

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

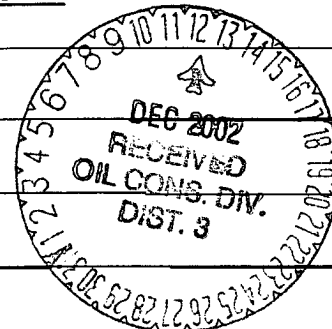
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

*Risk
bedrock
defined
extent of
plume*

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: 30-045-23258

Facility Or Bolack #3, Meter 90916
Well Name _____

Location: Unit or Qtr/Qtr Sec M Sec 20 T 28 R 8 County San Juan

Pit Type: Separator _____ Dehydrator X Other _____

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

Pit Location: Pit dimensions: length 21', width 21', depth 4'

(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 144'

Direction from reference: 150 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>10</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): 10

Date Remediation Started: 08/09/94 Date completed: 08/09/94

Remediation Method: Excavation Approx. cubic yards

(Check all appropriate sections.)

Landfarmed Insitu Bioremediation

Other Backfill pit without excavation

Remediation Location: Onsite N/A Offsite N/A

(i.e. landfarmed onsite,
name and location of
offsite facility)

General Description of Remedial Action: EPNG lines not marked. Soil gray, strong hydrocarbon odor. Hit sandstone
4'.

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 4'

Sample Date 08/09/94 Sample time 15:43

Sample Results

Benzene(ppm) Not reported.

Total BTEX(ppm) Not reported

Field headspace(ppm) 805

TPH 1350

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



PIT CLOSURE REQUEST

Bolack #3
Meter/Line ID 90916

SITE DETAILS

Legals - Twn: 28N

Rng: 8W

Sec: 20

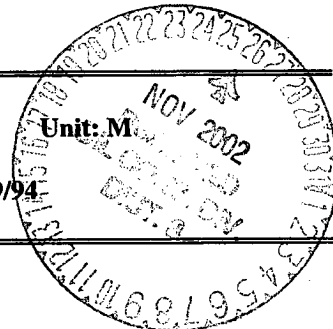
Unit: M

NMOCD Hazard Ranking: 10

Land Type: BLM

Operator: Amoco Production Company

Pit Closure Date: 8/09/94





PIT CLOSURE REQUEST

- Benzene, total BTEX, and TPH concentrations in the soil sample collected at the base of the Phase II soil boring at 15 ft bgs were non-detect, indicating that no significant downward constituent migration is occurring.
- Bedrock refusal was met at 4 feet below ground surface making additional excavation impractical and further downward migration of residual hydrocarbons unlikely.

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: 90916 Location: Black #3
 Operator #: _____ Operator Name: _____ P/L District: _____
 Coordinates: Letter: M Section 20 Township: 28 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	<input type="checkbox"/> (1)	BLM	<input checked="" type="checkbox"/> (1)
Outside	<input checked="" type="checkbox"/> (2)	State	<input type="checkbox"/> (2)
		Fee	<input type="checkbox"/> (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 <100' vertical from center of Large Canyon

FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: <u>90916</u> Location: <u>Bolack #3</u> Operator #: <u>0203</u> Operator Name: <u>Amold</u> P/L District: <u>Blanco</u> Coordinates: Letter: <u>M</u> Section: <u>20</u> Township: <u>28</u> Range: <u>8</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____ Site Assessment Date: <u>5/17/94</u> Area: <u>03</u> Run: <u>82</u>								
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps)								
	Land Type: <table border="0"> <tr> <td>BLM</td> <td><input checked="" type="checkbox"/> (1)</td> </tr> <tr> <td>State</td> <td><input type="checkbox"/> (2)</td> </tr> <tr> <td>Fee</td> <td><input type="checkbox"/> (3)</td> </tr> <tr> <td>Indian</td> <td>_____</td> </tr> </table>		BLM	<input checked="" type="checkbox"/> (1)	State	<input type="checkbox"/> (2)	Fee	<input type="checkbox"/> (3)	Indian
BLM	<input checked="" type="checkbox"/> (1)								
State	<input type="checkbox"/> (2)								
Fee	<input type="checkbox"/> (3)								
Indian	_____								
REMARKS	Depth to Groundwater Less Than 50 Feet (20 points) <input type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input checked="" 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 <u>Largo Canyon (closest)</u> (Surface Water Body : Perennial Rivers, Major Wash, 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>10</u> POINTS									
Remarks : <u>Redline-Vuln-Outside</u> <u>3 pits. Will close 1. Pit Dry</u> <u>Push-In</u>									

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 90916 Location: Bolack #3
 Coordinates: Letter: m Section 20 Township: 28 Range: 8
 Or Latitude _____ Longitude _____
 Date Started : 8-9-94 Run: 63 82

FIELD OBSERVATIONS

Sample Number(s): MK243
 Sample Depth: 4' Feet
 Final PID Reading 805 PID Reading Depth 4' 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: 8-9-94 Pit Closed By: BEI

REMARKS

Remarks : EPNG LINES NOT MARKED SOIL GRAY STRONG HYDROCARBON
odor HIT SANDSTONE 4'

Signature of Specialist: Morgan Killian



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

Field ID

Lab ID

MTR CODE | SITE NAME:

SAMPLE DATE | TIME (Hrs):

SAMPLED BY:

DATE OF TPH EXT. | ANAL.:

DATE OF BTEX EXT. | ANAL.:

TYPE | DESCRIPTION:

mw 243

945885

90916

N/A

8-9-94

1543

N/A

8/11/94

8/11/94

N/A

N/A

VG

light sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	1350	MG/KG			2.06	28
HEADSPACE PID	805	PPM				
PERCENT SOLIDS	92.7	%				

-- TPH is by EPA Method 418.1 --

narrative:

DF = Dilution Factor Used

Analyst By:

J.S.

Date:

9/2/94



CHAIN OF CUSTODY RECORD

[illegible]

RECORD OF SUBSURFACE EXPLORATION

PHILIP SERVICES CORP.

1000 Monroe Road
New Mexico 87401
262 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 BLACK #3 90916

Elevation
Borehole Location LTR: M S: 20 T: 28 R: 8
GWL Depth NA
Drilled By K. PADILLA
Well Logged By H. BRADBURY
Date Started 10/22/98
Date Completed 10/22/98

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				EXCAVATION SAMPLE collected at 4'						BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
5										
10	1	10-11	12	LT BR silty SAND, FINE SAND loose, dry	SM		0	1	901 1027	1536 hrs
15	2	15-16	12	LT BR SILTSTONE, mod CEMENTED, dry			0	153	273 112	1557 hrs
20				TOB 17'						
25										
30										
35										
40										

Notes: HAB50 15-16 SENT to LAB for TPH, BTEX. GW NOT
ENCOUNTERED. BH grouted to SURFACE
AUGER REFUSAL at 17'
Geologist Signature H. Bradbury

[illegible]

**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	HAB50	980754
MTR CODE SITE NAME:	90916	Bolack #3
SAMPLE DATE TIME (Hrs):	10/22/98	1557
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	10/30/98	10/30/98
DATE OF BTEX EXT. ANAL.:	10/26/98	10/26/98
TYPE DESCRIPTION:	VG	SOIL

Field Remarks: 15-16'

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	112	PPM				
PERCENT SOLIDS	91.3	%				

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

The Surrogate Recovery was at 103.3 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John J. Smith

Date: 11/20/98

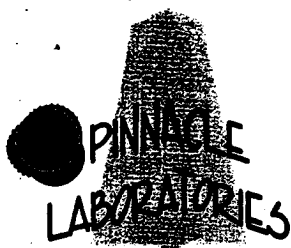


2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : PHASE II DRILLING

PINNACLE ID : 810097
DATE RECEIVED : 10/27/98
REPORT DATE : 11/5/98

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	980754	NON-AQ	10/22/98
02	980753	NON-AQ	10/22/98
03	980751	NON-AQ	10/21/98
04	980752	NON-AQ	10/22/98



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.: 810097

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	980754	NON-AQ	10/22/98	10/30/98	10/30/98	1
02	980753	NON-AQ	10/22/98	10/30/98	10/30/98	1
03	980751	NON-AQ	10/21/98	10/30/98	10/30/98	1
PARAMETER		DET. LIMIT	UNITS	01	02	03
FUEL HYDROCARBONS, C6-C10		10	MG/KG	< 10	< 10	16
FUEL HYDROCARBONS, C10-C22		5.0	MG/KG	< 5.0	< 5.0	150
FUEL HYDROCARBONS, C22-C36		5.0	MG/KG	< 5.0	< 5.0	< 5.0
CALCULATED SUM:						166.0
SURROGATE:						
O-TERPHENYL (%)				126	129	91
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

PINNACLE I.D.: 810097

PROJECT NAME		PHASE II DRILLING				
SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
04	980752	NON-AQ	10/22/98	10/30/98	10/30/98	1
PARAMETER		DET. LIMIT	UNITS	04		
FUEL HYDROCARBONS, C6-C10		10	MG/KG	< 10		
FUEL HYDROCARBONS, C10-C22		5.0	MG/KG	< 5.0		
FUEL HYDROCARBONS, C22-C36		5.0	MG/KG	< 5.0		
CALCULATED SUM:						

SURROGATE:
BIPHENYL (%) 114
SURROGATE LIMITS (66 - 151)

CHEMIST NOTES:
N/A

BTEX SOIL SAMPLE WORKSHEET

File	:	980754	Date Printed	:	10/27/98
Soil Mass (g)	:	5.28	Multiplier (L/g)	:	0.00095
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):	:	200
Shot Volume (uL)	:	50	CAL FACTOR (Report):	:	0.18939

		DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L)	: <0.5	Benzene (mg/Kg):	#VALUE!	0.473
Toluene (ug/L)	: <0.5	Toluene (mg/Kg):	#VALUE!	0.473
Ethylbenzene (ug/L)	: <0.5	Ethylbenzene (mg/Kg):	#VALUE!	0.473
p & m-xylene (ug/L)	: 1.04	p & m-xylene (mg/Kg):	0.197	0.947
o-xylene (ug/L)	: <0.5	o-xylene (mg/Kg):	#VALUE!	0.473
		Total xylenes (mg/Kg):	#VALUE!	1.420
		Total BTEX (mg/Kg):	#VALUE!	