

EL PASO FIELD SERVICES PRODUCTION PIT CLOSURE

RISK
TPH-BTEX

Houck No. 2
Meter/Line ID – 95258

SITE DETAILS

Legals - Twn: 29N	Rng: 10W	Sec: 11	Unit: A
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 twelve 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 685 ppm; laboratory analysis indicated a TPH concentration of 2880 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 included washes as a surface water body.

On June 4, 1998, a Phase II drill borehole was conducted to a depth of 25.5 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 excavation or borehole.
- 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 Drilling Geologic Log

Revised Field Pit Assessment Form
Laboratory Analytical Results

REVISED

FIELD PIT SITE ASSESSMENT FORM

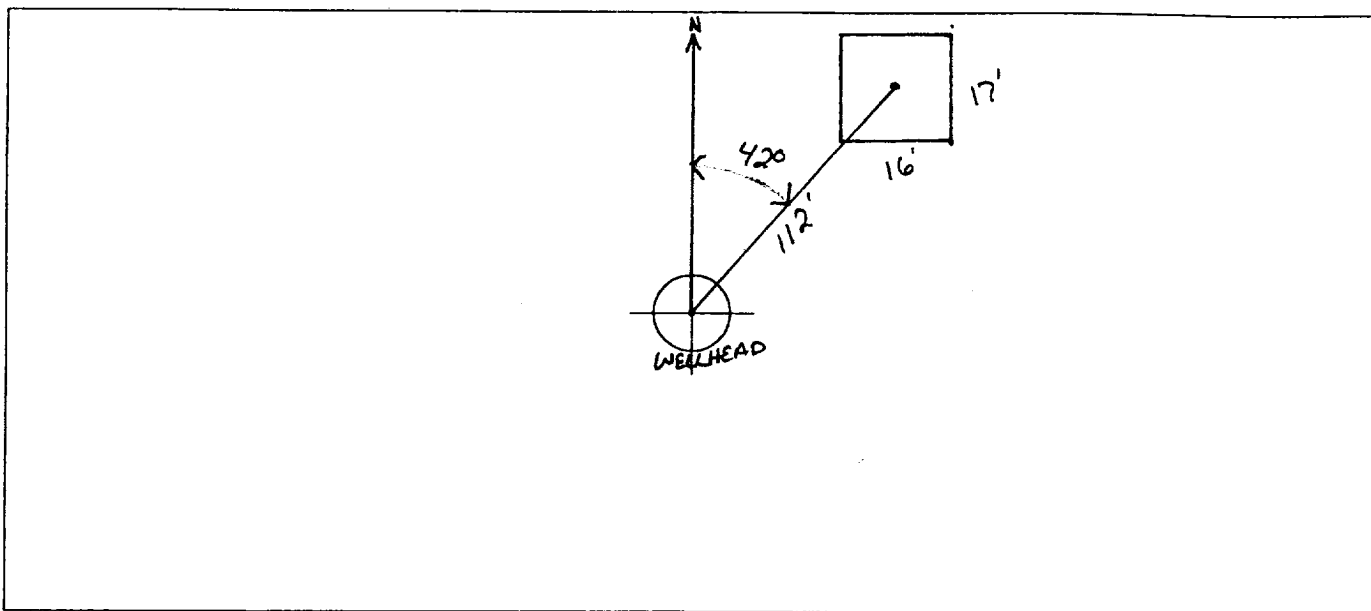
GENERAL	Meter: <u>95258</u> Location: <u>Hovck #2</u> Operator #: _____ Operator Name: _____ P/L District: _____ Coordinates: Letter: <u>A</u> Section <u>11</u> Township: <u>29</u> Range: <u>10</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: _____ Other: _____ Site Assessment Date: <u>4/13/98</u> Area: _____ Run: _____	
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps)	
	Land Type: Inside <input type="checkbox"/> (1) Outside <input checked="" type="checkbox"/> (2)	BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____
	Depth to Groundwater Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (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? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)	
	Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) <input type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)	
	Name of Surface Water Body _____ (Surface Water Body: Perennial Rivers, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'	
	TOTAL HAZARD RANKING SCORE: <u>20</u> POINTS	
REMARKS	Remarks : <u>Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. Site is < 50' vertical from center of Wright Canyon.</u>	

FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>95258 ^{5.4.94} Meter: 73930 ^{RT} Location: <u>Houck #2</u> Operator #: <u>0203</u> Operator Name: <u>Amoco</u> P/L District: <u>Bloomfield</u> Coordinates: Letter: <u>A</u> Section <u>11</u> Township: <u>29</u> Range: <u>10</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____ Site Assessment Date: <u>5.4.94</u> Area: <u>10</u> Run: <u>73</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <p>Inside <input type="checkbox"/> (1) Outside <input checked="" type="checkbox"/> (2)</p> <p>Land Type: BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____</p> <p>Depth to Groundwater Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p>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? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p>Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) <input type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p>Name of Surface Water Body _____ (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>20</u> POINTS</p>
REMARKS	<p>Remarks : <u>THREE PITS ON LOCATION, WILL CLOSE ONLY ONE, PIT IS DRY.</u> <u>REDLINE SHOWS LOCATION IS INSIDE THE V.Z. BUT TOPO SHOWS THAT IT IS</u> <u>OUTSIDE THE V.Z.</u></p> <p style="text-align: right;">PUSH IN</p>

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 42° Footage from Wellhead 112'b) Length : 17' Width : 16' Depth : 4'

REMARKS

Remarks :

TOOK PICTURES AT 12:54 P.M.

END DUMP

Completed By:

Robert Champion
Signature

5.4.94
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>95258</u> Location: <u>HOCK #2</u></p> <p>Coordinates: Letter: <u>A</u> Section <u>11</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>VW178</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>685</u> PID Reading Depth <u>12'</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>BEI</u></p>
REMARKS	<p>Remarks : <u>EPN by line markers</u></p> <p>_____</p> <p>_____</p> <p>_____</p>
	<p>Signature of Specialist: <u>Vale Wilson</u></p>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW 178	945410
MTR CODE SITE NAME:	45258	N/A
SAMPLE DATE TIME (Hrs):	6-9-94	0845
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	Brown/Black Coarse 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)	2880	MG/KG			2.10	28
HEADSPACE PID	685	PPM				
PERCENT SOLIDS	88.7	%				

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

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

DF = Dilution Factor Used

Approved By:

John Lusk

Date:

6/16/94



CHAIN OF CUSTODY RECORD

[illegible]

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 Haverk #2 95258

Elevation _____
Borehole Location LTR: A S:11 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										BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
5										
10				Excavation Sample collected @ 12'						
15	1	15-17	24	Lt gray silty CLAY, dense, dry nonplastic			3	64	$\frac{105}{39}$	1106 hr
20	2	20-22	18	Gray/Redish br silty CLAY, dense, nonplastic, dry			0	98	$\frac{3}{13}$	1116 hr
25	3	25-25.5	4	Br weathered SANDSTONE, hard, f sand, dry			0	57	$\frac{2}{0}$	1126 hr
30				TOB 25.5'						
35										
40										

Comments: Pit was backfilled w/o excavation (a sample was collected @ 12') Will begin sampling @ 15' BGS. CMC 391 (25-25.5) sent to lab (BTEX, TPH). BH grouted to surface. NO GW encountered.

Geologist Signature

Cory Chance



2000

[illegible]



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC391	980458
MTR CODE SITE NAME:	95258	Houck #2
SAMPLE DATE TIME (Hrs):	6/4/98	1126
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:	N/A	SOIL

Field Remarks: 25-25.5'

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	94.3	%				

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

The Surrogate Recovery was at 86.1 % for this sample All QA/QC was acceptable.
Active:

DF = Dilution Factor Used

Approved By:

John F. 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.

A handwritten signature in black ink, appearing to read "Kimberly D. McNeill".

Kimberly D. McNeill
Project Manager

A handwritten signature in black ink, appearing to read "H. Mitchell Rubenstein".

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 COLLECTED
01	980427	NON-AQ	6/1/98
02	980428	NON-AQ	6/2/98
03	980457	NON-AQ	6/4/98
04	980458	NON-AQ	6/4/98
05	980459	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		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		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		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		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

PROJECT MANAGER: John Lambdin

COMPANY: El Paso Field Services Co

ADDRESS: 770 W. Navajo

Farmington, NM 87401

PHONE: (505) 599-2144

FAX: (505) 599-2261

BILL TO: Above

COMPANY:

ADDRESS:

ANALYST DATE TIME MATRIX LAB ID

980427 6/1/98 1518 Soil

980428 6/2/98 0958 Soil

980457 6/4/98 1040 Soil

980458 6/4/98 1126 Soil

980459 6/4/98 1305 Soil

Petroleum Hydrocarbons (418.1) TRPH

(MOD.8015) Diesel/Direct Inject

(M8015) Gas/Purge & Trap

8021 (BTEX)/8015 (Gasoline)

8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE

8021 (TCL)

8021 (EDX)

8021 (HALO)

8021 (CUST)

504.1 EDB ☐ / DBCP ☐

8260 (TCL) Volatile Organics

8260 (Full) Volatile Organics

8260 (CUST) Volatile Organics

8260 (Landfill) Volatile Organics

Pesticides /PCB (608/8081)

Herbicides (615/8151)

Base/Neutral/Acid Compounds GC/MS (625/8270)

Polynuclear Aromatics (610/8310)

General Chemistry:

Priority Pollutant Metals (13)

Target Analyte List Metals (23)

RCRA Metals (8)

RCRA Metals by TCLP (Method 1311)

Metals:

PROJECT INFORMATION

PROJ. NO.:

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK(NORMAL) ☒

PROJ. NAME: Phase II Drilling

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

P.O. NO.:

METHANOL PRESERVATION ☐

SHIPPED VIA: Fed Ex

COMMENTS: FIXED FEE ☐

REINQUISHED BY:

Signature: Marken Hopper Time: 1000

Printed Name: Marken Hopper Date: 6/8/98

Company: EPFS

REINQUISHED BY:

Signature: Time:

Printed Name: Date:

Company:

PLEASE FILL THIS FORM IN COMPLETELY.

1/5/5

V Inc.: American Environmental Network (NM), Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Mexico 87107 • (505) 344-3777 • Fax (505) 344-4413

DISTRIBUTION: W. AEN, Canary - Original

BTEX SOIL SAMPLE WORKSHEET

File	:	980458	Date Printed	:	6/9/98
Soil Mass (g)	:	5.02	Multiplier (L/g)	:	0.00100
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):	:	200
Shot Volume (uL)	:	50	CAL FACTOR (Report):	:	0.19920

		DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L)	:	<0.5	Benzene (mg/Kg): #VALUE!	0.498
Toluene (ug/L)	:	<0.5	Toluene (mg/Kg): #VALUE!	0.498
Ethylbenzene (ug/L)	:	<0.5	Ethylbenzene (mg/Kg): #VALUE!	0.498
p & m-xylene (ug/L)	:	<1.0	p & m-xylene (mg/Kg): #VALUE!	0.996
o-xylene (ug/L)	:	<0.5	o-xylene (mg/Kg): #VALUE!	0.498
			Total xylenes (mg/Kg): #VALUE!	1.494
			Total BTEX (mg/Kg): #VALUE!	

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

4/6/98

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	8.04 ³	94.5 94.3
980459	2.65 - 11.44 =	8.79	10.74	8.09	92.0

Continued on Page

Read and Understood By