

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
defined
extent of
plume.
485 feet
groundwater
estimated at
less than 50 feet

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: Meridian Oil Inc. Telephone: _____

Address: 30-045-05944

Facility Or: Huerfanito #66, Meter 92991
Well Name _____

Location: Unit or Qtr/Qtr Sec H Sec 12 T 26 R 9 County San Juan

Pit Type: Separator _____ Dehydrator _____ Other Drip

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

Pit Location: Pit dimensions: length 14', width 12', depth 3'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 123'

Direction from reference: 136 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: 09/29/94 Date completed: 09/29/94

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: 10 yds.

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 09/29/94 Sample time 14:45

Sample Results

Benzene(ppm) Not reported

Total BTEX(ppm) Not reported

Field headspace(ppm) 215

TPH 947

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

Huerfanito #66
Meter/Line ID 92991

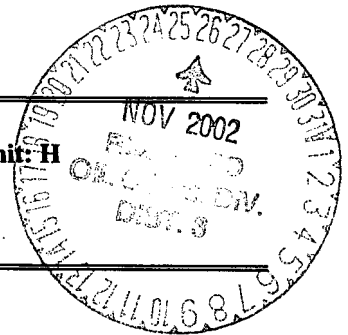
SITE DETAILS

Legals - Twn: 26N
NMOCD Hazard Ranking: 20
Operator: Meridian Oil Inc.

Rng: 9W

Sec: 12
Land Type: Fee
Pit Closure Date: 9/29/94

Unit: H



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) where a soil sample was collected for field headspace analysis and laboratory analysis for TPH. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 215 ppm; laboratory analysis indicated a TPH concentration of 947 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 as well as 20 cubic yards of imported clean fill, and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed to refusal at 48.5 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 48-48.5 ft bgs. Headspace analysis indicated an organic vapor content of 142 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 <20 mg/kg. The benzene, BTEX and TPH concentrations were below recommended remediation levels for the Hazard Ranking Score.

No Phase III activities were conducted.

El Paso Field Services requests closure of the above mentioned production 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.
- Groundwater was not encountered in the soil boring to 48 ft bgs.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- Benzene, total BTEX, and TPH concentrations in the soil sample collected at the base of the Phase II soil boring at 48 ft bgs were non-detect.



PIT CLOSURE REQUEST

- Residual hydrocarbons in the soil 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: 92991 Location: Huerfano #66
 Operator #: _____ Operator Name: _____ P/L District: _____
 Coordinates: Letter: H Section 12 Township: 26 Range: 9
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 4/13/98 Area: _____ Run: _____

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps) Inside _____ Outside _____

Land Type: BLM ☐ (1)
 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 _____
 (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: 20 POINTS

REMARKS

Remarks : Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. Site is <50' vertical from center of Blanco Canyon.

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 92991 Location: Huerfano No. 66
 Operator #: 2999 Operator Name: Meridian P/L District: Ballard
 Coordinates: Letter: H Section ^{low 6-22-94} 26 Township: 26 Range: 9W
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
 Site Assessment Date: 6-22-94 Area: 11 Run: 91

SITE ASSESSMENT

NMOCD Zone:

(From NMOCD
Maps)

Inside

☐ (1)

Outside

☒ (2)

Land Type:

^{K6W 6-24-94} ~~BLM~~ ☒ (1)

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 Blanco Canyon Wash

(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

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

TOTAL HAZARD RANKING SCORE: 20 POINTS

REMARKS

Remarks : Two pits. Drip pit next to Meter. Dry

Outside V.Z. on Top O

Inside V.Z. on Redline

D. L. L.



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:

VW 361

946271

92991

N/A

9-29-94

1445

N/A

10-3-94

N/A

N/A

VG

gray sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	947	MG/KG			2.06	28
HEADSPACE PID	215	PPM				
PERCENT SOLIDS	85.9	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Approved By:

Date:

10/6/94

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 92991 Location: Huerfano #66
 Coordinates: Letter: H Section 12 Township: 26 Range: 9
 Or Latitude _____ Longitude _____
 Date Started : 9-29-94 Run: 11 91

FIELD OBSERVATIONS

Sample Number(s): VW361
 Sample Depth: 12 Feet
 Final PID Reading 215 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: 9-29-94 Pit Closed By: BEZ

REMARKS

Remarks : _____ 10 yds

Signature of Specialist: Vale Wilson



CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER		PROJECT NAME		CONTRACT LABORATORY P. O. NUMBER	
Pit Closure Project # 24324 <td colspan="2"></td> <td colspan="2"></td>					
DATE: 9-29-94					
SAMPLERS (Signature)					
Vale Wilson					
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	REMARKS
94 6261	9-29-94	1:20	Soil	VW 351	
94 6262	9-29-94	10:00	Soil	VW 352	
94 6263	9-29-94	10:30	Soil	VW 353	
94 6264	9-29-94	11:30	Soil	VW 354	
94 6265	9-29-94	12:00	Soil	VW 355	
94 6266	9-29-94	12:45	Soil	VW 356	
94 6267	9-29-94	13:25	Soil	VW 357	
94 6268	9-29-94	13:25	Soil	VW 358	
94 6269	9-29-94	13:30	Soil	VW 359	
94 6270	9-29-94	14:00	Soil	VW 360	
94 6271	9-29-94	14:45	Soil	VW 361	
94 6272	9-29-94	15:30	Soil	VW 362	
RELINQUISHED BY: (Signature)		DATE/TIME 34		RECEIVED BY: (Signature)	
Vale Wilson		9-29-94 18:05		Wanda X	
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)	
				Wanda X	
REQUESTED TURNAROUND TIME:		DATE/TIME		RECEIVED OF LABORATORY BY: (Signature)	
<input type="checkbox"/> ROUTINE <input type="checkbox"/> RUSH				Wanda X	
CARRIER CO.					
RESULTS & INVOICES TO:		SAMPLE RECEIPT REMARKS		CHARGE CODE	
FIELD SERVICES LABORATORY					
EL PASO NATURAL GAS COMPANY					
P. O. BOX 4990					
FARMINGTON, NEW MEXICO 87499					
505-599-2144					
FAX: 505-599-2261					

RECORD OF SUBSURFACE EXPLORATION

PHILIP SERVICES CORP.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # BH- 1

Well # NA

Page 1 of 2

Project Number 19643 Phase 1001.77

Project Name EPFS PITS >10

Project Location Huerfano #66 92991

Elevation

Borehole Location LTR: H S: 12 T: 26 R: 9

GWL Depth NA

Drilled By K. PADILLA

Well Logged By C. CHANCE

Date Started 6/16/98

Date Completed 6/16/98

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 @ 12'						
15	1	6-17	18	lt grey/redish br silty CLAY, med stiff, non-plastic, varved, dry			2	17	$\frac{30}{125}$	1226 hr
20	2	20-25	18	dk grey silty CLAY, stiff, low plastic, dry			0	10	$\frac{23}{468}$	hard drilling. 1254 hr.
25	3	25-26	12	Redish br silty CLAY, stiff, low plastic, dry			0	12	$\frac{99}{577}$	1312 hr
30	4	30-31	14	Grey/Redish br silty CLAY, stiff non-plastic, dry			0	10	$\frac{419}{413}$	1231 hr
35	5	35-35.5	6	Redish br/Grey silty CLAY, hard, non-plastic, dry			3	12	$\frac{135}{225}$	1246 hr 50 BC/4"
40	6	40-40.5	6	Grey weathered SANDSTONE, vt sand, poorly cemented, sil argillaceous.			0	4	$\frac{132}{40}$	1405 hr

Comments:

Pit was backfilled w/o excavation. CMC 397 (48-48.5') sent to lab
For BTEX, TPH. Retrieval @ 48'. GW not encountered. BH grouted to
surface

Geologist Signature

C. Chance

RECORD OF SUBSURFACE EXPLORATION

PHILIP SERVICES CORP.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # BH- 1

Well # NA

Page 2 of 2

Project Number 19643 Phase 1001.77

Project Name EPFS PITS >10

Project Location Huerfano Unit #66 9299/

Elevation _____

Borehole Location LTR: H S: 12 T: 26 R: 9

GWL Depth NA

Drilled By K. PADILLA

Well Logged By C. CHANCE

Date Started 6/16/98

Date Completed 6/16/98

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	
40										BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
45	7	45-45.5	6	gray ^{silty} CLAY SILT STONE , v. hard, dry nonplastic			0	8	16 74	-1429 h, 5080/4"
50	8	48-48.5	6	Gray weathered SANDSTONE f-med sand, mod cemented, dry			0	4	32 142	V. Hard Drilling. -Refusal @ 48' -1455 h Sample
				TOB 48.5'						
55										
60										
65										
70										
75										
80										

Comments:

Geologist Signature _____

[illegible]



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC397	980491
MTR CODE SITE NAME:	92991	Huerfanito Unit #66
SAMPLE DATE TIME (Hrs):	6/16/98	1455
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	6/29/98	7/1/98
DATE OF BTEX EXT. ANAL.:	6/18/98	6/18/98
TYPE DESCRIPTION:	VG	SOIL

Field Remarks: 48-48.5

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	142	PPM				
PERCENT SOLIDS	90.0	%				

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

The Surrogate Recovery was at 95.3 % for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By:

John L. Linder

Date:

7/20/98

GAS CHROMATOGRAPHY RESULTS

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

AEN I.D.: 806384

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	
01	980490	NON-AQ	6/16/98	6/29/98	6/30/98	1
02	980491	NON-AQ	6/16/98	6/29/98	7/1/98	1
PARAMETER		DET. LIMIT	UNITS	01	02	
FUEL HYDROCARBONS, C6-C10		10	MG/KG	< 10	< 10	
FUEL HYDROCARBONS, C10-C22		5.0	MG/KG	< 5.0	< 5.0	
FUEL HYDROCARBONS, C22-C36		5.0	MG/KG	< 5.0	< 5.0	
CALCULATED SUM:						
SURROGATE:						
O-TERPHENYL (%)				90	89	
SURROGATE LIMITS		(66 - 151)				

CHEMIST NOTES:

N/A

**GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK**

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)		
BLANK I.D.	: 062998	AEN I.D.	: 806384
CLIENT	: EL PASO FIELD SERVICES	DATE EXTRACTED	: 6/29/98
PROJECT #	: (none)	DATE ANALYZED	: 6/29/98
PROJECT NAME	: PHASE II	SAMPLE MATRIX	: NON-AQ

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 5.0
FUEL HYDROCARBONS, C22-C36	MG/KG	< 5.0

SURROGATE:

TERPHENYL (%)		103
SURROGATE LIMITS	(80 - 151)	

CHEMIST NOTES:

N/A

THE UNIVERSITY OF CHICAGO

PLEASE FILL THIS FORM IN COMPLETELY.

1/5/98 AEN Inc.: American Environmental Network (NM), Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Mexico 87107 • (505) 344-3777 • Fax (505) 344-4413
DISTRIBUTION: White • AEL, Canary - Original

1/5/98 AEN Inc.: American Environmental Network (NM), Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Mexico 87107 • (505) 344-3777 • Fax (505) 344-4413
DISTRIBUTION: White • AEL, Canary - Original

BTEX SOIL SAMPLE WORKSHEET

File	:	980490	Date Printed	:	6/22/98
Soil Mass (g)	:	5.00	Multiplier (L/g)	:	0.00100
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):		200
Shot Volume (uL)	:	50	CAL FACTOR (Report):		0.20000

		DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L)	:	<0.5	Benzene (mg/Kg): #VALUE!	0.500
Toluene (ug/L)	:	<0.5	Toluene (mg/Kg): #VALUE!	0.500
Ethylbenzene (ug/L)	:	<0.5	Ethylbenzene (mg/Kg): #VALUE!	0.500
p & m-xylene (ug/L)	:	<1.0	p & m-xylene (mg/Kg): #VALUE!	1.000
o-xylene (ug/L)	:	<0.5	o-xylene (mg/Kg): #VALUE!	0.500
			Total xylenes (mg/Kg): #VALUE!	1.500
			Total BTEX (mg/Kg): #VALUE!	