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
Bedrock

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

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

30-045-23110

Operator: Amoco by EPFS Telephone

Address:

Facility Or Well Name: Hughes C#6A, Meter 90449

Location: Unit or Qtr/Qtr Sec F Sec 33 T 29 R 8 County San Juan

Pit Type: Separator ____ Dehydrator X Other

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

Pit Location: Pit dimensions: length 42', width 30', depth 5'
(Attach diagram)

Reference: wellhead X, other

Footage from reference: 35'

Direction from reference: 358 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	(20 points)
	50 feet to 99 feet	(10 points)
	Greater than 100 feet	(0 points) 0
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources.)	Yes	(20 points)
	No	(0 points) 0
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches.)	Less than 200 feet	(20 points)
	200 feet to 1000 feet	(10 points)
	Greater than 1000 feet	(0 points) 10

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 08/22/94 Date completed: 08/22/94

Remediation Method: (Check all appropriate sections.) Excavation X Approx. cubic yards 120

Landfarmed _____ Insitu Bioremediation _____

Other _____

Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility) Onsite _____ Offsite Envirotech

General Description of Remedial Action: Some line markers on location. Had to redo because too much oil in pit from push-in crew. At 7' hit sandstone, PID 035, closed pit.

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 7'

Sample Date 08/22/94 Sample time 12:23

Sample Results

Benzene(ppm) <0.25

Total BTEX(ppm) 8.1

Field headspace(ppm) 35

TPH 18100

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 Scott T. Pope and Title Senior Env. Scientist

elpaso

PIT CLOSURE REQUEST

Hughes C #6A
Meter/Line ID 90449

SITE DETAILS

Legals - Twn: 29N	**Rng: 8W**	**Sec: 33**	**Unit: F**
NMOCD Hazard Ranking: 10		**Land Type: BLM**	
Operator: Amoco Production Company		**Pit Closure Date: 8/22/94**	

RATIONALE FOR CLEAN 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 7 feet (ft) below ground surface (bgs) when sandstone was encountered and a soil sample was collected for field headspace and laboratory analysis for TPH and BTEX. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 35 ppm, laboratory analysis indicated a benzene concentration of <0.25 mg/kg, a total BTEX concentration of 8.1 mg/kg, and a TPH concentration of 18,100 mg/kg. The TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score of 10.

Approximately 120 cubic yards of soil were excavated and hauled to Envirotech, a commercial landfarm, for treatment and disposal. The pit was backfilled with clean soil and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed with refusal at 7 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 7-8 ft bgs. 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 <25 mg/kg. The benzene, total BTEX, and TPH concentrations are below recommended remediation levels for the Hazard Ranking Score.

No Phase III activities were conducted.

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

- The primary source, discharge to the pit, has been removed for over eight years.
- The impacted soils were excavated to the practical extent of the equipment and disposed of at an off-site location.
- Bedrock refusal was encountered at 7 feet bgs in both the test pit and Phase II soil boring making additional excavation impractical and further vertical migration of contaminants unlikely.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- Backfilling the pit with clean soil eliminated the potential for direct contact with hazardous constituents by livestock or the public; i.e., direct contact exposure pathways are incomplete.

- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- Groundwater was not encountered in the soil boring at 7 ft bgs; local geologic features indicate the depth to groundwater is greater than 100 ft bgs.
- Following soil excavation, Benzene, total BTEX, and TPH concentrations in the soil sample collected at the base of the Phase II soil boring at 7 ft bgs were non-detect, indicating that no significant downward constituent migration is occurring.
- Residual hydrocarbons, if any, in the soil 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: 90449 Location: Hughes C#6A

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

Coordinates: Letter: F Section 33 Township: 29 Range: 8

Or Latitude _____ Longitude _____

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

Site Assessment Date: 4/9/98 Area: _____ Run: _____

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)

Land Type:

Inside	☐ (1)	BLM ☒ (1)
Outside	☒ (2)	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 Cutter Dam Lake

(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 slightly < 1000' horizontal From Cutter Dam Lake

El Paso Natural Gas Company

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

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP201	945992
MTR CODE | SITE NAME:	90449	N/A
SAMPLE DATE | TIME (Hrs):	8-22-94	1223
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	8-24-94	8-24-94
DATE OF BTEX EXT. | ANAL.:	8/25/94	8/26/94
TYPE | DESCRIPTION:	VC	Brown Coarse Sand & Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.25	MG/KG	10			
TOLUENE	1.2	MG/KG	10			
ETHYL BENZENE	0.60	MG/KG	10			
TOTAL XYLENES	6.0	MG/KG	10			
TOTAL BTEX	8.1	MG/KG				
TPH (418.1)	18100	MG/KG			.48	28
HEADSPACE PID	35	PPM				
PERCENT SOLIDS	92.1	%				

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

e Surrogate Recovery was at 62 % for this sample All QA/QC was acceptable.

r e: ATI results attached. Surrogate recovery was outside ATI QC limits due to matrix interference.

= Dilution Factor Used

proved By: _____ Date: 9/30/94

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408397
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
22	945992	NON-AQ	08/22/94	08/25/94	08/26/94	10
23	945993	NON-AQ	08/22/94	08/25/94	08/26/94	20
24	945994	NON-AQ	08/22/94	08/25/94	08/26/94	1

PARAMETER	UNITS	22	23	24
BENZENE	MG/KG	<0.25	<0.5	<0.025
TOLUENE	MG/KG	1.2	30	<0.025
ETHYLBENZENE	MG/KG	0.60	1.9	<0.025
TOTAL XYLENES	MG/KG	6.0	51	<0.025
SURROGATE:				
BROMOFLUOROBENZENE (%)		62*	159*	94

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 90449 Location: Hughes C No. 6A

Coordinates: Letter: F Section 33 Township: 29 Range: 8

Or Latitude _____ Longitude _____

Date Started : 8-22-94 Run: 13 16

FIELD OBSERVATIONS

Sample Number(s): KP 201 _____ _____ _____

Sample Depth: 7' Feet

Final PID Reading 035 PID Reading Depth 7' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 120

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 8-22-94 Pit Closed By: B.C.T

REMARKS

Remarks : Some LINE markers. ON location.
Had To Redo because To much oil iN Pit. From Push iN Crew
At 7' Hit SAND stoNe Pid 035 closed Pit.
~~LINE Drip Pit south of Meter house~~ KP. 8-22-94

Signature of Specialist: Kelly Padilla

This is a reclaim.
KDK 9/27/94

(SP3191) 03/16/94

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	HAB66	980796
MTR CODE | SITE NAME:	90449	Hughes C #6A
SAMPLE DATE | TIME (Hrs):	11/9/98	1325
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	11/18/98	11/25/98
DATE OF BTEX EXT. | ANAL.:	11/16/98	11/16/98
TYPE | DESCRIPTION:	VG	SOIL

Field Remarks: 7-8'

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)	<25	MG/KG				
HEADSPACE PID	2	PPM				
PERCENT SOLIDS	92.0	%				

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

The Surrogate Recovery was at 101.2 % for this sample All QA/QC was acceptable.
...ative:

DF = Dilution Factor Used

Approved By: John Sanders Date: 12/13/98

PINNACLE LABORATORIES

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

GAS CHROMATOGRAPHY RESULTS

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

PINNACLE I.D.: 811047

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	980795	NON-AQ	11/9/98	11/18/98	11/25/98	20
02	980796	NON-AQ	11/9/98	11/18/98	11/25/98	1
03	980797	NON-AQ	11/11/98	11/18/98	11/25/98	1

PARAMETER	DET. LIMIT	UNITS	01	02	03
FUEL HYDROCARBONS, C6-C10	15	**MG/KG**	**3000**	< 15	**540**
FUEL HYDROCARBONS, C10-C22	5.0	**MG/KG**	**2000**	< 5.0	**80**
[illegible] HYDROCARBONS, C22-C36	5.0	**MG/KG**	**410**	< 5.0	< 5.0
[illegible]CULATED SUM:			**5410**		**620**
SURROGATE: O-TERPHENYL (%)			N/A *	87	93
SURROGATE LIMITS	(66 - 151)				

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

RECORD OF SUBSURFACE EXPLORATION

PHILIP SERVICES CORP.
4000 Monroe Road
[redacted]gton, New Mexico 87401
[redacted]26-2262 FAX (505) 326-2388

Borehole # BH-1
Well # N/A
Page 1 of 1

Project Number 19643 Phase 1001.77
Project Name EPFS PITS >10
Project Location HUGHES C #6A 90449

Elevation
Borehole Location LTR: E S: 33 T: 29 R: 8
GWL Depth NA
Drilled By K. PADILLA
Well Logged By H. BRADBURY
Date Started 11/9/98
Date Completed 11/9/98

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				EXCAVATION SAMPLE COLLECTED AT 7'						BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
5										
		7-8		LT GR SANDSTONE, FINE SAND, LOW CEMENTATION, CRUMBLY						HARD DRILLING
10	1	~~10-11~~		TOB 8'			0	4	3/2	1.325 HRS
15	2									HRS
20										
25										
30										
35										
40										

[redacted]ents: HAB66(7-8') SENT to lab for TPH, BTEX. GW NOT ENCOUNTERED BH GROUTED TO SURFACE AUGER REFUSAL at 7.5

Geologist Signature H. Bradbury