

**EPFS GROUNDWATER PITS
1998 CLOSURE REPORT**

AUG 16 1999

MILES FED #1E
Meter/Line ID - 94495

RECEIVED
APR - 2 1999

SITE DETAILS

Legals - Twn: 26N Rng: 7W
NMOCD Hazard Ranking: 50
Operator: LOUIS DREYFUS

Sec: 5

Unit: N

Land Type: FEDERAL

OIL CON. DIV.
DIST. 3

PREVIOUS ACTIVITIES

Site Assessment: Jun-94 Excavation: Jul-94 (260 cy) Re-Excavation: Nov-95 (1,020 cy)
Soil Boring: Mar-97 Monitor Well: Mar-97

The pit was excavated to 12 feet beneath ground surface (bgs) and a composite soil sample was collected from the excavation bottom and four walls. Approximately 260 cubic yards of impacted soil was removed during excavation. The headspace reading from soil at the excavation bottom was 910 ppm. Soil analytical was as follows: benzene - .90 mg/kg, total BTEX - 130 mg/kg, TPH (418.1) - 15,200 mg/kg.

The pit was re-excavated to 21 feet beneath ground surface (bgs) and groundwater was encountered at approximately 19 feet bgs. A soil sample was collected from the excavation bottom and four walls. Approximately 1,020 cubic yards of impacted soil were removed during excavation. The headspace soil reading from the excavation bottom was 148 ppm. Soil analytical was as follows: benzene - <0.5 mg/kg, total BTEX - <3 mg/kg, TPH (418.1) - 82.3 mg/kg. Approximately 100 pounds of nitrogen enriched fertilizer was added to excavation prior to backfilling to aid in natural degradation of residual hydrocarbons.

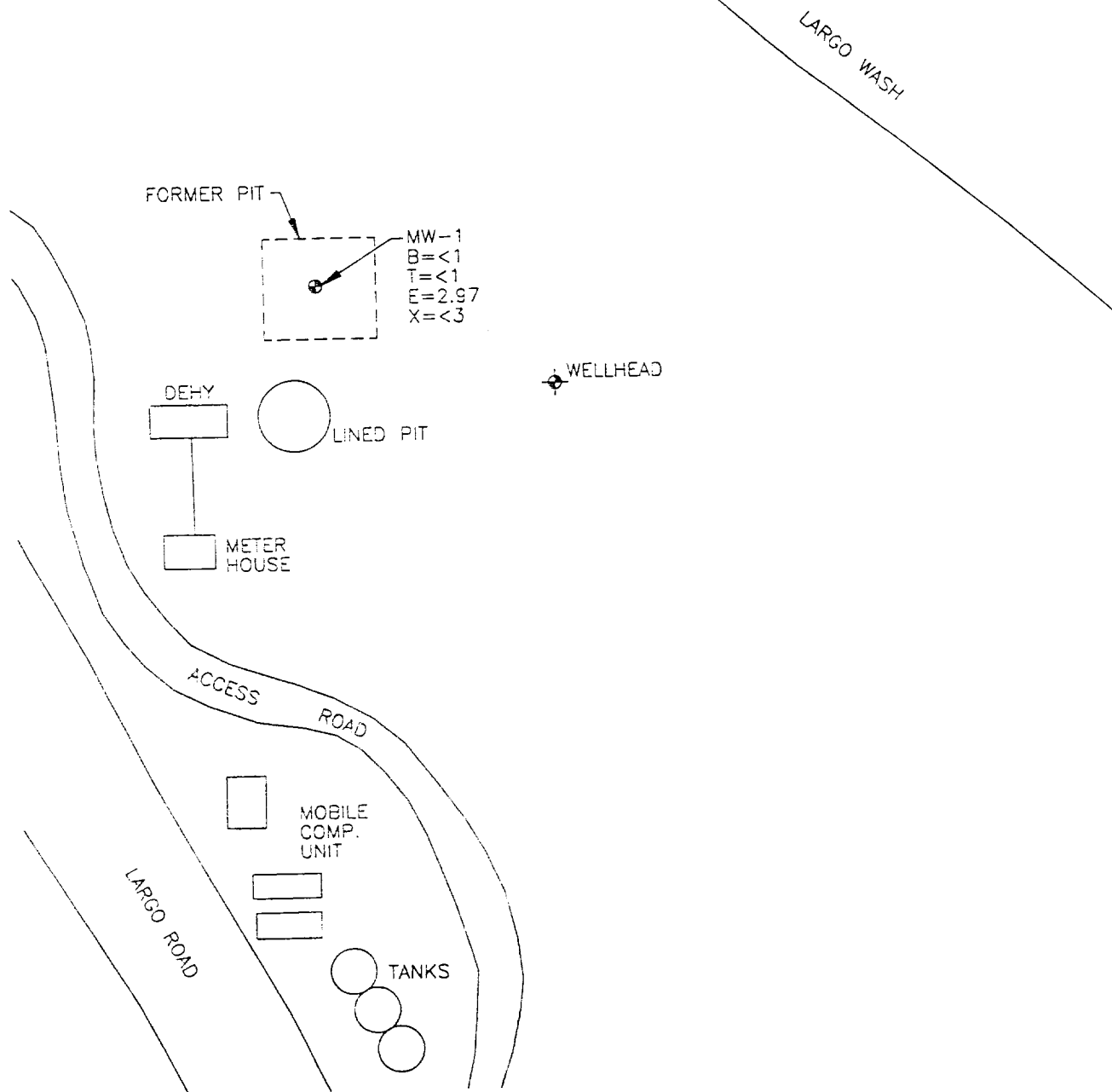
One soil boring was drilled in the center of the former pit. Groundwater was encountered at 15 feet bgs and a monitoring well was installed. Quarterly groundwater monitoring was initiated on 4/2/97 and has continued through 3/19/98. Groundwater analytical data are presented in Table 1. Groundwater analytical data prior to 1998 has been previously submitted in the 1997 Annual Report, along with boring logs and well installation diagrams.

CONCLUSIONS

Groundwater analytical data has been below standards for 4 consecutive quarters since quarterly sampling was initiated. Minimal impact to groundwater has occurred at this site.

RECOMMENDATIONS

- EPFS request closure at this site.
- Following OCD approval for closure, MW-1 will be abandoned following OCD approved abandonment procedures.



LEGEND

● MW-1 APPROXIMATE MONITORING WELL LOCATION AND NUMBER

B BENZENE (ug\L)
T TOLUENE (ug\L)
E ETHYL BENZENE (ug\L)
X XYLENE (ug\L)

ug\L MICROGRAMS PER LITER

NOT TO SCALE



COL 17520AL-001



TITLE:

MILES FED 1E
94495

DWN:	DES.:
TMM	CC
CHKD:	APPD:
CC	
DATE:	REV.:
1/14/98	0

PROJECT NO.: 17520
EPFS GW PITS

FIGURE 1

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 94497 Location: MILES FEDERAL #1E
 Operator #: 0448 Operator Name: LOUIS DEHARD/L District: BALLARD
 Coordinates: Letter: N Section 5 Township: 26 Range: 7
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator ☒ Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 6-16-94 Area: 07 Run: 51

SITE ASSESSMENT

NMOCD Zone:
 (From NMOCD
 Maps)

Inside

Outside

Land Type:

BLM

State

Fee

Indian

☒ (1)

☐ (2)

☐ (3)

☒ (1)

☐ (2)

Depth to Groundwater

Less Than 50 Feet (20 points)

50 Ft to 99 Ft (10 points)

Greater Than 100 Ft (0 points)

☒ (1)

☐ (2)

☐ (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)

200 Ft to 1000 Ft (10 points)

Greater Than 1000 Ft (0 points)

☐ (1)

☒ (2)

☐ (3)

Name of Surface Water Body CANON LARGO

(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: 50 POINTS

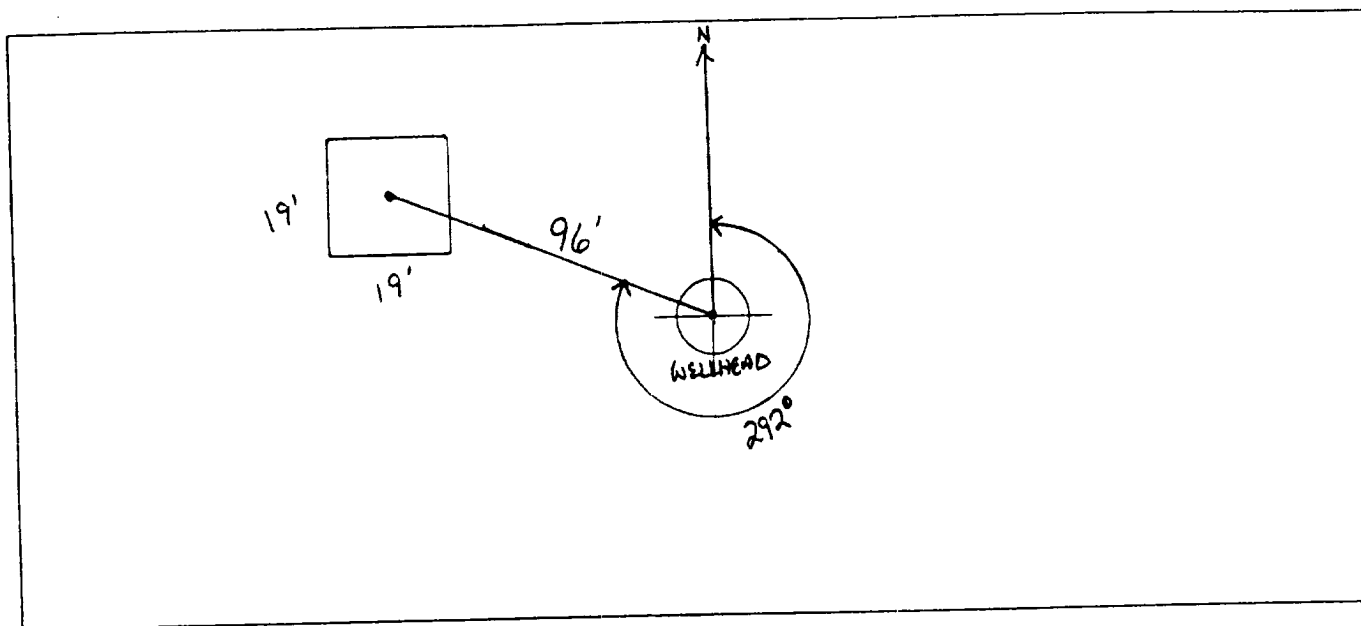
REMARKS

Remarks : THREE PITS ON LOCATION. WILL CLOSE ONLY ONE PIT IS ONLY.
LOCATION IS IN LARGO CANYON NEXT TO LARGO WASH. REDLINE AND TOPO
CONFIRMED LOCATION IS INSIDE U.Z.

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 292° Footage from Wellhead 96'
b) Length : 19' Width : 19' Depth : 3'



REMARKS

Remarks :

TOOK PICTURES AT 2:22 PM

END DUMP

Completed By:

Robert Thompson

Signature

6.16.94

Date

FIELD PIT REMEDIATION/CLOSURE FORM

94495 ^{KD 163}
7/31/94

GENERAL

Meter: 94497 Location: Miles Federal # 1E

Coordinates: Letter: N Section 5 Township: 26 Range: 7

Or Latitude _____ Longitude _____

Date Started : 7/22/94 Run: 07 51

FIELD OBSERVATIONS

Sample Number(s): KD 163

Sample Depth: 12' Feet

Final PID Reading 910 ppm PID Reading Depth 12' Feet

Yes No

Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation

☒ Approx. Cubic Yards 260

Onsite Bioremediation

☐

Backfill Pit Without Excavation

☐

Soil Disposition:

Envirotech

☒
☐

Tierra

Other Facility

☐

Name: _____

Pit Closure Date: 7/25/94

Pit Closed By: BEI

REMARKS

Remarks : Excavated pit to 12', took PID Sample, closed
pit.

Signature of Specialist: Harry Deann

Date:



CHAIN OF CUSTODY RECORD

[illegible]



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 407422
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945759	NON-AQ	07/25/94	07/29/94	07/29/94	20
02	945760	NON-AQ	07/26/94	07/29/94	07/29/94	1
03	945761	NON-AQ	07/26/94	07/29/94	07/29/94	20

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	0.90	<0.025	<0.025
TOLUENE	MG/KG	11	<0.025	<0.025
ETHYLBENZENE	MG/KG	8.4	<0.025	<0.025
TOTAL XYLENES	MG/KG	110	<0.025	36

SURROGATE:

BROMOFLUOROBENZENE (%) 90 82 93



Analytical **Technologies**, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. 407422

August 3, 1994

El Paso Natural Gas Co.
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 07/29/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

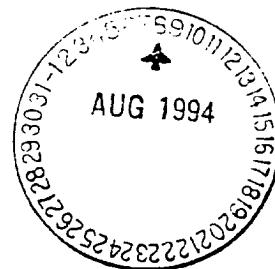
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



FIELD PIT REMEDIATION/CLOSURE FORM/PHASE II

GENERAL

Meter: 94495 Location: Mike's Federal #1 E MV
 Coordinates: Letter: N Section 05 Township: 26 Range: 07
 Or Latitude _____ Longitude _____
 Date Started : 11-3-95 Area: 07 Run: 51

FIELD OBSERVATIONS

Sample Number(s): 4P81 4P82 _____
 Sample Depth: 21 Feet
 Final PID Reading 148 PID Reading Depth 21 Feet
 Yes No
 Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth 19 Feet
 Final Dimensions: Length 46 Width 42 Depth 21

CLOSURE

Remediation Method :
 Excavation ☒ (1) Approx. Cubic Yards 1020 LT 11/9/95
 Onsite Bioremediation ☐ (2)
 Backfill Pit Without Excavation ☐ (3)
 Overburden Cubic Yards 40 LT 11/9/95
 Soil Disposition:
 Envirotech ☒ (1) ☐ (3) Tierra
 Other Facility ☐ (2) Name: _____
 Pit Closure Date: 11-7-95 Pit Closed By: Philip Env.
Phase III used 100 lbs Fertilizer

REMARKS

Remarks : Dug to 21 Ft. Encountered ground water, but
it was only a trickle, not enough to pull a sample.
Took PID N wall 160ppm S wall ppm was 3 E wall 4 ppm
West wall was 20 ppm Bot was 11 ppm comp. sample 148ppm
over.

Signature of Specialist: James F. Penas



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	Field ID JP81	Lab ID 947749
MTR CODE SITE NAME:	94495	Miles Federal #1E
SAMPLE DATE TIME (Hrs):	11/06/95	1500
PROJECT:	Phase III Excavation	
DATE OF TPH EXT. ANAL.:	11/07/95	11/07/95
DATE OF BTEX EXT. ANAL.:	11/07/95	11/07/95
TYPE DESCRIPTION:	VC	Dark brown sand & clay

Field Remarks:

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)	82.3	MG/KG			2.02	28
HEADSPACE PID	148	PPM				
PERCENT SOLIDS	83.8	%				

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

The Surrogate Recovery was at 106 % for this sample All QA/QC was acceptable.
ative:

DF = Dilution Factor Used

Approved By:

John Saville

Date:

7/19/96



350
Natural Gas Company

Page 4

[illegible]

White - Testing Laboratory Canary - EFNG Lab Pink - Field Sampler

MAJORITY



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Water

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	947747
FIELD ID:	JP82
MTR CODE:	94495
SAMPLE DATE:	11-06-95
SAMPLE TYPE:	WG [Exc.]
SITE NAME:	Miles Fed. #1E MV
PROJECT:	Phase III Excavation
DATE OF BTEX ANALYSIS:	11/7/95

FIELD COMMENTS:

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT	ANALYST	WCC LIMIT PPB
TDS - TOTAL DISSOLVED SOLIDS (PPM)			None
BENZENE (PPB)	31.1		10
TOLUENE (PPB)	131		740
ETHYL BENZENE (PPB)	11.0		750
TOTAL XYLENES (PPB)	467	DI	620
SURROGATE % RECOVERY	102%	Allowed Range 80 to 120 %	

NOTES: Result for m/p xylenes was above calibration range.

Approved By:

A handwritten signature, likely of the analyst or approver.

11-9-95

Date



CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER		PROJECT NAME		REQUESTED ANALYSIS		TOTAL NUMBERS OF CONTAINERS		SAMPLE TYPE		REMARKS	
24324		Pit Closure Project # 24324		TPH EPA 418.1 BTEX EPA 8020		2		VG X		74 Miles Fed #1E MV 94495	
DATE: 11-6-95		SAMPLE NUMBER: 4P82									
LAB ID: 7747		DATE: 11-6-95		TIME: 8:00		MATRIX: water					
SAMPLERS: (Signature) <i>James F. Fournier</i>		DATE: 11-6-95		SAMPLE NUMBER: 11-6-95							
RELINQUISHED BY: (Signature) <i>James F. Fournier</i>		DATE/TIME: 11-6-95 3:40		RECEIVED BY: (Signature) <i>Julia D. Dick</i>		DATE/TIME: 11-6-95 9:20		RECEIVED BY: (Signature) <i>Julia D. Dick</i>			
RELINQUISHED BY: (Signature) <i>James F. Fournier</i>		DATE/TIME: 11-6-95 3:40		RECEIVED BY: (Signature) <i>Julia D. Dick</i>		DATE/TIME: 11-6-95 9:20		RECEIVED BY: (Signature) <i>Julia D. Dick</i>			
REQUESTED TURNAROUND TIME: ☐ ROUTINE ☐ RUSH		CARRIER CO.		SAMPLE RECEIPT REMARKS		CHARGE CODE		RESULTS & INVOICES TO:		FIELD SERVICES LABORATORY EL PASO NATURAL GAS COMPANY P.O. BOX 4990 FARMINGTON, NEW MEXICO 87499 FAX: 505-599-2261	
BILL NO.:											

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL SERVICES INC.

4000 Monroe Road

Albuquerque, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # BH- 2
Well # 1
Page 1 of 1

Project Name EPFS GW PITS
Project Number 17520 Phase 6001.77
Project Location MILES FED # 1E-94495

Elevation _____
Borehole Location T26 R7 - S5 - Ltr N
GWL Depth 15' BGS
Logged By DCESARK
Drilled By K PADILLA
Date/Time Started 3/13/97 - 1230
Date/Time Completed 11 - 1300

Well Logged By DCESARK
Personnel On-Site D CHARLEY, C MAIS
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			Drilling Conditions & Blow Counts
							BZ	BH	S	
0				BACKFILL						
5				TO						
10				21'						
15										
20				(HIGHLY CONTAMIN SOIL)						
25				TD=25'						
30										
35										
40										

Comments:

ENCOUNTERED GW IN FILL MATERIAL @ 15' BGS. OVER-DRILLED TO 25' BGS
+ SET MW-1. NO SAMPLES COLLECTED. PLEASE REFER TO MW INSTALL
RECORD.

Geologist Signature

MONITORING WELL INSTALLATION RECORD

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

Borehole # 2
Well # 1
Page 1 of 1

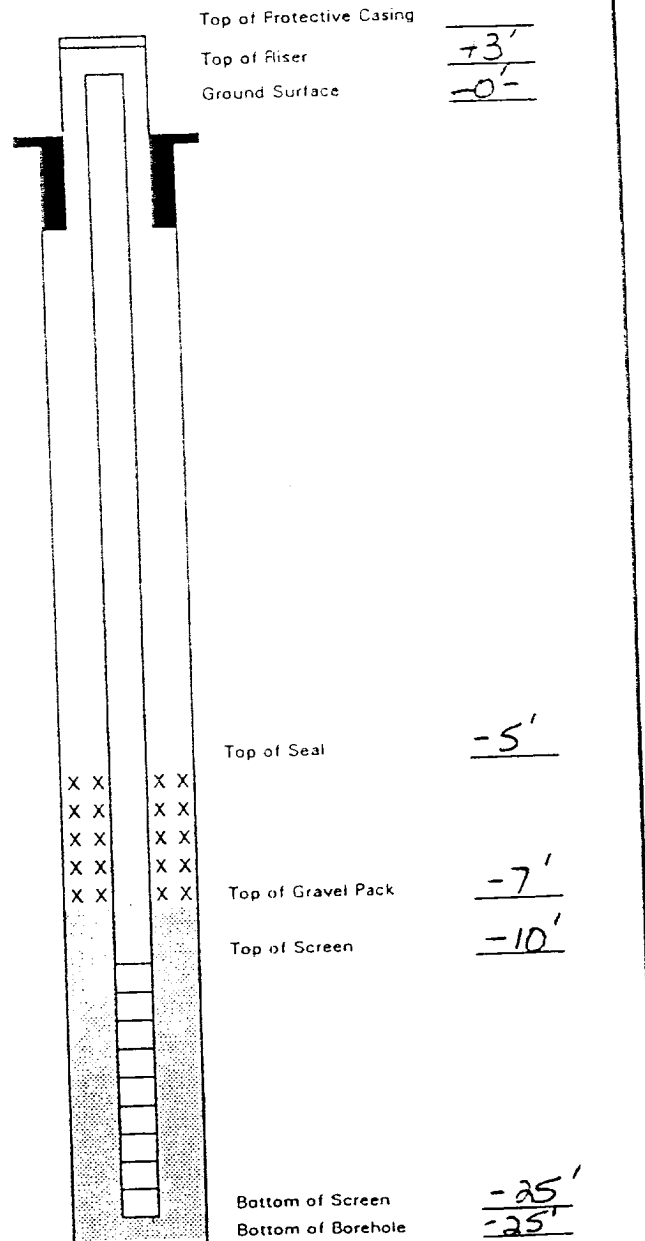
Project Name EPFS GWPITS
Project Number 17520 Phase 6002.77
Site Location MILES FED # 1E-94495

On-Site Geologist D CESARK
Personnel On-Site D CHARLEY, C MAIS
Contractors On-Site _____
Client Personnel On-Site _____

Elevation _____
Well Location T27N-R7W-S5-L1N
GWL Depth 15' BGS
Installed By M. BOONAHLE
K PADILLA
Date/Time Started 3/13/97 1300
Date/Time Completed 3/13/97 1430

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	<u>40 PVC</u>	<u>+3'</u>
Bottom of Well Riser	"	<u>-10'</u>
Top of Well Screen	<u>.010 SLOT</u>	<u>-10'</u>
Bottom of Well Screen	"	<u>-25'</u>
Top of Peltonite Seal	<u>ENVIROPLUG</u>	<u>-5'</u>
Bottom of Peltonite Seal	"	<u>-7'</u>
Top of Gravel Pack	<u>10-20 S.SND.</u>	<u>-7'</u>
Bottom of Gravel Pack	"	<u>-25'</u>
Top of Natural Cave-In		N/A
Bottom of Natural Cave-In		N/A
Top of Groundwater		<u>-15'</u>
Total Depth of Borehole		<u>-25'</u>



Comments: _____

Geologist Signature lu



~~Development~~
~~Purging~~

Well Number MW-1

MMW-1

Page/____ of ____

GW PITS

Project Manager

CHANCE

Project No.

EPFS

EPFS

Site Name MILES FEDERAL #1E-94495

Site Address

Site Address

Phase, Task No. 6003.111

Water Volume Calculation

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

Initial Depth of Well (feet) 25' 865
Initial Depth to Water (feet) 12' 865
Height of Water Column in Well (feet) 13

Methods of Development

Pump

☐ Centrifugal

☐ Submersible

☐ Peristaltic

☐ Other

Bailer

☒ Bottom Valve

☐ Double Check Valve

☐ Stainless-steel Kemmerer

Diameter (Inches): Well 4 Gravel Pack

Item	Water Volume In Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		8.5	
Gravel Pack			
Drilling Fluids			
Total			42.5

Water Removal Data

[illegible]

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

First 2-3 bales clear, rest were muddy, removed alot of dirt, almost baled well dry.

Developer's Signature(s)

Date 17/2/47

Reviewer

Date _____

Water Sampling Data

Location No. MW-1

Group List Number _____

Sample Type: ☒ Groundwater ☐ Surface Water ☐ Other _____ Date 4/2/97

Project Name EPFS GW DITS Project No. 17520

Project Manager C CHANCE Phase/Task No. 6003.77

Site Name MILES FEDERAL #1 E - 94495

Sampling Specifications

Requested Sampling

Depth Interval (feet) _____

Requested Wait Following

Development/Purging (hours) _____

Initial Measurements

Time Elapsed From Final Development/Purging (hours) _____

Initial Water Depth (feet) _____

Nonaqueous Liquids Present (Describe) _____

Water Quality/Water Collection

DO = Dissolved Oxygen; Cond. = Conductivity

[illegible]

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

Preservatives: H = HCl; N = HNO₃; S = H₂SO₄; A = NaOH; O = Other (Specify); - = None

Sample Containers

[illegible]

Case Type _____ Chain-of-Custody Form Number _____

nts ~~X~~ PLEASE REFER TO WELL DEVELOPMENT + PURGING DATA FORM

Signature Date 4/2/97 Reviewer _____ Date _____



EL PASO FIELD SERVICES



5-22-97

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	DRC26	970242
MTR CODE SITE NAME:	94495	Miles Fed #1E
SAMPLE DATE TIME (Hrs):	4/2/97	1405
PROJECT:	Phase II Drilling - Initial	
DATE OF BTEX EXT. ANAL.:	4/4/97	4/4/97
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 105 for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John L. Ladd

Date:

4/8/97

970242, 4/8/97

Page 1 of 1[illegible]

or

Sample #	Meter/ Line #	Site Name	Sample Date	Project	S1	Benzene (PPB)	S2	Toluene (PPB)	S3	Ethyl Benzene (PPB)	S4	Total Nylenes (PPB)	S7	Total BTEX PPB
970242 *	94495	Miles Fed #1E	4/2/97	Phase II Drilling - Initial	✓	1	✓	1	✓	1	✓	3	<	6
970530 *	94495	Miles Fed #1E	6/5/97	Sample 4 - 1st Qtr	✓	5.29	✓	1	✓	10.7	✓	3	✓	16
970972 *	94495	Miles Fed #1E	9/11/97	Sample 4 - 2nd Qtr	✓	1.19	✓	1	✓	2.51	✓	3	✓	4
971263 *	94495	Miles Fed #1E	12/2/97	Sample 4 - 3rd Qtr	✓	1	✓	1	✓	2.97	✓	3	✓	3
980242	94495	Miles Fed #1E	3/19/98	Sample 4 - 4th Qtr	✓	1	✓	1	✓	2.53	✓	3	✓	3

* Analytical reports provided to NMOCD in prior annual report.



MCLE 4 4THQTR

6/20/98
CPU 4-2-98 Pdo
CPU 4-3-98 OMA 2623

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Requested Analysis		Type and No. of Sample Containers	Preservation Technique	Remarks
MC # 744495		Date: 3-17-98				
Samplers: (Signature) <i>Donnie Bied</i>		Date	Time	Comp.	GRAB	Sample Number
		3/17/98	1578		X	980242 ✓
Relinquished by: (Signature) <i>Donnie Bied</i>		Date/Time		Received by: (Signature)		Date/Time
		3/17/98 1217				
Relinquished by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time
				<i>Marlon Hopper</i>		3/20/98 1030
Carrier Co:		Carrier Phone No.		Remarks:		
				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	980242
MTR CODE SITE NAME:	94495	Miles Federal #1E
SAMPLE DATE TIME (Hrs):	3/19/98	1518
PROJECT:	Sample 4 4th Quarter	
DATE OF BTEX EXT. ANAL:	3/23/98	3/23/98
TYPE DESCRIPTION:	MW-1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	< 1	PPB				
TOLUENE	< 1	PPB				
ETHYL BENZENE	2.53	PPB				
TOTAL XYLENES	< 3	PPB				
TOTAL BTEX	3	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 106.6 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

980242BTEXMW, 3/25/98

Date: _____

3/27/98

