District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

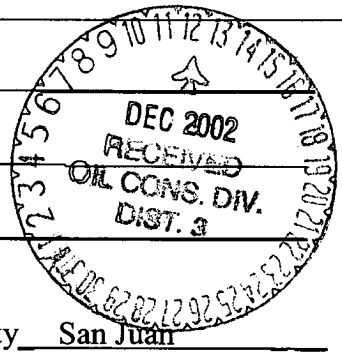
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Risk Extent of plume defined

Submit 1 copy to appropriate District Office and 1 copy to the Santa Fe Office

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT



Operator: Amoco Production Company Telephone

Address: 30-045-06857

Facility Or: Schwerdtfeger A#10, Meter 71863 (45)
Well Name

Location: Unit or Qtr/Qtr Sec M Sec 31 T 28 R 8 County San Juan

Pit Type: Separator _____ Dehydrator _____ Other Drip

Land Type: BLM X, State _____, Fee _____ Other _____

Pit Location: Pit dimensions: length 27', width 18', depth 3'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 92'

Direction from reference: 345 Degrees X East North _____ of _____ West South _____

Depth To Ground Water (Vertical distance from contaminants to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (0 points) 10
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) 0
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches.)	Less than 200 feet 200 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) (0 points) 0

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 08/08/94 Date completed: 08/08/94

Remediation Method: (Check all appropriate sections.)
Excavation _____ Approx. cubic yards _____
Landfarmed _____ Insitu Bioremediation _____
Other Backfill pit without excavation

Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)
Onsite N/A Offsite N/A

General Description of Remedial Action: EPNG lines marked. Gray sand, strong hydrocarbon odor.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location Four walls and center of pit composite

Sample depth 12'

Sample Date 08/08/94 Sample time 14:17

Sample Results

Benzene(ppm) Not reported

Total BTEX(ppm) Not reported

Field headspace(ppm) 1507

TPH 3330

Ground Water Sample: Yes _____ No X (If yes, attach sample results)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Date 1/8/03

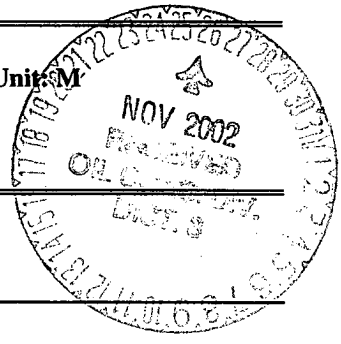
Signature Scott T. Pope

Printed Name and Title Scott T. Pope Senior ENV. Scientist

elpaso

PIT CLOSURE REQUEST

Schwerdtfeger A #10
Meter/Line ID 71863



SITE DETAILS

Legals - Twn: 28N **Rng: 8W** **Sec: 31** **Unit: M**
NMOCD Hazard Ranking: 10 **Land Type: BLM**
Operator: Amoco Production Company **Pit Closure Date: 8/8/94**

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 to 12 feet (ft) below ground surface (bgs) where a soil sample was collected for field headspace analysis and laboratory analysis for TPH. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 1,507 ppm; laboratory analysis indicated a TPH concentration 3,330 mg/kg. The headspace analysis and TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score of 10.

No soil was disposed of offsite. The pit was backfilled with site soil, topped with clean soil from the surrounding berms, and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed to 22 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 20-22 ft bgs. Headspace analysis indicated an organic vapor content of 27 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 293 mg/kg. The benzene, TPH and BTEX concentrations were below recommended remediation levels for the Hazard Ranking Score.

No Phase III activities were conducted.

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

- The primary source, discharge to the pit, has been removed for over eight years.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- The clean soil from the berms placed on top of the excavation would limit the potential for direct contact with hazardous constituents by livestock or the public; i.e., current direct contact exposure pathways are unlikely to be completed.
- Groundwater was not encountered in the soil boring at 22 ft bgs; local geologic features indicate the depth to groundwater is greater than 50 ft bgs.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- Benzene, TPH, and BTEX were below recommended remediation levels for the Hazard Ranking Score.

- TPH concentrations in the soil at 20 ft bgs were about 9% of the concentration at 12 ft bgs, and were below the recommended remediation levels for this site. This strong attenuation with depth indicates that residual hydrocarbons will degrade by natural attenuation with minimal risk to the environment.

ATTACHMENTS

Field Pit Assessment Form
Revised Field Pit Assessment Form
Field Pit Remediation/Closure Form
Phase II Soil Boring Log
Laboratory Analytical Results

REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 71863 Location: Schwerdtfeger A #10

Operator #: _____ Operator Name: _____ P/L District: _____

Coordinates: Letter: M Section 31 Township: 28 Range: 8

Or Latitude _____ Longitude _____

Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: _____ Other: _____

Site Assessment Date: 12/18/97 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?

☐ (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: 10 POINTS

REMARKS

Remarks : Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. Site is <1000' From center of Blanco Canyon Wash.

(assess) 12/16/97

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 71863 Location: Schwerdtfeger A-10
Operator #: 0203 Operator Name: Amoco P/L District: Blanco
Coordinates: Letter: M Section 31 Township: 28 Range: 8
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: ✓ Line Drip: ___ Other: _____
Site Assessment Date: 5/17/94 Area: 03 Run: 82

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 Blanco 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: 20 **POINTS**

REMARKS

Remarks : Redline - Inside, Vuln - Outside
2 pits. Will Push-in 1. Pit Dry

PUSH-IN

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 71863 Location: Schwerdtfeger A #10

Coordinates: Letter: M Section 31 Township: 28 Range: 8

Or Latitude _____ Longitude _____

Date Started : 8-8-94 Run: 03 82

FIELD OBSERVATIONS

Sample Number(s): MK 738 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 1507 PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☐ Approx. Cubic Yards _____

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☒

Soil Disposition:

Envirotech ☐ ☐ Tierra

Other Facility ☐ Name: _____

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

REMARKS

Remarks : EPNG pits mark Gray Sand Strong HYDrocarbon odor

Signature of Specialist: _____

(SP3191) 03/16/94

El Paso Natural Gas Company

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

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	mk 238	945871
MTR CODE | SITE NAME:	71863	N/A
SAMPLE DATE | TIME (Hrs):	8-8-94	1417
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	8-9-94	8-9-94
DATE OF BTEX EXT. | ANAL.:	N/A	N/A
TYPE | DESCRIPTION:	VG	Gray Sand & Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	3330	MG/KG			2.23	28
HEADSPACE PID	1507	PPM				
PERCENT SOLIDS	93.4	%				

-- TPH is by EPA Method 418.1 --

arrative:

F = Dilution Factor Used

d By: J.S. Date: 8/12/94

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page ______ of ______

PROJECT NUMBER:
PROJECT NAME: Pit Closure Project # 24324
SAMPLERS: (Signature) Morgan Killion
DATE: 8-8-94
CONTRACT LABORATORY P. O. NUMBER:

LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020					REMARKS
5867	8-8-94	11:04	Soil	MK 234	1	VG	X					210	Gray sand Strong Hydrocarbon odor
5868	8-8-94	11:45	Soil	MK 235	1	VG	X					211	Black sand very Strong Hydrocarbon odor
5869	8-8-94	13:20	Soil	MK 236	1	VG	X					212	Black sand ~~strong~~ Strong Hydrocarbon odor
5870	8-8-94	13:41	Soil	MK 237	1	VG	X					213	Black Sand Strong Hydrocarbon odor
5871	8-8-94	14:17	Soil	MK 238	1	VG	X					214	Grey sand Strong Hydrocarbon odor
5872	8-8-94	14:58	Soil	MK 239	1	VG	X					215	Brown sand Strong Hydrocarbon odor

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Morgan Killion	8-8-94 17:00 340	Brenda Riess	Brenda Riess	8/9/94 0850 260	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)
					Kim King

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

HILIP SERVICES CORP.
)00 Monroe Road
arm[redacted] New Mexico 87401
-05[redacted]52 FAX (505) 326-2388

Project Number 19643 Phase 1001.77
Project Name EPFS PITS >10
Project Location SCHWERDTFEGER A-10 71863

:levation
)orehole Location LTR: M S: 31 T: 28 R: 8
;WL Depth NA
)rilled By K. PADILLA
Vell Logged By H. BRADBURY
)ate Started 11/2/98
)ate Completed 11/2/98

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										BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
5										
10				EXCAVATION SAMPLE COLLECTED AT 12'						
15	1	15-17	24	LT BR silty SAND, FINE SAND loose, moist	SM		0	0	0 0	1031 hrs
20	2	20-22	24	LT BR silty SAND, FINE SAND loose, moist	SM		0	0	10 27	1036 hrs
25				TOB 22'						
30										
35										
40										

C[redacted]nts: HAB59 20-22' SENT TO lAb for TPH, BTEX, GW NOT ENCOUNTERED BH GROUTED TO SURFACE
LINE IN CENTER OF PIT drilled 3-5 FEET IN ASSUMED DOWNGRADIENT

Geologist Signature H. Bradbury

8/18/98\Drillog

El Paso Natural Gas Company

Phase II Drill

CHAIN OF CUSTODY RECORD

12-28-98 Anal.
12-28-98 Chen.
12-28-98 Appr.

PROJECT NUMBER: # 24324
PROJECT NAME: Pit Closure Project
SAMPLERS: (Signature) Holly Bradley
DATE: 11/2/98
CONTRACT LABORATORY P. O. NUMBER:

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 #	REMARKS
980771	11/2/98	1036	soil	HAB59	1	VG		✓		✓	27	59	Schwerdtfeger A-10 71863 20-22'

HAB 11/2/98

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Holly Bradley	11/2/98 1558	Holly Bradley	Holly Bradley	11/4/98 1059	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME 11/4/98 1059	RECEIVED OF LABORATORY BY: (Signature) Marlon E. Hopper

REQUESTED TURNAROUND TIME: ☐ ROUTINE ☐ RUSH

CARRIER CO.:

BILL NO.:

SAMPLE RECEIPT REMARKS: Cool & intact 32°F

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 FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	HAB59	980771
MTR CODE | SITE NAME:	71863	Schwerdtfeger A-10
SAMPLE DATE | TIME (Hrs):	11/2/98	1036
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	11/10/98	11/10/98
DATE OF BTEX EXT. | ANAL.:	11/9/98	11/9/98
TYPE | DESCRIPTION:	VG	SOIL

Field Remarks: 20-22'

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)	293	MG/KG				
HEADSPACE PID	27	PPM				
PERCENT SOLIDS	91.8	%				

-- TPH is by EPA Method 8015 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 100.5 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Stabler Date: 12/3/98

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMOTOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES PINNACLE I.D.: 811025
PROJECT # : (none)
PROJECT NAME : PHASE II DRILLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	980771	NON-AQ	11/2/98	11/10/98	11/10/98	1
02	980772	NON-AQ	11/2/98	11/10/98	11/12/98	20
03	980773	NON-AQ	11/2/98	11/10/98	11/10/98	1

PARAMETER	DET. LIMIT	UNITS	01	02	03
FUEL HYDROCARBONS, C6-C10	10	**MG/KG**	**13**	**8000**	< 10
FUEL HYDROCARBONS, C10-C22	5.0	**MG/KG**	**160**	**1300**	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	**MG/KG**	**120**	**320**	< 5.0
CALCULATED SUM:			**293**	**9620**	
SURROGATE:					
O-TERPHENYL (%)			89	97	99
SURROGATE LIMITS	(66 - 151)				

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMOTOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES PINNACLE I.D.: 811025
PROJECT # : (none)
PROJECT NAME : PHASE II DRILLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	980774	NON-AQ	11/5/98	11/10/98	11/10/98	1
05	980775	NON-AQ	11/5/98	11/10/98	11/10/98	1
06	980776	NON-AQ	11/5/98	11/10/98	11/10/98	1

PARAMETER	DET. LIMIT	UNITS	04	05	06
FUEL HYDROCARBONS, C6-C10	10	**MG/KG**	**76**	< 10	< 10
FUEL HYDROCARBONS, C10-C22	5.0	**MG/KG**	**96**	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	**MG/KG**	**33**	< 5.0	< 5.0
CULATED SUM:			**205**		
SURROGATE:					
O-TERPHENYL (%)			88	86	89
SURROGATE LIMITS	(66 - 151)				

CHEMIST NOTES:
N/A

BTEX SOIL SAMPLE WORKSHEET

File	980771	**Date Printed**	11/15/98
Soil Mass (g)	5.19	**Multiplier (L/g)**	0.00096
Extraction vol. (mL)	10	**CAL FACTOR (Analytical):**	200
Shot Volume (uL)	50	**CAL FACTOR (Report):**	0.19268

		DILUTION FACTOR:	**1**	**Det. Limit**
Benzene (ug/L)	<0.5	**Benzene (mg/Kg):**	**#VALUE!**	0.482
Toluene (ug/L)	<0.5	**Toluene (mg/Kg):**	**#VALUE!**	0.482
Ethylbenzene (ug/L)	<0.5	**Ethylbenzene (mg/Kg):**	**#VALUE!**	0.482
p & m-xylene (ug/L)	<1.0	p & m-xylene (mg/Kg):	#VALUE!	0.963
o-xylene (ug/L)	<0.5	o-xylene (mg/Kg):	#VALUE!	0.482
		Total xylenes (mg/Kg):	**#VALUE!**	1.445
		Total BTEX (mg/Kg):	**#VALUE!**	