BTEX
TPH

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

Valencia Canyon Unit No. 3
Meter/Line ID – 89727

SITE DETAILS

Legals - Twn: 28N	**Rng: 4W**	**Sec: 22**	**Unit: H**
NMOCD Hazard Ranking: 20		**Land Type: BLM**	
Operator: Amoco		**Pit Closure Date: 07/08/94**	

RATIONALE FOR RISK-BASED CLOSURE

The pit noted above was assessed and ranked according to the criteria in the New Mexico Oil Conservation Division's (NMOCD) Unlined Surface Impoundment Closure Guidelines.

A test pit was excavated on July 8, 1994, to nine feet below ground surface and a soil sample was collected for field headspace analysis and laboratory analysis for TPH. Groundwater was not encountered in the test pit. The pit was backfilled and graded in a manner to direct surface runoff away from the pit area. Headspace analysis indicated an organic vapor content of 459 ppm; laboratory analysis indicated a TPH concentration of 61.3 mg/kg. This site was reassessed on April 1, 1998, because the initial assessment incorrectly included washes as a surface water body.

On May 6, 1998, a Phase II drill borehole was conducted to a depth of 19 feet where auger refusal was encountered. A soil sample was collected for field headspace analysis and laboratory analysis for benzene, total BTEX, and TPH. Groundwater was not encountered in the test boring. The boring was backfilled with cement and bentonite grout. Headspace analysis indicated an organic vapor content of 2 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of <3 mg/kg, and a TPH concentration of <20 mg/kg.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- The primary source, discharge to the pit, has been removed for almost six years.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- Groundwater was not encountered in the excavations. In addition, the estimated depth to groundwater is greater than 100 feet.
- Residual hydrocarbons in the soil will degrade naturally, with minimal risk to the environment.
- Based on the Hazard Ranking Score, benzene, total BTEX, and TPH were below required remediation levels for the Hazard Ranking Score.
- Bedrock was encountered at nine feet below the ground surface; therefore, impact to groundwater is unlikely.

REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 89727 Location: Valencia Canyon Unit #3
Operator #: _____ Operator Name: _____ P/L District: _____
Coordinates: Letter: H Section 22 Township: 28 Range: 4
Or Latitude _____ Longitude _____
Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: _____ Other: _____
Site Assessment Date: 4/1/98 Area: _____ Run: _____

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?
Horse Spring ☒ (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 _____
(Surface Water Body: Perennial Rivers, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 20 POINTS

REMARKS

Remarks : Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. Site is ~500' From Horse Spring

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 89727 Location: VALENCIA CANYON UNIT #3
Operator #: 0203 Operator Name: AMOCO P/L District: BLOOMFIELD
Coordinates: Letter: H Section 22 Township: 28 Range: 4
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 5-15-94 Area: 10 Run: 62

SITE ASSESSMENT

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

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

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 : HORSE SPRING
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 _____
(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: 20 **POINTS**

REMARKS

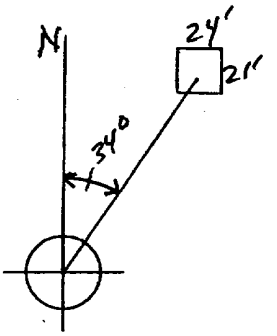
Remarks : 3 PITS ON LOCATION, ONE IS TO BE CLOSED

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 34° Footage from Wellhead 114'

b) Length : 24' Width : 21' Depth : 4'



REMARKS

Remarks :

LIQUID IN PITS

PHOTOGRAPHS AH-6(5-9)

Completed By:

Signature

5-15-94

Date

FIE. PIT REMEDIATION/CLOSU. . FORM

GENERAL

Meter: 89727 Location: VALENCIA CANYON UNIT #3

Coordinates: Letter: H Section 22 Township: 28 Range: 4

Or Latitude _____ Longitude _____

Date Started : 7-8-94 Area: 10 Run: 62

FIELD OBSERVATIONS

Sample Number(s): MK104 _____ _____ _____

Sample Depth: 9' Feet

Final PID Reading 459 PID Reading Depth 9' Feet

	Yes	No	
Groundwater Encountered	☐ (1)	☒ (2)	Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☐ (1)	Approx. Cubic Yards _____
Onsite Bioremediation	☐ (2)	
Backfill Pit Without Excavation	☒ (3)	

Soil Disposition:

Envirotech	☐ (1)	☐ (3)	Tierra
Other Facility	☐ (2)	Name: _____	

Pit Closure Date: 7-8-94 Pit Closed By: BEI

REMARKS

Remarks : EPNG lines marked Brownish Gray strong Hydrocarbon Odor Hit Sandstone 9' MK 7-8-94

Signature of Specialist: Morgan Killion

(SP3191) 04/07/94

20

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 104	945620
MTR CODE | SITE NAME:	89727	N/A
SAMPLE DATE | TIME (Hrs):	7-8-94	1009
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	7-12-94	7/12/94
DATE OF BTEX EXT. | ANAL.:	N/A	N/A
TYPE | DESCRIPTION:	VG	Brown Sand & Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
TPH (418.1)	61.3	MG/KG			2.04	28
HEADSPACE PID	459	PPM				
PERCENT SOLIDS	87.9	%				

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

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

Narrative:

DF = Dilution Factor Used

1

7/13/94

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME												CONTRACT LABORATORY P. O. NUMBER
	Pit Closure Project # 24324												
SAMPLERS: (Signature) Morgan Killion				DATE: 7-8-94									
	LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020				REMARKS
94	5619	7-8-94	07:14	Soil	MK 103	1	VG	X				92	Soil Brown No Hydrocarbon odor
94	5620	7-8-94	10:09	Soil	MK 104	1	VG	X				93	Brown Gray Soil No Hydrocarbon odor
94	5621	7-8-94	11:21	Soil	MK 105	1	VG	X				94	Brown Gray Strong Hydrocarbon odor
94	5622	7-8-94	12:28	Soil	MK 106	1	VG	X				95	Gray Brown Slight Hydrocarbon odor
94	5623	7-8-94	13:27	Soil	MK 107	1	VG	X				96	Brown Soil No Hydrocarbon odor

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Morgan Killion	7-8-94 16:09	Brenda Kiess	Brenda Kiess	7/11/94 0940	
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-08-0565A (Rev 03-94)

RECORD OF SUBSURFACE EXPLORATION

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

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

Project Number 19007 Phase 1001.77
Project Name EPFS WELLHEAD PITS
Project Location Valencia Canyon Unit # 3
89727

Elevation
Borehole Location LTR: H S: 22 T: 28 R: 4
GWL Depth NA
Drilled By K. PADILLA
Well Logged By C. CHANCE
Date Started 5/6/98
Date Completed 5/6/98

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/HS	Drilling Conditions & Blow Counts
0										
5	1	5-7	12	Br CLAY, v. stiff, high plastic, dry			0	0	0/0	-1306 h
10	2	10-12	4	Reddish br silty CLAY, hard, nonplastic, dry			0	0	0/4	-1312 h Hard drlng
15	3	15-15.5	3	Br SANDSTONE, vF sand - Xtln, mod - well cemented, dry hard			0	120	3/4	vhard ~14' -1330 50BC/4"
	4	18.5-19	2	AA			0	10	0/2	-1347 h -Refusal 18.5'
20				TOB 19'						Refusal in v hard well cemented (Xtln) sandstone
25										
30										
35										
40										

Comments: Site is <1000' from Horse Spring. Tank is on former pit. Will drill downgradient of pit. Based on pit dimensions boring is on edge of pit. Pit was backfilled w/o excavation. CMC 385 (18.5-19') sent to lab (BTEX, TPH) No GW encountered. BH grouted to surface

Geologist Signature

4/23/98\Drillog

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC385	980353
MTR CODE | SITE NAME:	89727	Valencia Canyon Unit #3
SAMPLE DATE | TIME (Hrs):	5/6/98	1437
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:		
DATE OF BTEX EXT. | ANAL.:	5/7/98	5/7/98
TYPE | DESCRIPTION:	VG	SOIL

Field Remarks: 18.5-19'

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 (MOD.8015)	<20	MG/KG				
HEADSPACE PID	2	PPM				
PERCENT SOLIDS	94.5	%				

-- TPH is by EPA Method 418.1 and 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: [signature] Date: 6/2/98

El Paso Natural Gas Company

Phase II Drilling

CHAIN OF CUSTODY RECORD

6-5-98 Chlor.
6-4-98 Anal.

Page _____ of _____

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (Signature) Cory Chavez DATE: 5/6/98

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020	LAB PID	TPH 8015	Field PID	SEQUENCE #
980353	5/6/98	1437	SOIL	CMC 385		6		✓		✓	2	

CONTRACT LABORATORY P. O. NUMBER

REMARKS

18.7-19' 20' Mc#
Valencia Canyon Unit #3 89727

Cmc 5/6/98

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Cory Chavez	5/6/98 1700	Cory Chavez	Cory Chavez	5/7/98 0910	
				5/7/98 0925	John Saldana

REQUESTED TURNAROUND TIME:
☐ ROUTINE ☐ RUSH

CARRIER CO.

BILL NO.:

SAMPLE RECEIPT REMARKS: Cool an INTACT

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)

BTEX SOIL SAMPLE WORKSHEET

File	980353	**Date Printed**	5/8/98		
Soil Mass (g)	5.07	**Multiplier (L/g)**	0.00099		
Extraction vol. (mL)	10	**CAL FACTOR (Analytical):**	200		
Shot Volume (uL)	50	**CAL FACTOR (Report):**	0.19724		
		DILUTION FACTOR:	**1**	**Det. Limit**	
Benzene (ug/L)	<0.5	**Benzene (mg/Kg):**	**#VALUE!**	0.493	
Toluene (ug/L)	<0.5	**Toluene (mg/Kg):**	**#VALUE!**	0.493	
Ethylbenzene (ug/L)	<0.5	**Ethylbenzene (mg/Kg):**	**#VALUE!**	0.493	
p & m-xylene (ug/L)	<1.0	p & m-xylene (mg/Kg):	#VALUE!	0.986	
o-xylene (ug/L)	<0.5	o-xylene (mg/Kg):	#VALUE!	0.493	
		Total xylenes (mg/Kg):	**#VALUE!**	1.479	
		Total BTEX (mg/Kg):	**#VALUE!**		

Sample	Pan wt - Smpl wt	Pan+Dry	Dry wt	% Solids
3/26/98				
980253	2.61 - 11.97 = 9.36	11.05	8.44	90.2 %
980253 dup	2.65 - 11.94 = 9.29	10.99	8.34	89.8
980254	2.64 - 12.33 = 9.69	~~9.69~~ 11.36	8.72	90.0
4/28/98				
980324	2.63 - 10.92 = 8.29	10.50	7.87	94.9%
980324 dup	2.61 - 9.38 = 6.77	9.06	6.45	95.3%
980325	2.64 - 11.04 = 8.40	10.51	7.87	93.7
5/7/98				
980330	2.65 - 11.00 = 8.35	10.68	7.43	89.0 %
980331	2.65 - 11.50 = 8.85	10.65	8	90.4
30333	2.63 - 11.88 = 9.25	11.08	8.45	91.4
980334	2.62 - 11.20 = 8.58	10.39	7.77	90.6
980335	2.64 - 11.76 = 9.12	10.65	8.01	87.8
980336	2.63 - 11.46 = 8.83	11.02	8.39	95.0%
980337	2.63 - 11.09 = 8.46	10.57	7.94	93.9
980353	2.64 - 10.51 = 7.87	10.08	7.44	94.5
980353 dup	2.63 - 10.00 = 7.37	9.61	6.98	94.7
980354	2.63 - 11.14 = 8.51	10.36	7.73	90.8

Continued on Page

Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

American Environmental Network, Inc.

AEN I.D. 805329

May 21, 1998

EL PASO FIELD SERVICES
770 WEST NAVAJO
FARMINGTON, NM 87401

Project Name PHASE II DRILLING
Project Number (none)

Attention: JOHN LAMBDIN

On 5/8/98 American Environmental Network (NM), Inc. (ADHS License No. AZ0015), received a request to analyze **non-aq** 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.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: mt

Enclosure

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

American Environmental Network, Inc.

CLIENT	: EL PASO FIELD SERVICES	AEN I.D.	: 805329
PROJECT #	: (none)	DATE RECEIVED	: 5/8/98
PROJECT NAME	: PHASE II DRILLING	REPORT DATE	: 5/21/98

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	980330	NON-AQ	4/29/98
02	980331	NON-AQ	4/29/98
03	980333	NON-AQ	4/30/98
04	980334	NON-AQ	4/30/98
05	980335	NON-AQ	5/1/98
06	980336	NON-AQ	5/4/98
07	980337	NON-AQ	5/4/98
08	980353	NON-AQ	5/6/98
09	980354	NON-AQ	5/5/98

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : PHASE II DRILLING

AEN I.D.: 805329

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	980337	NON-AQ	5/4/98	5/12/98	5/14/98	1
08	980353	NON-AQ	5/6/98	5/12/98	5/14/98	1
09	980354	NON-AQ	5/5/98	5/12/98	5/19/98	20

PARAMETER	DET. LIMIT	UNITS	07	08	09
FUEL HYDROCARBONS, C6-C10	10	**MG/KG**	**< 10**	**< 10**	**13000**
FUEL HYDROCARBONS, C10-C22	5.0	**MG/KG**	**17**	**< 5.0**	**600**
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0	< 5.0	< 100
CALCULATED SUM:			**17.0**		**13600**
SURROGATE: O-TERPHENYL (%)			142	130	N/A *
SURROGATE LIMITS	(66 - 151)				

CHEMIST NOTES:
* - DUE TO NECESSARY SAMPLE DILUTION, SURROGATE RECOVERY NOT OBTAINABLE

American Environmental Network (NM), Inc.
Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 5/7/98 PAGE: 1 OF 1

PROJECT MANAGER: John Lambdin
COMPANY: El Paso Field Services
ADDRESS: 770 W. Navajo
Farmington, NM 87401
PHONE: (505) 599-2144
FAX: (505) 599-2261
BILL TO: Above
COMPANY:
ADDRESS:

				Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject		(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)		504 EDB☐ / DBCP☐	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS		Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)		General Chemistry:			Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:	
980330	4/29/98	1050	Soil		X																									
980331	4/29/98	1540			X																									
980333	4/30/98	1320			X																									
980334	4/30/98	1602			X																									
980335	5/1/98	1337			X																									
980336	5/4/98	1203			X																									
980337	5/4/98	1453			X																									
980353	5/6/98	1437			X																									
980354	5/5/98	1540	↓		X																									

PLEASE FILL THIS FORM IN COMPLETELY.

PROJ. NO.:
PROJ. NAME: Phase II Drilling
P.O. NO.:
SHIPPED VIA: Fed-X

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒
CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER
METHANOL PRESERVATION ☐
COMMENTS: FIXED FEE ☐

Signature:	Time:	Signature:	Time:
Mark Hopper	1240		
Printed Name:	Date:	Printed Name:	Date:
Marlon Hopper	5/7/98		
Company: EPFS		Company:	

Signature: Time:
Printed Name: Date:
Company: