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
220 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 defined plume to 102 PPM TPH

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

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

30-045-25621

Operator: Amoco by EPFS Telephone

Address:

Facility Or: Earl B Sullivan No. 2, Meter 94952
Well Name

Location: Unit or Qtr/Qtr Sec H Sec 26 T 29 R 11 County San Juan

Pit Type: Separator ____ Dehydrator ____ Other Drip

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

Pit Location: Pit dimensions: length 19', width 17', depth 1'
(Attach diagram)

Reference: wellhead X, other ____

Footage from reference: 101'

Direction from reference: 284 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) 20
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) 0

RANKING SCORE (TOTAL POINTS): 20

Date Remediation Started: 09/26/94 Date completed: 09/26/94

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: Some lines markers. Started remediating. Had tank inside pit, took tank Out. Pit looked clean. Sample at 12', PID 44, 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 12'

Sample Date 09/26/94 Sample time 13:45

Sample Results

Benzene(ppm) <0.025

Total BTEX(ppm) 0.304

Field headspace(ppm) 44

TPH 10000

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

Earl B. Sullivan No. 2
Meter/Line ID 94952

SITE DETAILS

Legals - Twn: 29N **Rng: 11W** **Sec: 26** **Unit: H**
NMOCD Hazard Ranking: 20 **Land Type: Fee**
Operator: Amoco Production Company **Pit Closure Date: 9/26/94**

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) 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 44 ppm; laboratory analysis indicated a TPH concentration of 10,000 mg/kg, a benzene concentration of <0.025 mg/kg, and a total BTEX concentration of 0.3 mg/kg. The TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score of 20.

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 21 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 20-21 ft bgs. 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 102 mg/kg. The benzene and total BTEX concentrations were below recommended remediation levels for the Hazard Ranking Score.

No Phase III excavation was done.

El Paso Field Services requests 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 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.
- 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 to 21 ft bgs.

- Benzene and total BTEX concentrations at the base of the Phase II soil boring were non-detect; and the TPH concentration of 102 mg/kg was just above the recommended remediation level of 100 mg/kg.
- TPH concentrations in the soil at 21 ft bgs were about 1% of the concentration at 12 ft bgs. This strong attenuation with depth indicates that residual hydrocarbons will likely 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: 94952 Location: Earl S Sullivan #2
Operator #: 0203 Operator Name: Amoco P/L District: Angel Peak
Coordinates: Letter H Section 26 Township: 29 Range: 11
or Latitude _____ Longitude _____
Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
Site Assessment Date: 9/12/94 Area: 01 Run: 41
Revised Date: 12/11/02

SITE ASSESSMENT

NMOCD Zone:
(from NMCOD Maps)

Land Type:
Intside ☒ (1)
Outside ☐ (2)

BLM ☐ (1)
State ☐ (2)
Fee ☒ (3)
Indian _____

Depth to Groundwater
Less than 50 Feet (20 points) ☒ (1)
50 Feet to 99 Feet (10 Points) ☐ (2)
Greater than 100 Feet (0 Points) ☐ (3)

Well Protection Area
Is it less than 1000 feet from well, spring or other source of fresh water extraction?
or; Is it less than 200 feet from a private domestic water source?
☐ YES (20 Points) ☒ NO (0 Points)

Horizontal Distance to Surface Water Body
Less than 200 Feet (20 points) ☐ (1)
200 Feet to 1000 Feet (10 Points) ☐ (2)
Greater than 1000 Feet (0 Points) ☒ (3)

Name of Surface Water Body San Juan River

(Surface Water Body: Perennial River, Stream, Creek, Irrigation Canal, Ditch, Lake, Pond)

Distance to Nearest Ephemeral Stream ☐ (1) < 100 feet (Navajo Pits Only)
☐ (2) > 100 feet

TOTAL HAZARD RANKING SCORE 20 **POINTS**

REMARKS

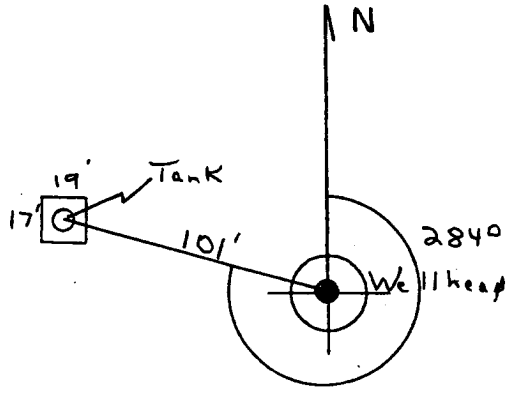
Remarks: Revision Based on Re-Assessment of Distance to Nearest Surface Water Body.

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 284° Footage from Wellhead 101'

b) Length : 19' Width : 17' Depth : 1'



REMARKS

Remarks :

Pictures @ 1148 hr

Completed By:

Cory Chance
Signature

9/12/94
Date

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:	KP 253	9416214
MTR CODE | SITE NAME:	94952	N/A
SAMPLE DATE | TIME (Hrs):	9-26-94	1345
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	9-27-94	9-27-94
DATE OF BTEX EXT. | ANAL.:	9-29-94	10-2-94
TYPE | DESCRIPTION:	VC	Light brown Sand & Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.025	MG/KG	1			
TOLUENE	0.12	MG/KG	1			
ETHYL BENZENE	0.039	MG/KG	1			
TOTAL XYLENES	0.12	MG/KG	1			
TOTAL BTEX	0.304	MG/KG				
TPH (418.1)	10,000	MG/KG			1.05	28
HEADSPACE PID	44	PPM				
PERCENT SOLIDS	88.6	%				

-- 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:

ATI Results attached.

DF = Dilution Factor Used

Approved By: _____ Date: 10/3/94

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 409425

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
16	946214	NON-AQ	09/26/94	09/29/94	10/02/94	1

PARAMETER	UNITS	16
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	0.12
ETHYLBENZENE	MG/KG	0.039
TOTAL XYLENES	MG/KG	0.12
SURROGATE:		
BROMOFLUOROBENZENE (%)		103

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 94952 Location: Earl B Sullivan No. 2

Coordinates: Letter: H Section 26 Township: 29 Range: 11

Or Latitude _____ Longitude _____

Date Started : 9-26-94 Run: 01 41

FIELD OBSERVATIONS

Sample Number(s): KP 253 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 044 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: 9-26-94 Pit Closed By: B.E.I

REMARKS

Remarks : Some LINE MARKERS. STARTED REMEDIATING HAD TANK IN SIDE PIT ~~KP-26-01~~ TOOK TANK OUT. PIT LOOKED CLEAN SAMPLE AT 12' PID 044 CLOSED PIT

Signature of Specialist: Kelly Padilla

(SP3181) 03/16/94

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

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

JWK 42

Project Name EPNG Pits
Project Number 14509 Phase 6000.77
Project Location Earl B Sullivan No 2
94952

Well Logged By Jeff W. Kindley
Personnel On-Site G. Suddurth, A. Roberts, B. Charley
Contractors On-Site
Client Personnel On-Site

Drilling Method 4 1/4 ID HSA
Air Monitoring Method PID, CGI

Elevation
Borehole Location T29, R11, S26, H
GWL Depth
Logged By Jeff W. Kindley
Drilled By G. Suddurth
Date/Time Started 08/23/95 1345
Date/Time Completed 08/23/95 1440

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	Drilling Conditions & Blow Counts HS
0				Backfill material to 12'						
5										
10										
15										
20	1	18-20'	8/20	SW, GR SAND, medium grained, dry, very dense, no odor. Boring terminated at 20'					0/0	1415 100 blows per Foot
25										
30										
35										
40										

Comments: Sample collected from 18 to 20' (JWK 42). submitted to lab for analysis of BTEX and TPH. BH grouted to the surface.

Geologist Signature Jeffrey Kindley

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:	JWK42	947316
MTR CODE | SITE NAME:	94952	Earl B. Sullivan No. 2
SAMPLE DATE | TIME (Hrs):	08/23/95	14:15
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	8/24/95	
DATE OF BTEX EXT. | ANAL.:	8/25/95	8/29/95
TYPE | DESCRIPTION:	VG	Light brown sand & sandstone

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS DF	Q	M(g)	V(ml)
BENZENE	< .5	MG/KG				
TOLUENE	< .5	MG/KG				
ETHYL BENZENE	< .5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	102	MG/KG			2.02	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	93.1	%				

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

The Surrogate Recovery was at 88 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used