

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

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

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

30-045-20460

Operator: Meridian by EPFS Telephone \_\_\_\_\_

Address: \_\_\_\_\_

Facility Or Grambling #6, Meter 87012  
Well Name \_\_\_\_\_

Location: Unit or Qtr/Qtr Sec K Sec 22 T 29 R 9 County San Juan

Pit Type: Separator \_\_\_\_\_ Dehydrator X Other \_\_\_\_\_

Land Type: BLM X, State \_\_\_\_\_, Fee \_\_\_\_\_ Other \_\_\_\_\_

Pit Location: Pit dimensions: length 17', width 16', depth 2'  
(Attach diagram)

Reference: wellhead X, other \_\_\_\_\_

Footage from reference: 16'

Direction from reference: 54 Degrees X East North \_\_\_\_\_

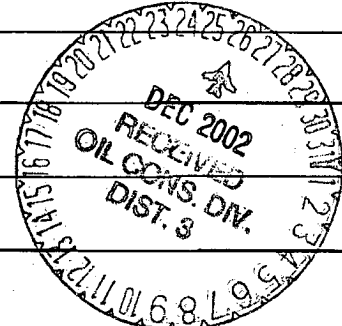
of  
\_\_\_\_\_ West South \_\_\_\_\_

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) <u>10</u>

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) <u>0</u>

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) <u>0</u>

RANKING SCORE (TOTAL POINTS): 10



Date Remediation Started: 07/18/94 Date completed: 07/18/94

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 marked. Soil dark gray, slight 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 07/18/94 Sample time 13:07

Sample Results

Benzene(ppm) Not reported.

Total BTEX(ppm) Not reported.

Field headspace(ppm) 409

TPH 3070

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 1/8/93  
Signature Scott T. Pope

Printed Name SCOTT T. POPE  
and Title Senior EML Scientist



## PIT CLOSURE REQUEST

Grambling #6  
Meter/Line ID 87012

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### SITE DETAILS

Legals - Twn: 29N

Rng: 9W

Sec: 22

Unit: K

NMOCD Hazard Ranking: 10

Land Type: BLM

Operator: Meridian Oil Inc.

Pit Closure Date: 7/18/94

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### 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. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 409 ppm and a TPH concentration of 3,070 mg/kg. The 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 with refusal at 24 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 23-24 ft bgs. Headspace analysis indicated an organic vapor content of 218 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 74.8 mg/kg. The benzene, total BTEX and TPH 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 at 24 ft bgs; local geologic features indicate the depth to groundwater is greater than 50 ft bgs.
- Benzene, total BTEX and TPH concentrations at the bottom of the Phase II soil boring (24 feet bgs) were below recommended remediation levels for the Hazard Ranking Score.

**REVISED**  
**FIELD PIT SITE ASSESSMENT FORM**

GENERAL

Meter: 87012 Location: Grambling #6  
 Operator #: \_\_\_\_\_ Operator Name: \_\_\_\_\_ P/L District: \_\_\_\_\_  
 Coordinates: Letter: K Section 22 Township: 29 Range: 9  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Pit Type: Dehydrator \_\_\_\_\_ Location Drip: \_\_\_\_\_ Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
 Site Assessment Date: 4/8/98 Area: \_\_\_\_\_ Run: \_\_\_\_\_

SITE ASSESSMENT

**NMOCD Zone:**

(From NMOCD  
Maps)

Inside  
Outside

**Land Type:**

☐ (1)  
☒ (2)

BLM

State

Fee

Indian

☒ (1)  
☐ (2)  
☐ (3)

**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

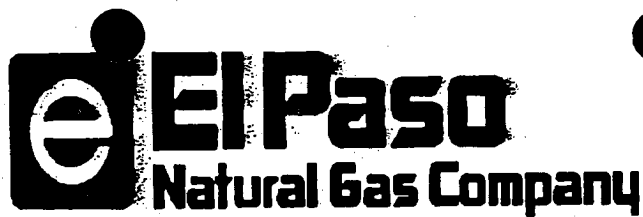
☐ (1) < 100' (Navajo Pits Only)

☐ (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 SERVICES LABORATORY

## ANALYTICAL REPORT

### PIT CLOSURE PROJECT - Soil

#### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 150	945704
MTR CODE   SITE NAME:	87012	N/A
SAMPLE DATE   TIME (Hrs):	7/18/94	1307
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	7/19/94	7/19/94
DATE OF BTEX EXT.   ANAL.:	N/A	N/A
TYPE   DESCRIPTION:	VE	Grey Clay

REMARKS:

#### RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
TPH (418.1)	3070	MG/KG			2.05	28
HEADSPACE PID	409	PPM				
PERCENT SOLIDS	86.5%	%				

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

Spontaneous Recovery was at  
Narrative:

N/A

% for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

2.8

8/8/94

# FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 37012 Location: Graveling #6  
 Coordinates: Letter: K Section 22 Township: 29 Range: 9  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Date Started : 7-18-94 Run: 13 22

FIELD OBSERVATIONS

Sample Number(s): mk 150  
 Sample Depth: 12' Feet  
 Final PID Reading 409 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: 7-18-94 Pit Closed By: BEI

REMARKS

Remarks : EPNG LINES MARKED SOIL DARK GRAY SLIGHT  
HYDROCARBON ODOR

Signature of Specialist: Morgan Killion

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

**SAMPLE IDENTIFICATION**

	Field ID	Lab ID
SAMPLE NUMBER:	HAB51	980756
MTR CODE   SITE NAME:	87012	Grambling 6
SAMPLE DATE   TIME (Hrs):	10/23/98	1433
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	10/30/98	11/2/98
DATE OF BTEX EXT.   ANAL.:	10/29/98	11/2/98
TYPE   DESCRIPTION:	VG	SOIL

Field Remarks: 23-24'

**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)	74.8	MG/KG				
HEADSPACE PID	218	PPM				
PERCENT SOLIDS	92.5	%				

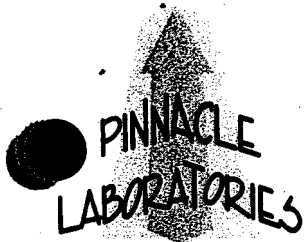
-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 109.9 % for this sample All QA/QC was acceptable.  
ative:

DF = Dilution Factor Used

Approved By: \_\_\_\_\_

Date: 11/20/98



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.: 810117

SAMPLE		DATE		DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	980756	NON-AQ	10/23/98	10/30/98	11/2/98	1
PARAMETER		DET. LIMIT	UNITS	01		
FUEL HYDROCARBONS, C6-C10		10	MG/KG	68		
FUEL HYDROCARBONS, C10-C22		5.0	MG/KG	6.8		
FUEL HYDROCARBONS, C22-C36		5.0	MG/KG	< 5.0		
CALCULATED SUM:				74.8		

SURROGATE:  
BIPHENYL (%)  
SURROGATE LIMITS

( 66 - 151 )

86

CHEMIST NOTES:  
N/A



RECORD OF SUBSURFACE EXPLORATION

HILIP SERVICES CORP.  
00 Moore Road  
New Mexico 87401  
357 52 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 GRAMBLING #6 87012

Elevation \_\_\_\_\_  
Borehole Location LTR: K S:22 T:29 R:9  
MWL Depth NA  
Drilled By K. PADILLA  
Well Logged By H. BRADBURY  
Date Started 10/23/98  
Date Completed 10/23/98

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										BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
5										
10				EXCAVATION SAMPLE COLLECTED AT 12'						
15	1	15-17	24	LT GR SANDSTONE, FINE SAND MOD CEMENTATION, dry			0	364	596 611	1359 hrs
20	2	20-21	6	LT GR SANDSTONE, FINE SAND MOD CEMENTED, dry			1	181	202 129	1416 hrs
25	3			DK BR SANDSTONE, FINE SAND LOW CEMENTATION, dry			0	1	570 218	1433 hrs
30				TOB 24'						
35										
40										

Remarks: HAB51 23' SENT TO LAB FOR TPH, BTEX. SW NOT  
ENCOUNTERED BH GROUTED TO SURFACE  
AUGER REFUSAL AT  
Geologist Signature H. Bradbury