

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
Approaches
depth of plume
TPH 117
Submit 1 copy to appropriate District Office and 1 copy to the Santa Fe Office
(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

30-045-07880

Operator: Amoco by EPFS Telephone _____

Address: _____

Facility Or: Abrams Gas Com C#1, Meter 71697

Well Name _____

Location: Unit or Qtr/Qtr Sec F Sec 25 T 29 R 10 County San Juan

Pit Type: Separator _____ Dehydrator _____ Other Drip

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

Pit Location: Pit dimensions: length 18', width 17', depth 3'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 142'

Direction from reference: 0 Degrees X East North _____

of
_____ West South _____

Depth To Ground Water	Less than 50 feet	(20 points)
(Vertical distance from	50 feet to 99 feet	(10 points)
contaminants to seasonal	Greater than 100 feet	(0 points) <u>20</u>
high water elevation of		
ground water.)		

Wellhead Protection Area:	Yes (20 points)
(Less than 200 feet from a private	No (0 points) <u>0</u>
domestic water source, or; less than	
1000 feet from all other water sources.)	

Distance To Surface Water:	Less than 200 feet	(20 points)
(Horizontal distance to perennial	200 feet to 1000 feet	(10 points)
lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet	(0 points) <u>0</u>
irrigation canals and ditches.)		

RANKING SCORE (TOTAL POINTS): 20

Date Remediation Started: 09/27/94 Date completed: 09/27/94

Remediation Method: Excavation X Approx. cubic yards 100
(Check all appropriate sections.) Landfarmed _____ Insitu Bioremediation _____
Other _____

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

General Description of Remedial Action: No line markers. Started remediating to 12'. Soil turned dark gray with a
Smell. At 12' soil light gray with a smell. Closed pit.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit: Sample location Four walls and center of pit composite
Closure Sampling: _____
(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 12'

Sample Date 09/27/94 Sample time 11:35

Sample Results

Benzene(ppm) 0.50

Total BTEX(ppm) 11.0

Field headspace(ppm) 165

TPH 177

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



PIT CLOSURE REQUEST

Abrams Gas Com C#1
Meter/Line ID 71697

SITE DETAILS

Legals - Twn: 29N

Rng: 10W

Sec: 25

Unit: F

NMOCD Hazard Ranking: 20

Land Type: FEE

Operator: Crosstimbers

Pit Closure Date: 9/27/94

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 165 ppm; laboratory analysis indicated a benzene concentration of 0.5 mg/kg, a total BTEX concentration of 11 mg/kg, and a TPH concentration of 177 mg/kg. The TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score of 20.

Approximately 100 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 to 17 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 15-17 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 117 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.
- Impacted soils were excavated to the practical extent of the equipment and subsurface conditions. All excavated soil was disposed of at an off-site location.
- 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 to 17 ft bgs.



PIT CLOSURE REQUEST

- Benzene and total BTEX concentrations at the base of the test pit and Phase II boring were below recommended remediation levels for the Hazard Ranking Score.
- The TPH concentration of 117 mg/kg at the base of the Phase II soil boring was only slightly above the recommended remediation level of 100 mg/kg.
- TPH concentrations in the soil at 17 ft bgs were about 66% 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

ORIGINAL PIT LOCATION

REMARKS

Pictures @ 0839 hr

Cory Chase
Signature

9/13/94
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 71697 Location: Abrams Gas Com C #1
 Coordinates: Letter: F Section 25 Township: 29 Range: 10
 Or Latitude _____ Longitude _____
 Date Started : 9-27-94 Run: 01 51

FIELD OBSERVATIONS

Sample Number(s): KP254
 Sample Depth: 12' Feet
 Final PID Reading 165 PID Reading Depth 12' Feet
 Yes No
 Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet

CLOSURE

Remediation Method :
 Excavation ☒ Approx. Cubic Yards 100
 Onsite Bioremediation ☐
 Backfill Pit Without Excavation ☐
 Soil Disposition:
 Envirotech ☒ ☐ Tierra
 Other Facility ☐ Name: _____
 Pit Closure Date: 9-27-94 Pit Closed By: B.E.I

REMARKS

Remarks : No line markers. Started Remediating to 12" soil
turned dark gray with a smell. At 12" soil light gray with
a smell. Closed Pit.

Signature of Specialist: Kelly Padilla



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 254	946228
MTR CODE SITE NAME:	71697	N/A
SAMPLE DATE TIME (Hrs):	9-27-94	1135
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	9-29-94	9-29-94
DATE OF BTEX EXT. ANAL.:	10-3-94	10-6-94
TYPE DESCRIPTION:	VC	Brown fine sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	0.50	MG/KG	S			
TOLUENE	0.61	MG/KG	S			
ETHYL BENZENE	0.70	MG/KG	S			
TOTAL XYLENES	9.2	MG/KG	S			
TOTAL BTEX	11.0	MG/KG				
TPH (418.1)	177	MG/KG			2.15	28
HEADSPACE PID	165	PPM				
PERCENT SOLIDS	78.5	%				

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

The Surrogate Recovery was at 71 % for this sample All QA/QC was acceptable.
Narrative:

ATI Results attached

DF = Dilution Factor Used

Approved By:

Date:

10/23/94

RECORD OF SUBSURFACE EXPLORATION

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

Borehole # BH-1
Well # 1 of 1
Page

Project Name EPNG Pits
Project Number 14509 Phase 6000.77
Project Location Abrams Gas Well C#1

Well Logged By Jeff W. Kindley
Personnel On-Site K Padilla, A. Chanley, F Rivera
Contractors On-Site
Client Personnel On-Site

Elevation
Borehole Location T29, R10, S25, F
GWL Depth
Logged By Jeff W. Kindley
Drilled By K. Padilla
Date/Time Started 08/24/95 0830
Date/Time Completed 08/24/95 1005

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

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	
0				Backfill material to 12'						
5										
10										
15	1	15-17	17 2.0	CL, BR CLAY, moist, soft, high plasticity, no odor, Boring terminated at 17'				%		0928 2 blows per Foot
20										
25										
30										
35										
40										

Comments: Sample collected from 15 to 17' (Sample ID: JWK 43). Sample submitted for analysis of BTEX and TPH. BH grouted to the surface.

Geologist Signature Jeff W. Kindley



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JWK 43	947329
MTR CODE SITE NAME:	71697	Abrams Gas Com C#1
SAMPLE DATE TIME (Hrs):	08-24-95	0928
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	8/28/95	
DATE OF BTEX EXT. ANAL.:	8/28/95	8/30/95
TYPE DESCRIPTION:	V6	grey clay

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)	117	MG/KG			2.0	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	70.5	%				

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

Surrogate Recovery was at
Narrative:

86%

for this sample All QA/QC was acceptable.