50			
TOTAL XYLENES	700	MG/KG	50			
TOTAL BTEX	1840	MG/KG				
TPH (418.1)	11800	MG/KG			0.86	28
HEADSPACE PID	328	PPM				
PERCENT SOLIDS	87.9	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 180 % for this sample All QA/QC was acceptable.

rative:

performed analyses. Surrogate recovery was outside ATI QC limits due to matrix interference.

DF = Dilution Factor Used

Approved By: John Keldahl Date: 7/18/96

PHASE II EXCAVATION
PIT 1

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

North Pit

Meter: 72890 Location: Ohio C Government #3 (1st Pit)

Coordinates: Letter: P Section 26 Township: 28 Range: 11

Or Latitude _____ Longitude _____

Date Started : 8-31-95 Run: 01 63

FIELD OBSERVATIONS

Sample Number(s): 4P56 4P57 _____

Sample Depth: 17' Feet

Final PID Reading 197 PID Reading Depth 17' Feet

	Yes	No
Groundwater Encountered	☒	☐

Approximate Depth 17' Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards _____

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

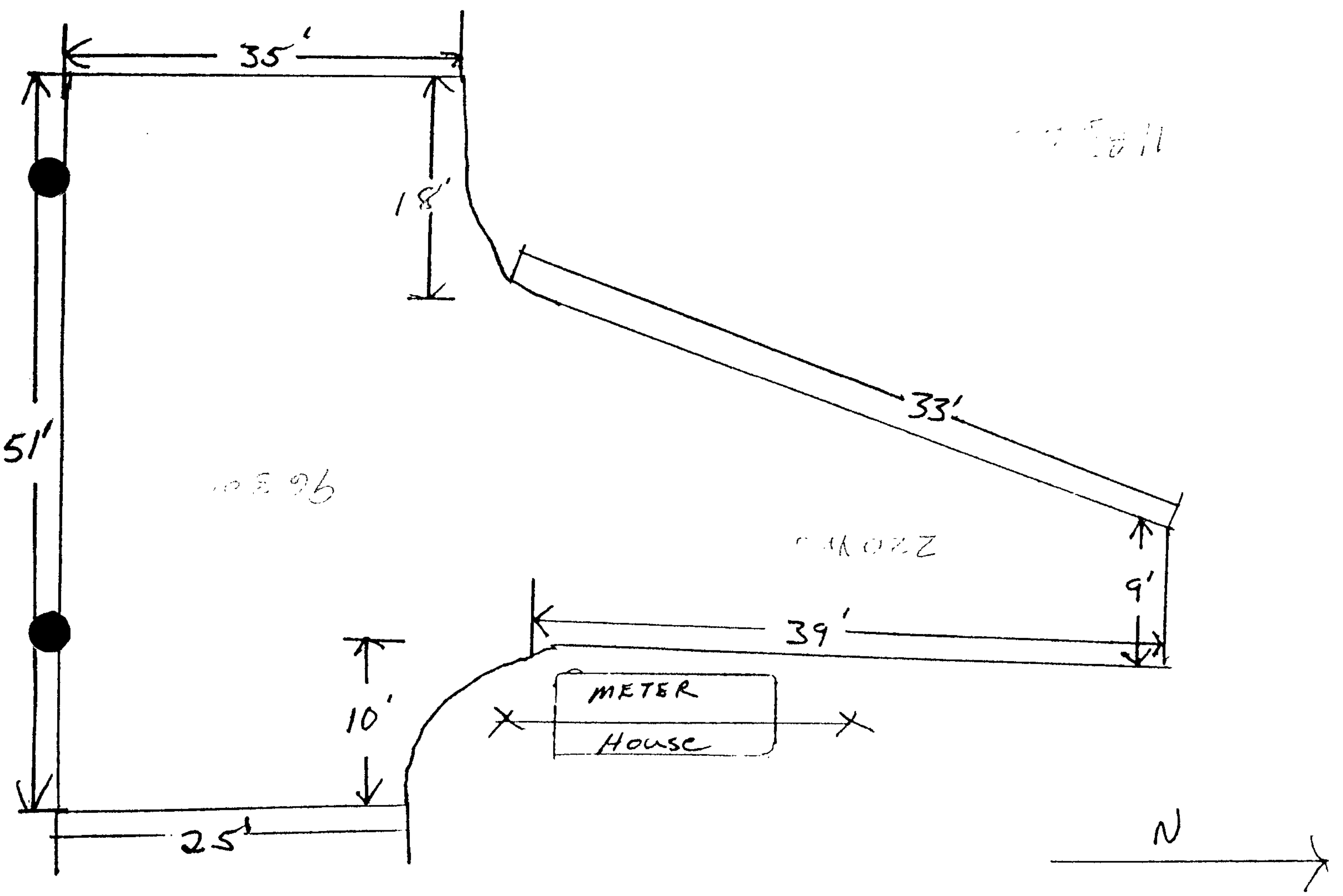
PLEASE CORRECT.

Pit Closure Date: 9-5-95 Pit Closed By: Philip Env.

REMARKS

Remarks : Place T. Dug to 17' took PID it was 53 ppm, also lit sandy gravel. Contamination starts at approx 8' to Bottom. Took North wall PID it was 268 ppm South wall was 177 ppm East Wall 125 ppm West wall was 156 ppm Used 75 LBS Fertilizer See Back →

Signature of Specialist: James L Lewis


35'
18'
33'
51'
9'
39'
10'
METER
House
25'
N

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (*Signature*) James L Lewis DATE: 9-1-95

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	REQUESTED ANALYSIS: TPH EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
	9-1-95	0830	Water	#P56	2	VG	X	X				50	Ohio C Gov't #3 72690

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (*Signature*)	DATE/TIME	RECEIVED BY: (*Signature*)	RELINQUISHED BY: (*Signature*)	DATE/TIME	RECEIVED BY: (*Signature*)
James L Lewis	9-1-95 1400	Linda Diehl	Linda Diehl	9/5/95 1010	
RELINQUISHED BY: (*Signature*)	DATE/TIME	RECEIVED BY: (*Signature*)	RELINQUISHED BY: (*Signature*)	DATE/TIME	RECEIVED OF LABORATORY BY: (*Signature*)

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*

FM-08-0565 A (Rev. 05-94)

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (*Signature*) James F Stamm DATE: 9-1-95

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	REQUESTED ANALYSIS: TPH EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
	9-1-95	1500	Soil	#P57	1	VC	X	X				51	Ohio C Govt #3 72890 North Pit

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (*Signature*)	DATE/TIME	RECEIVED BY: (*Signature*)	RELINQUISHED BY: (*Signature*)	DATE/TIME	RECEIVED BY: (*Signature*)
James F Stamm	9-1-95 1400	Julie D Dix	Julie Dix	9/5/95 10:20	
					RECEIVED OF LABORATORY BY: (*Signature*)

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*

FM-08-0565 A (Rev. 05-94)

PHASE III EXCAVATION
PIT 2

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE II

(2nd Pit)

Meter: 72890 Location: Ohio C Gout #3 South Pit

Coordinates: Letter: P Section 26 Township: 28 Range: 11

Or Latitude _____ Longitude _____

Date Started : 9-6-95 Area: 01 Run: 63

Sample Number(s): 4P58 4P59 _____ _____

Sample Depth: 13'-17' Feet

Final PID Reading 72 ppm PID Reading Depth 13'-17' Feet

Yes No

Groundwater Encountered ☒(1) ☐(2) Approximate Depth 13' East side 17' West side Feet

Pit Dimensions: Length 76' Width 56' Depth 13 East side 17' West side

Remediation Method :

Excavation ☒(1) Approx. Cubic Yards 1,098 @ 9/19

Onsite Bioremediation ☐(2)

Backfill Pit Without Excavation ☐(3)

Soil Disposition: Overburden Cubic Yards 33 @ 9/19

Envirotech ☒(1) ☐(3) Tierra

Other Facility ☐(2) Name: _____

Pit Closure Date: _____ Pit Closed By: Philip Env

Used 100 Lbs of Fertilizer.

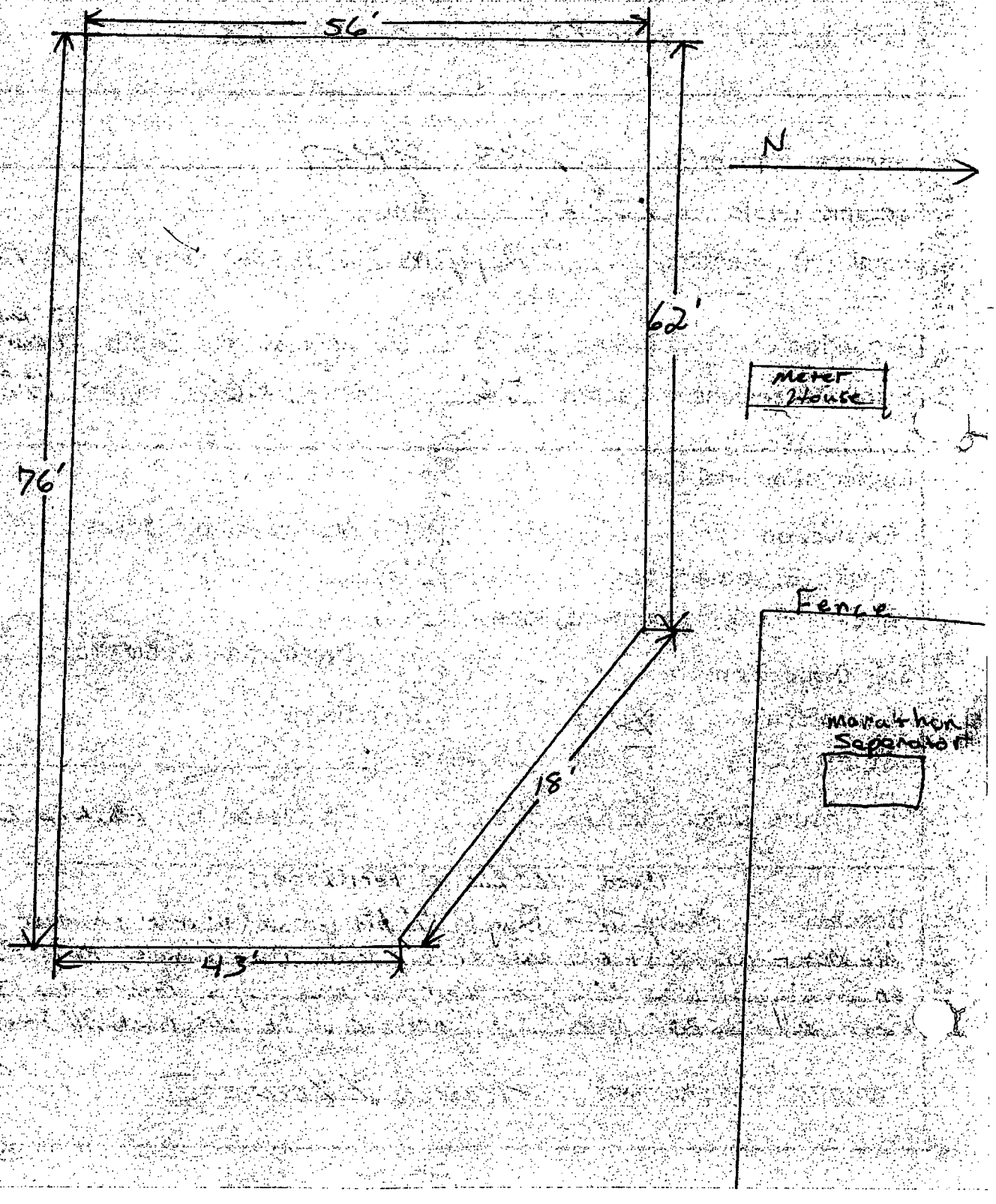
Remarks : Phase II Rig to 17' hit ground water on west side hit water at 13 ft on east side; Took Water sample, took PID South wall was 005 ppm, West wall was 5 ppm, Bottom was 3 ppm East wall was 236 ppm No North wall it was Backfill from previous pit.

Signature of Specialist: James F Powers

over

Sent to lab 9/19

East wall contaminated starts at approx 7 ft and is approx 3 ft thick. Bottom Sample are 13'-17' due to surface ground Slope



El Paso Natural Gas Company

Excavator

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME							REQUESTED ANALYSIS						CONTRACT LABORATORY P. O. NUMBER
# 24324	Pit Closure Project													
SAMPLERS: (Signature)			DATE: 9-1-95											
LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS	
947389	9-1-95	0830	Water	#P56	2	VG	X	X				30	Ohio C Gas #3	72690

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
	9-1-95 1400			9/5/95 0820	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY LABORATORY: (Signature)

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*

FM-08-0565 A (Rev. 05-94)

3-31-99;10:09AM;MEASUREMENT/LAB ;5055992261 # 11/ 13

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Water

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	947389
FIELD ID:	JP 56
MTR CODE:	72890
SAMPLE DATE:	09-01-95
SAMPLE TYPE:	Excavation
SITE NAME:	Ohio C Govt. #3 (north pit)
PROJECT:	~~Phase II~~ Excavation Phase I
DATE OF BTEX ANALYSIS:	09/06/95

FIELD COMMENTS: _____

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT	QUALIFIER	WQCC LIMIT PPB
TDS - TOTAL DISSOLVED SOLIDS (PPM)	N/A		None
BENZENE (PPB)	1350	D (X50)	10
TOLUENE (PPB)	5460	D (X50)	740
ETHYL BENZENE (PPB)	147	D (X50)	750
TOTAL XYLENES (PPB)	2860	D (X50)	620
SURROGATE % RECOVERY	86	Allowed Range 80 to 120 %	

NOTES:

Approved By: John Pruda 9-11-95

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Water

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	947428
FIELD ID:	JP58
MTR CODE:	72890
SAMPLE DATE:	09/07/95
SAMPLE TYPE:	WG
SITE NAME:	Ohio C Govt #3, Pit #1
PROJECT:	Phase II Excavation
ATE OF BTEX ANALYSIS:	09/11/95

FIELD COMMENTS: _____

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT	QUALIFIER	WQCC LIMIT PPB
TDS - TOTAL DISSOLVED SOLIDS (PPM)	Not Required		None
BENZENE (PPB)	200	D (x5)	10
TOLUENE (PPB)	713	D (x5)	740
ETHYL BENZENE (PPB)	<10	D (x5)	750
TOTAL XYLENES (PPB)	808	D (x5)	620
SURROGATE % RECOVERY	99%	Allowed Range 80 to 120 %	

ES:

Approved By: John Keller 7/18/96

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JP59	947427
MTR CODE | SITE NAME:	72890	Ohio C Government #3
SAMPLE DATE | TIME (Hrs):	09/07/95	1510
PROJECT:	Phase II Excavation	
DATE OF TPH EXT. | ANAL.:	09/08/95	09/12/95
DATE OF BTEX EXT. | ANAL.:	09/08/95	09/12/95
TYPE | DESCRIPTION:	VC	Light brown sand & clay

Field Remarks: Pit #1

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG				
TOLUENE	<0.5	MG/KG				
ETHYL BENZENE	<0.5	MG/KG				
TOTAL XYLENES	<1.5	MG/KG				
TOTAL BTEX	<3	MG/KG				
TPH (418.1)	66.0	MG/KG			2.02	28
HEADSPACE PID	76	PPM				
PERCENT SOLIDS	90.3	%				

– TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 94 % for this sample All QA/QC was acceptable.

arrative:

DF = Dilution Factor Used

Approved By: John Taylor Date: 7/8/96

El Paso Natural Gas Company

Phase II Excavation

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (Signature) James F Stinson DATE: 9-7-95

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
	9-7-95	1435	Water	SP58	2	VG	X	X				52	Ohio C Govt #3 72890 2nd pit South Pit

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
James F Stinson	9-7-95 1700	Linda Dodd	Linda Dodd	9/8/95 9:35	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)

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*

FM-08-0565 A (Rev. 05-94)

El Paso Natural Gas Company

Phase III Excavation

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (Signature) James L Powell DATE: 9-7-95

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
	9-7-95	1510	Soil	dP59	1	VC	X	X				53	Ohio C Gov't #3 72890 (2nd Pit South Pit

CONTRACT LABORATORY P. O. NUMBER

REQUESTED ANALYSIS

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
James L Powell	9-7-95 1700	Julie Dodd	Julie Dodd	9/8/95 9:35	
					RECEIVED OF LABORATORY BY: (Signature)

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*

FM-08-0565 A (Rev. 05-94)

PHASE IV EXCAVATION
PIT 1

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

IP ENVIRONMENTAL
Monroe Road
Farmington, New Mexico 87401
(606) 326-2262 FAX (606) 326-2388

Project Name EPNG Pits
Project Number 14509 Phase 6000.77
Project Location OHIO "C" Government #3 72890

Elevation
Borehole Location T 28, R 11, S 26, P
GWL Depth
Logged By Jeff W. Kindley
Drilled By M. Donahue
Date/Time Started 09/13/95 1520
Date/Time Completed 09/13/95 1605

Well Logged By Jeff W. Kindley
Personnel On-Site M. Donahue, J. Johnson, J O'Keife
Contractors On-Site
Client Personnel On-Site

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

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				Back Fill material to 12'						
5										
10										
15	1	13-15	0.8/2.0	SP, brown/red silty sand with gravel, poorly graded, moist, dense, no odor. Boring terminated at 15'					0/0	1544 37 blows per foot
20										
25										
30										
35										
40										

Comments: Sample collected at 13 to 15 feet (JWK 69). Sample submitted for analysis of BTEX and TPH. BH grouted to the surface

Geologist Signature

El Paso Natural Gas Company

Phase II Drilling

CHAIN OF CUSTODY RECORD

PROJECT NUMBER	PROJECT NAME
14509	Pit Closure Project # 24324

SAMPLERS: (*Signature*) Jeffrey Knoll — DATE: September 13, 1995

LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020			PID HS # (ppm)	SEQ #	REMARKS
	09/13/95	1155	Soil	JWK 65	1	VG	✓	✓			0	59	3-C LINE DRIP #3 18-20 feet
	09/13/95	1320	Soil	JWK 66	1	VG	✓	✓			0	60	Lat 3C-2 Line Drip 8-10 feet
	09/13/95	1320	Soil	JWK 67	1	B	✓	✓			0	—	Trip Blank
	09/13/95	1320	Soil	JWK 68	1	D	✓	✓			0	—	Lat 3C-2 Line Drip 8-10 feet
	09/13/95	1544	Soil	JWK 69	1	VG	✓	✓			0	61	OHIO "C" Government #3 72890 13-15 feet

CONTRACT LABORATORY P. O. NUMBER

REQUESTED ANALYSIS

RELINQUISHED BY: (*Signature*)	DATE/TIME	RECEIVED BY: (*Signature*)	RELINQUISHED BY: (*Signature*)	DATE/TIME	RECEIVED BY: (*Signature*)
Jeffrey Knoll	09/13/95 1655	Julie Dudley	Julie Dudley	9/14/95 9:30	
RELINQUISHED BY: (*Signature*)	DATE/TIME	RECEIVED BY: (*Signature*)	RELINQUISHED BY: (*Signature*)	DATE/TIME	RECEIVED OF LABORATORY BY: (*Signature*)

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 Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JWK69	947458
MTR CODE | SITE NAME:	72890	Ohio "C" Government #3
SAMPLE DATE | TIME (Hrs):	09/13/95	1544
PROJECT:	Phase III Drilling	
DATE OF TPH EXT. | ANAL.:	09/14/95	09/20/95
DATE OF BTEX EXT. | ANAL.:	09/14/95	09/20/95
TYPE | DESCRIPTION:	VG	Light brown sand & sandstone

Field Remarks: Pit #1

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG				
TOLUENE	<0.5	MG/KG				
ETHYL BENZENE	<0.5	MG/KG				
TOTAL XYLENES	<1.5	MG/KG				
TOTAL BTEX	<3	MG/KG				
TPH (418.1)	54.8	MG/KG			2.04	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	91.9	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 91 % for this sample All QA/QC was acceptable.

rative:

DF = Dilution Factor Used

Approved By: John Leslie Date: 7/08/96

PHASE V MONITOR WELL

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 Gov't J 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										
5				Backfill to 17'						
10										
15										- Cuttings
20				Br silty SAND, vf-F sand, +- med, Saturated						- gravel
25				TOB 20'						
30				~~TOB 20'~~ cmc						
35										
40										

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

Geologist Signature Cory Chance

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

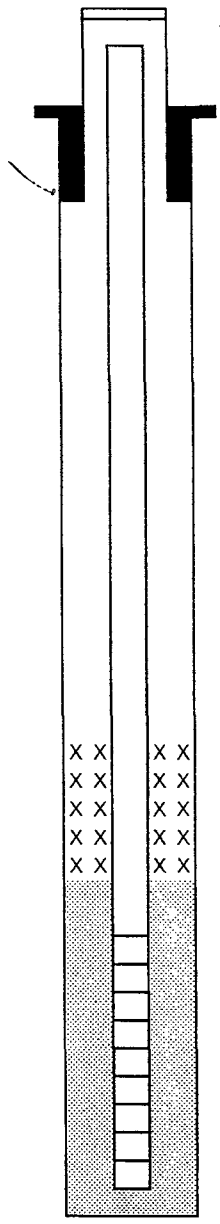
Elevation
Well Location T28 R11 S26 LTR P
GWL Depth 12.3' BGS
Installed By K Padilla

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

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

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

MWINSTAL.wk1

Geologist Signature Cory Chance

PHILIP ENVIRONMENTAL

Well Number MW-1

Serial No. WDPD-

☒ Development ☐ Purging

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS 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 72890

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	Bailer
☐ 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		Gallons to be Removed
	Cubic Feet	Gallons	
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		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons)		Product Volume Removed (gallons)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
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 Baled Dry At 9 Gallons, Let Recover 20 Min. Baled Less Than 1 Gal. Before Well Went Dry Again. Well Has Poor Recovery. Will Let Recover And Sample.

Developer's Signature(s) Robert 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

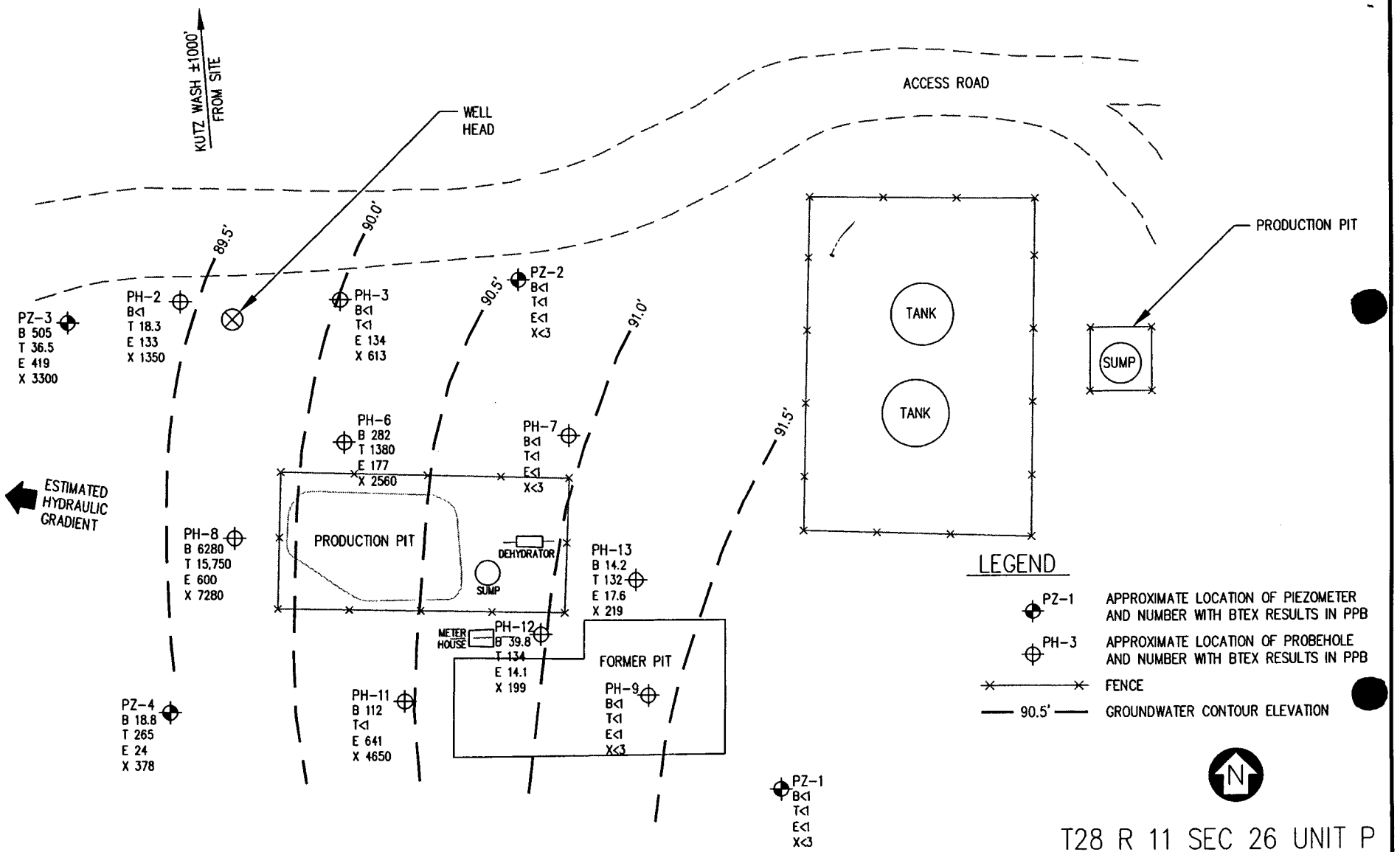
Analytical Parameter List	Container			Field Filtered		Preserved	Cooled During Collection		Comments
	Number	Type	Volume (mL)	Yes	No		Yes	No	
BTEX	2	V	40		X	H	X		SAMPLED AT 1515

Filter Type NONE Chain-of-Custody Form Number EPFS

Comments

Signature Robert Thompson Date 5.22.97 Reviewer Date

PHASE VI GEOPROBE



PHILIP ENVIRONMENTAL

TITLE:
OHIO C GOVERNMENT #3
METER 72890

SCALE	NONE	DATE	PROJECT NO: 17520
DWN:	M.R.W.	5/23/97	
DES:			
CHKD:			FIGURE 1 REV: 0
APPD:			

COL. J:\17520\CM\CL4-1

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. Govt 3 72890

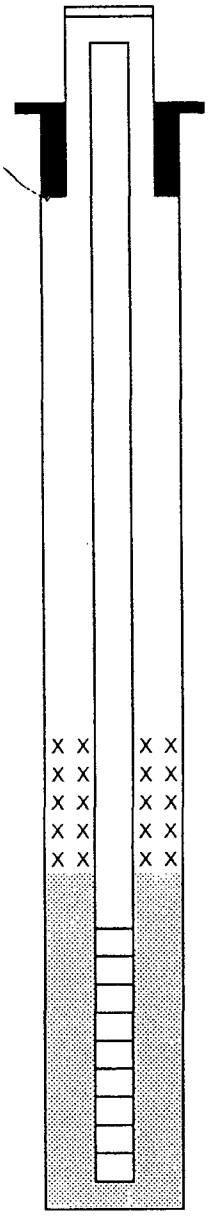
Elevation
Well Location SE of Pit
GWL Depth 13.0 ± 2.5' TOR
Installed By K PADILLA

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 Gas #3 72890

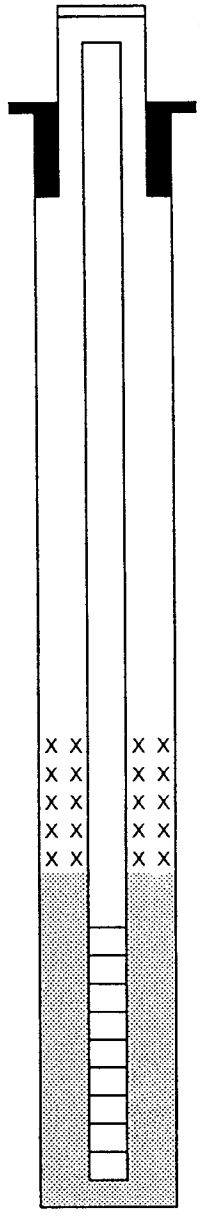
Elevation
Well Location N of PH
GWL Depth 10.98 TDR
Installed By K PADILLA

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 Gen #3 72890

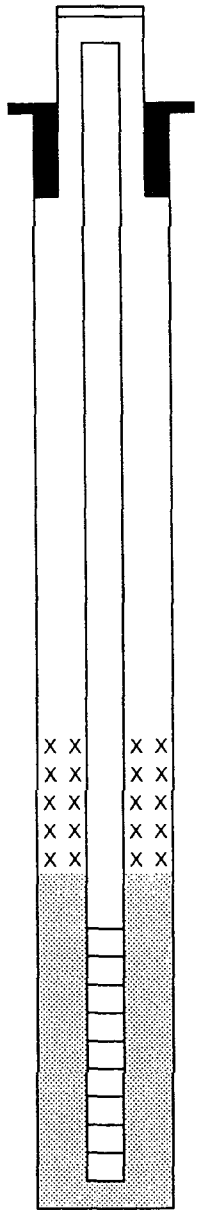
Elevation
Well Location NW of Pit
GWL Depth ~~9.3 BGS~~ 12.29 TOR
Installed By K PADILLA

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

MWINSTAL.wk1

Geoprobe

El Paso Natural Gas Company

A 1964

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

mail 70019	Date	Time	Comp.	GRAB	Sample Number				
~~48048~~	1/22/97	1000		✓	CMC285	2	4°C/HCl	X	PZ4 Ohio (Gov't) 72890 ✓ Prod. Odor
					Trip BLANK	1		X	TRIP BLANK

Cory Chance 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	Marla 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:	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 Fowler Date: 1-29-97

970019.XLS,1/28/97

Geoprobe

EPFS 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 Chaney

Date: 10/1/96

	Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	BTEX				Remarks
947910	10/1/96	1215		✓	CMC200	2	HCL	✓				PZ3 Ohio Court 72890 (Meter code)
947911	↓	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)
Cory Chaney	10/1/96 1700	Kelly Starcell	Kelly Starcell	10-2-96 9:45 (390)	
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:	
	10-1-96 0945	Marla Armenta			

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:	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:

I = Dilution Factor Used

Approved By: John Tatch 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:	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

EPFS

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 Fabelin Date: 10-8-96

EPFS Natural Gas Company

A 2340

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis			Remarks
16297	EPFS PH-3						
Samplers: (Signature)	Date: 10/2/96						

	Date	Time	Comp.	GRAB	Sample Number						
947913	10/2/96	0750		✓	CMC 202	2	HCL	✓			PZ2 Ohio C#3 72890
947914		0900		✓	CMC 203	2		✓			PZ1 "
947915		1020		✓	CMC 204	2		✓		✓	PH7
947916		1240		✓	CMC 205	2		✓			PH9
947917		1330		✓	CMC 206	2		✓			PH11
947918		1450	mail 10-3-96	✓	CMC 207	2		✓			PH8
					CMC 208	2		✓			PH6 CMC 10/2/96
947919					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)
Cary Chang	10/2/96 1700	Kelly Stovall	Kelly Stovall	10-3-96 9:40	
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:	
	10/3/96 0957	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:	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: 10-8-96

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

EPFS

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 Taylor 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

EPFS

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

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 Faulk Date: 10-8-96

947915.XLS,10/7/96

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 Saenz Date: 10-8-96

A 2341

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Project No.	Project Name
16297	EPFS PITS

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

	Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	Requested Analysis: BTEX				Remarks
147920	10/3/96	0910		✓	CMC 208	2	HCL	✓				PHD Ohio C#J 72890
	CMC 10/3/96				CMC 209							PHS
147921	10/3/96				Trip Blank	1		✓				Trip Blank

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Cindy 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

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

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 Fowler Date: 10-8-96

El Paso Natural Gas Company

A 2342

CHAIN OF CUSTODY RECORD

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

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

	Date	Time	Comp.	GRAB	Sample Number							
	10/4/96				~~CMC 209~~							~~PH3 Ohio (#)~~
47922	↓	1040		✓	CMC 210		2	✓				PH13 Ohio (#)
47923	↓	1150		✓	CMC 211		2	✓				PH12
~~47924~~					TRIP BLANK		1	✓				TRIP BLANK

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	10/4/96 1530			10-7-96 0955a	
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:	
	10/7/96 0955				

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

EPFS

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 Loehr Date: 10-5-96

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
747943	10/22/96	0915		✓	CMC 220	2	HCl/4°C	✓			Ohio (Govt) PH2
747944		1450		✓	CMC 221	2		✓			~~PH5~~ CMC 10/22/96 Mae Gail / 73079 PH1
747945		1505		✓	CMC 222	2		✓			PH2 Mae Gail / 73079
747946		1600		✓	CMC 223	2		✓			PH3 Mae Gail / 73079
747947		1615		✓	CMC 224	2		✓			PH4 Mae Gail / 73079
747948		1655		✓	CMC 225	2		✓			PH5 Mae Gail / 73079
	↓	—			TRIP Blank	1	↓	✓			TRIP Blank

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.:		

San Juan Form 71-55 A

ELPASO NO.REG.LAB ID:505-599-2261 OCT 29'96 9:01 No.001 P.03

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

947943.XLS,10/25/96

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: Mde Approved By: John Test Date: 10/29/96

GROUNDWATER ANALYTICAL

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
970487	72890	Ohio C Govt #3 (MARATHON)	05/22/97	1	Phase II Drilling	< 1	< 1	< 1	< 3	< 6
970606	72890	Ohio C Govt #3 (MARATHON)	06/26/97	1	Sample 4 - 1st Quarter	< 1	< 1	< 1	< 3	< 6
970979	72890	Ohio C Govt #3 (MARATHON)	09/12/97	1	Sample 4 - 2nd Quarter	< 1	< 1	< 1	< 3	< 6
971272	72890	Ohio C Govt #3 (MARATHON)	12/05/97	1	Sample 4 - 3rd Quarter	< 1	< 1	< 1	< 3	< 6
980262	72890	Ohio C Govt #3 (MARATHON)	03/27/98	1	Sample 4 - 4th Quarter	< 1	< 1	< 1	< 3	< 6

DRILLING INITIAL WELL SAMP

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					REMENTIA 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 Samples

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 Laden Date: 6/3/97

970487,6/2/97

PHILIP ENVIRONMENTAL

Well Number MW-1

☒ Development ☐ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

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	Bailer
☐ 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	44.49	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 ~~ont~~	

Water Disposal

ON GROUND ON SITE

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	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		Y	H	X		SAMPLED AT 1515
–									

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	Samplers: (Signature)	Date
	HUERFANO PIPELINE	Dennis Bird	6/26/97

MATRIX	Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	Requested Analysis: BTXE	GENERAL CHEMISTRY	PCB & METALS		Remarks
WATER	6/26/97	1353		X	970606	5 x 40 ml	4°C	X	X	X		OHIO C GOVT. #3 MW-1 MC72890

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

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: _____ 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 Scott 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 Removal
☐ 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 Tubb Date 7-10-97

SAMPLE 4 2ND QTR

Meridian Oil Natural Gas Company

A 207

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: 9-12-97							

MATRIX	Date	Time	Comp.	GRAB	Sample Number							
WATER	9-12-97	1429		X	970979	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	9-12-97 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:	
		Marilyn Harper	9/15/97 0800		

Carrier Co:

Carrier Phone No.

Air Bill No.:

Date Results Reported / by: (Signature)

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 Sabo Date: 9-22-97

970971BTEXMW,9/18/97

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: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
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: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal): Increment	Water Volume Removed (gal): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
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	3325	3.5	

Comments THE WELL BAILED DRY @ 9.0 GALLONS

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

SAMPLE 4 3RD QTR

El Paso Natural Gas Company

A 2151

CPU 1-7-98

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis			Remarks
	NC #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 Faulkner Date: 1/6/98

971272BTEXMW,1/6/98

EXXON 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

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	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 Forden Date 1/2/98

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

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) 13.69
Height of Water Column in Well (feet) 8.01
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		5.3	15.9
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					
3-27-98	1420										14.3	6.87	4180		
3-27-98	1424						3.0	3.0			13.2	7.00	4140		
3-27-98	1429						2.0	5.0			12.8	7.03	4050		
3-27-98	1450						3.0	8.0			13.2	7.08	4200		
3-27-98	1500						2.0	10.0			13.3	7.16	4260	3.5	

Comments THE WELL BAILED DRY @ 10.0 GALLONS.

Developer's Signature Dennis Bird Date 3-27-98 Reviewer John Laird Date 4/10/98

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980262
MTR CODE | SITE NAME:	72890	Ohio C Govt. #3
SAMPLE DATE | TIME (Hrs):	3/27/98	1515
PROJECT:	Sample 4 4th Quarter	
DATE OF BTEX EXT. | ANAL.:	4/6/98	4/6/98
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 --

ıe Surrogate Recovery was at 102.6 % for this sample All QA/QC was acceptable.

: = Dilution Factor Used

ırrative:

ıproved By: _____ Date: 4/10/98

980262BTEXMW,4/7/98

SAMPLES 4 4TH QTR

Gas Company

A 2590

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: 3-27-98							
MATRIX Date	Time Comp. GRAB Sample Number							
WATER 3-27-98	1515 X 980362	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	3-27-98 1654				
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 Hopper	3/30/98 0830		
Carrier Co:		Carrier Phone No.	Date Results Reported / by: (Signature)		
Air Bill No.:					