

EL PASO FIELD SERVICES PRODUCTION PIT CLOSURE

RISK
BTEX
TPH

Florance No. E1 (Pit 2)
Meter/Line ID – 70616

SITE DETAILS

Legals - Twn: 29N	Rng: 10W	Sec: 1	Unit: L
NMOCD Hazard Ranking: 20		Land Type: BLM	
Operator: Amoco		Pit Closure Date: 06/09/94	

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 June 9, 1994, to four 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 164 ppm; laboratory analysis indicated a TPH concentration of 9630 mg/kg. TPH was above required remediation levels for the Hazard Ranking Score. This site was re-assessed on April 13, 1998, because the initial assessment incorrectly included washes as a surface water body.

On November 15, 1995, a Phase II drill borehole was conducted to a depth of 10.5 feet below ground surface, and a soil sample was collected for field headspace analysis and laboratory analysis for benzene, total BTEX, and TPH. Groundwater was not encountered in the borehole. Headspace analysis indicated an organic vapor content of 0 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.
- 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.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.

ATTACHMENT

Field Pit Assessment Form
Field Pit Remediation/Closure Form
Phase II Geologic Log

Revised Field Pit Assessment Form
Laboratory Analytical Results

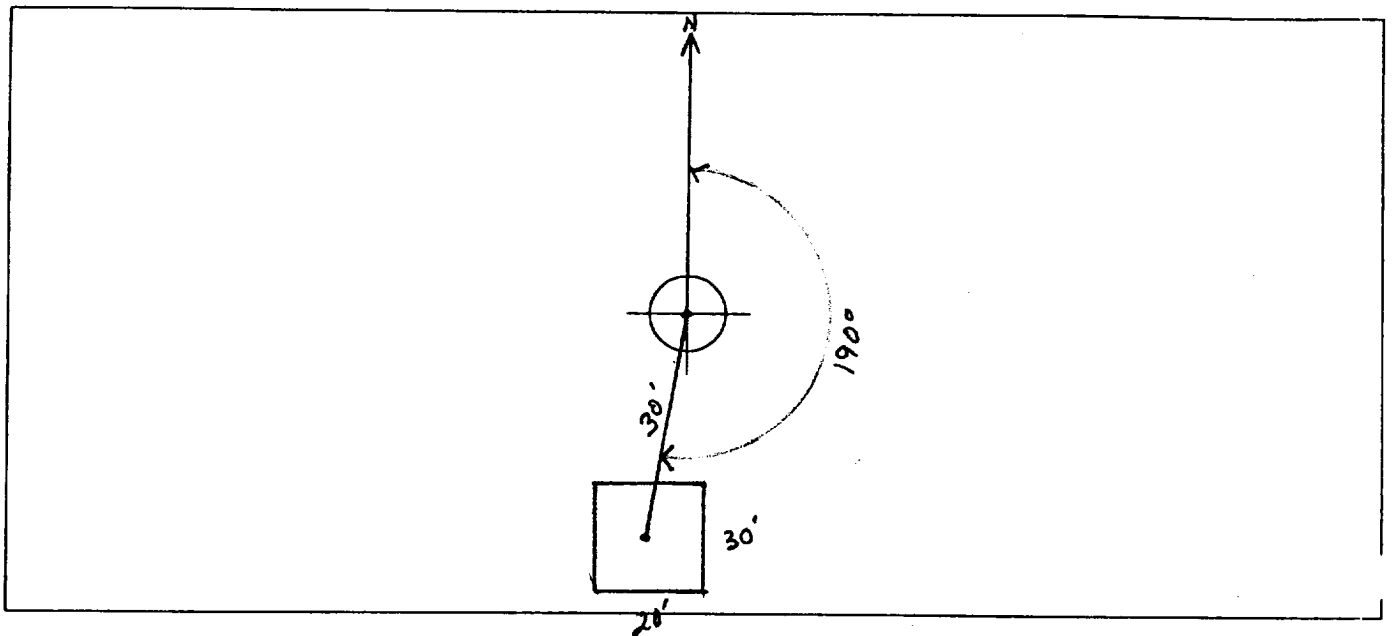
REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>70616</u> Location: <u>Florance #E1 (PIT#2)</u></p> <p>Operator #: _____ Operator Name: _____ P/L District: _____</p> <p>Coordinates: Letter: <u>L</u> Section <u>1</u> Township: <u>29</u> Range: <u>10</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>4/13/98</u> Area: _____ Run: _____</p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <p style="margin-left: 150px;">Inside <input type="checkbox"/> (1)</p> <p style="margin-left: 150px;">Outside <input checked="" type="checkbox"/> (2)</p> <p>Land Type:</p> <p style="margin-left: 150px;">BLM <input checked="" type="checkbox"/> (1)</p> <p style="margin-left: 150px;">State <input type="checkbox"/> (2)</p> <p style="margin-left: 150px;">Fee <input type="checkbox"/> (3)</p> <p style="margin-left: 150px;">Indian _____</p> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Wellhead Protection Area</p> <p>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?</p> <p style="text-align: center;"><input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p>Horizontal Distance to Surface Water Body</p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> (1)</p> <p>200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p>Name of Surface Water Body _____</p> <p>(Surface Water Body: Perennial Rivers, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only)</p> <p style="margin-left: 350px;"><input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>20</u> POINTS</p>
REMARKS	<p>Remarks : <u>Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. Site is at same elevation as the center of Wright Canyon. X_{cmr}</u></p>

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ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 190° Footage from Wellhead 30'
 b) Length : 30' Width : 20' Depth : 4'



Remarks :

TOOK PICTURES AT 11:58 A.M.

END PUMP

Completed By:

Robert Thompson
 Signature

5.4.94
 Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>70616</u> Location: <u>Florence #E1 (Pit #2)</u></p> <p>Coordinates: Letter: <u>L</u> Section <u>L</u> Township: <u>29</u> Range: <u>10</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>6-9-94</u> Area: <u>10</u> Run: <u>73</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>VW181</u> <u>VW182</u> <u>VW183</u></p> <p>Sample Depth: <u>4</u> Feet</p> <p>Final PID Reading <u>164</u> PID Reading Depth <u>4</u> Feet</p> <p style="text-align: center;">Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input type="checkbox"/> (1) Approx. Cubic Yards _____</p> <p>Onsite Bioremediation <input type="checkbox"/> (2)</p> <p>Backfill Pit Without Excavation <input checked="" type="checkbox"/> (3)</p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> (1) <input type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>6-9-94</u> Pit Closed By: <u>B.E.I</u></p>
REMARKS	<p>Remarks : <u>line markers, 8" standing water in pit, Black soil 0"-4'</u></p> <p>_____</p> <p>_____</p>
	<p>Signature of Specialist: <u>Lab Wilson</u></p>



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FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW181 -	945413
MTR CODE SITE NAME:	701616 (Pit #2)	N/A
SAMPLE DATE TIME (Hrs):	6-9-94	1040
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	6/16/94	6/16/94
DATE OF BTEX EXT. ANAL.:	N/A	N/A
TYPE DESCRIPTION:	VG	Black Sand/Clay - mixed

REMARKS: Beron TPH

* Re Run TPH on 6/27 = 6530
1.95g/28ml

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)	✓ 9630 *	MG/KG			1.02	28
HEADSPACE PID	164	PPM				
PERCENT SOLIDS	80.8	%				

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

TI surrogate Recovery was at N/A % for this sample All QA/QC was acceptable.

Narrative:

* TPA Summary - 6/10 = 3200, 6/16 = 9630, 6/27 = 6530
(unmixed) (mixed) (mixed)

DF = Dilution Factor Used

Approved By: Joe FentleyDate: 7/17/94



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

VW 181

Lab ID

945413

MTR CODE | SITE NAME:

70616 (Pit #2)

N/A

SAMPLE DATE | TIME (Hrs):

6-9-94

1040

SAMPLED BY:

N/A

DATE OF TPH EXT. | ANAL.:

6/10/94

6/10/94

DATE OF BTEX EXT. | ANAL.:

N/A

N/A

TYPE | DESCRIPTION:

VG

Black Sand/Clay
black patches in sample

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)	3200	MG/KG			0.98	28
HEADSPACE PID	164	PPM				
PERCENT SOLIDS	80.8	%				

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

The surrogate Recovery was at
Narrative:

N/A

% for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Approved By:

Date:

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER		PROJECT NAME		Pit Closure Project # 24324		CONTRACT LABORATORY P. O. NUMBER	
SAMPLERS: (Signature)		DATE		DATE			
Val. Wilson		6-9-94		6-9-94			
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	REMARKS		
94 5410	6-9-94	8:45	SO:1	VW178	1	TPH EPA 418.1	158
94 5411	6-9-94	9:30	SO:1	VW179	1	TPH EPA 418.1	159
94 5412	6-9-94	10:10	SO:1	VW180	1	TPH EPA 418.1	160
94 5413	6-9-94	10:40	SO:1	VW181	1	TPH EPA 418.1	161
94 5414	6-9-94	10:40	SO:1	VW182	1	TPH EPA 418.1	
94 5415	6-9-94	10:45	SO:1	VW183	1	TPH EPA 418.1	
94 5416	6-9-94	11:45	SO:1	VW184	1	TPH EPA 418.1	162
94 5417	6-9-94	12:25	SO:1	VW185	1	TPH EPA 418.1	163
94 5418	6-9-94	13:10	SO:1	VW186	1	TPH EPA 418.1	164
94 5419	6-9-94	14:00	SO:1	VW187	1	TPH EPA 418.1	165
94 5420	6-9-94	14:55	SO:1	VW188	1	TPH EPA 418.1	166
94 5421	6-9-94	15:30	SO:1	VW189	1	TPH EPA 418.1	167
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME	
Val. Wilson		6-9-94 17:40		Penda Lices		6/9/94 18:10	
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME	
						Pink	
REQUESTED TURNAROUND TIME: <input type="checkbox"/> ROUTINE <input type="checkbox"/> RUSH				SAMPLE RECEIPT REMARKS			
CARRIER CO.				RESULTS & INVOICES TO:			
BILL NO.:				FIELD SERVICES LABORATORY EL PASO NATURAL GAS COMPANY P.O. BOX 4990 FARMINGTON, NEW MEXICO 87499			
				505-599-2144			
				FAX: 505-599-2261			

RECORD OF SUBSURFACE EXPLORATION

PHILIP SERVICES CORP.

4000 Monroe Road

Farmington, New Mexico 87401

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

Borehole # BH- 1

Well # NA

Page 1 of 1

Project Number 19643 Phase 1001.77

Project Name EPFS PITS >10

Project Location Florence #E1 (PIT #2) 70616

Elevation

Borehole Location LTR: L S: I T: 29 R: 10

GWL Depth NA

Drilled By K. PADILLA

Well Logged By C. CHANCE

Date Started 6/4/98

Date Completed 6/4/98

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			Drilling Conditions & Blow Counts
							BZ	BH	S/HS	
0				Excavation Sample Collected @ 4'						BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
5	1	5.5 5-7	6	Lt gry silty SAND, vf-F sand, vdense, dry			0	1	0/0	1250hr
10	2	10-10.5	4	Lt gry weathered SANDSTONE vf-F sand, hard, dry, mod cemented			0	0	0/0	1305hr
				TDB 10.5'						
15										
20										
25										
30										
35										
40										

Comments:

Pit was backfilled w/o excavation. CMC 392 (10-10.5') sent to lab (BTEX, TPH). No GW was encountered. BH grouted to surface.

Geologist Signature

Cory Chance

[illegible]



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC392	980459
MTR CODE SITE NAME:	70616	Florance E #1
SAMPLE DATE TIME (Hrs):	6/4/98	1305
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	6/15/98	6/18/98
DATE OF BTEX EXT. ANAL.:	6/8/98	6/8/98
TYPE DESCRIPTION:	Pit #2	SOIL

Field Remarks: 10-10.5'

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	0	PPM				
PERCENT SOLIDS	92.0	%				

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

The Surrogate Recovery was at 83.7 % for this sample All QA/QC was acceptable.
ative:

DF = Dilution Factor Used

Approved By: John L. Linder

Date: 6/23/98

American Environmental Network, Inc.

AEN I.D.

806328

June 19, 1998

EL PASO FIELD SERVICES
770 WEST NAVAJO
FARMINGTON, NM 87401



Project Name PHASE II DRILLING
Project Number (none)

Attention: JOHN LAMBDIN

On 6/9/98 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

American Environmental Network, Inc.

CLIENT	: EL PASO FIELD SERVICES	AEN I.D.	: 806328
PROJECT #	: (none)	DATE RECEIVED	: 6/9/98
PROJECT NAME	: PHASE II DRILLING	REPORT DATE	: 6/19/98
AEN			
ID. #	CLIENT DESCRIPTION	MATRIX	DATE
01	980427		COLLECTED
02	980428	NON-AQ	
03	980457	NON-AQ	6/1/98
04	980458	NON-AQ	6/2/98
05	980459	NON-AQ	6/4/98
		NON-AQ	6/4/98
		NON-AQ	6/4/98

GAS CHROMATOGRAPHY RESULTS

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

AEN I.D.: 806328

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	980427	NON-AQ	6/1/98	6/15/98	6/17/98	1
02	980428	NON-AQ	6/2/98	6/15/98	6/18/98	1
03	980457	NON-AQ	6/4/98	6/15/98	6/18/98	1

PARAMETER	DET. LIMIT	UNITS	01	02	03
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	< 5.0	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0	< 5.0	< 5.0

CULATED SUM:

SURROGATE:
O-TERPHENYL (%) 108 105 96
SURROGATE LIMITS (66 - 151)

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : PHASE II DRILLING
AEN I.D.: 806328

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
04	980458	NON-AQ	6/4/98	6/15/98	6/18/98	1
05	980459	NON-AQ	6/4/98	6/15/98	6/18/98	1

PARAMETER	DET. LIMIT	UNITS	04	05
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0	< 5.0
CALCULATED SUM:				

SURROGATE:
O-TERPHENYL (%) 104 101
SURROGATE LIMITS (66 - 151)

CHEMIST NOTES:
N/A

DISTRIBUTION: W. - AEN, Canary - Originator

BTEX SOIL SAMPLE WORKSHEET

File	:	980459	Date Printed	:	6/9/98
Soil Mass (g)	:	5.03	Multiplier (L/g)	:	0.00099
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):	:	200
Shot Volume (uL)	:	50	CAL FACTOR (Report):	:	0.19881

	DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L) : <0.5	Benzene (mg/Kg):	#VALUE!	0.497
Toluene (ug/L) : <0.5	Toluene (mg/Kg):	#VALUE!	0.497
Ethylbenzene (ug/L) : <0.5	Ethylbenzene (mg/Kg):	#VALUE!	0.497
p & m-xylene (ug/L) : <1.0	p & m-xylene (mg/Kg):	#VALUE!	0.994
o-xylene (ug/L) : <0.5	o-xylene (mg/Kg):	#VALUE!	0.497
	Total xylenes (mg/Kg):	#VALUE!	1.491
	Total BTEX (mg/Kg):	#VALUE!	

Sample Pan wt - Sample wt, Pan Dry, Pan wt, % Solids

6/8/98

980427	2.63 - 11.62 =	8.99	10.86	8.23	91.5%
980427	2.63 - 11.33 =	8.70	10.63	8.00	92.0
980428	2.64 - 10.93 =	8.29	10.45	7.81	94.2
980457	2.64 - 11.56 =	8.92	10.82	8.18	91.7 _{mh}
980458	2.65 - 11.16 =	8.51	10.68	8.043	94.5 94.3
980459	2.65 - 11.44 =	8.79	10.74	8.09	92.0

Continued on Page

Read and Understood By

Signed

Date

Signed

Date