

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: Meridian Oil Inc Telephone

Address: 30-039-22234

Facility Or: San Juan 28-6 #71A, Meter 93179

Well Name

Location: Unit or Qtr/Qtr Sec N 10 Sec 13 T 28 R 6 County Rio Arriba

Pit Type: Separator Dehydrator X Other

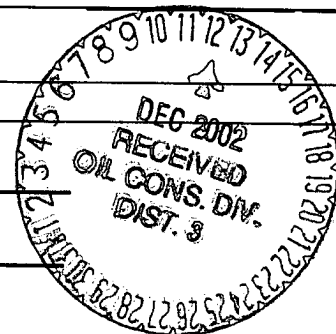
Land Type: BLM , State , Fee X Other

Pit Location: Pit dimensions: length 26', width 22', depth 3'
(Attach diagram)

Reference: wellhead X, other

Footage from reference: 69'

Direction from reference: 358 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>20</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>10</u>

RANKING SCORE (TOTAL POINTS): 40

Date Remediation Started: 03/27/95 Date completed: 03/27/95

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: Some line markers. Dug a test hole to 3', took sample. Soil looked gray with H.C. odor. Hit sandstone at 3'. 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 3'

Sample Date 03/27/95 Sample time 15:10

Sample Results

Benzene(ppm) Not reported

Total BTEX(ppm) Not reported

Field headspace(ppm) 384

TPH 2690

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

San Juan 28-6 #71A
Meter/Line ID 93179

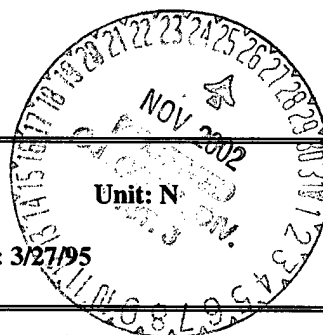
SITE DETAILS

Legals - Twn: 28N
NMOCD Hazard Ranking: 40
Operator: Meridian Oil Inc.

Rng: 6W

Sec: 13
Land Type: Fee
Pit Closure Date: 3/27/95

Unit: N



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 3 feet (ft) below ground surface (bgs) where sandstone was encountered and 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 384 ppm; laboratory analysis indicated a TPH concentration of 2,690 mg/kg. The headspace analysis and TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score of 40.

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. The site is approximately 950 feet from an unnamed well.

A Phase II boring was completed to refusal at 12 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 10-11 ft bgs. Headspace analysis indicated an organic vapor content of 65 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, TPH, and BTEX 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 seven 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 12 ft bgs.
- While there is a well 950 ft from the pit, Benzene, total BTEX, and TPH concentrations in the soil sample collected at the base of the Phase II soil boring at 12 ft bgs were non-detect, indicating that no significant downward constituent migration is occurring.
- Bedrock refusal was encountered at 3 feet bgs making further excavation impractical.



PIT CLOSURE REQUEST

- Residual hydrocarbons, if any, in the soil will 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: 93179 Location: SAN JUAN 28-6 UNIT #71A
 Operator #: _____ Operator Name: BURINGTON RES P/L District: _____
 Coordinates: Letter: O Section 13 Township: 28 Range: 6
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator X Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 4.30.98 Area: 10 Run: 91

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps) **Land Type:**

Inside <input type="checkbox"/> (1)	BLM <input type="checkbox"/> (1)	
Outside <input checked="" type="checkbox"/> (2)		State <input type="checkbox"/> (2)
		Fee <input checked="" type="checkbox"/> (3)
		Indian _____

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?

WELL APPROXIMATELY 950' AWAY ☒ (1) YES (20 points) ☐ (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 checked="" type="checkbox"/> (2)
Greater Than 1000 Ft (0 points)	<input type="checkbox"/> (3)

Name of Surface Water Body FOURMILE CANYON

(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: 40 POINTS

REMARKS

Remarks : Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. LOCATION IS AT THE BASE OF A BLUFF ON A SMALL RISE ABOVE FOURMILE CANYON. THERE IS A WELL APPROXIMATELY 950' AWAY.

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 93179 Location: San Juan 28-6 #71A
 Operator #: _____ Operator Name MERIDIAN P/L District: Bloomfield
 Coordinates: Letter: N Section 13 Township: 28 Range: 06
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator ☒ Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 3/8/95 Area: 10 Run: 91

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps) Inside ☐ (1) Outside ☒ (2)

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 Four Mile 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: 40 POINTS

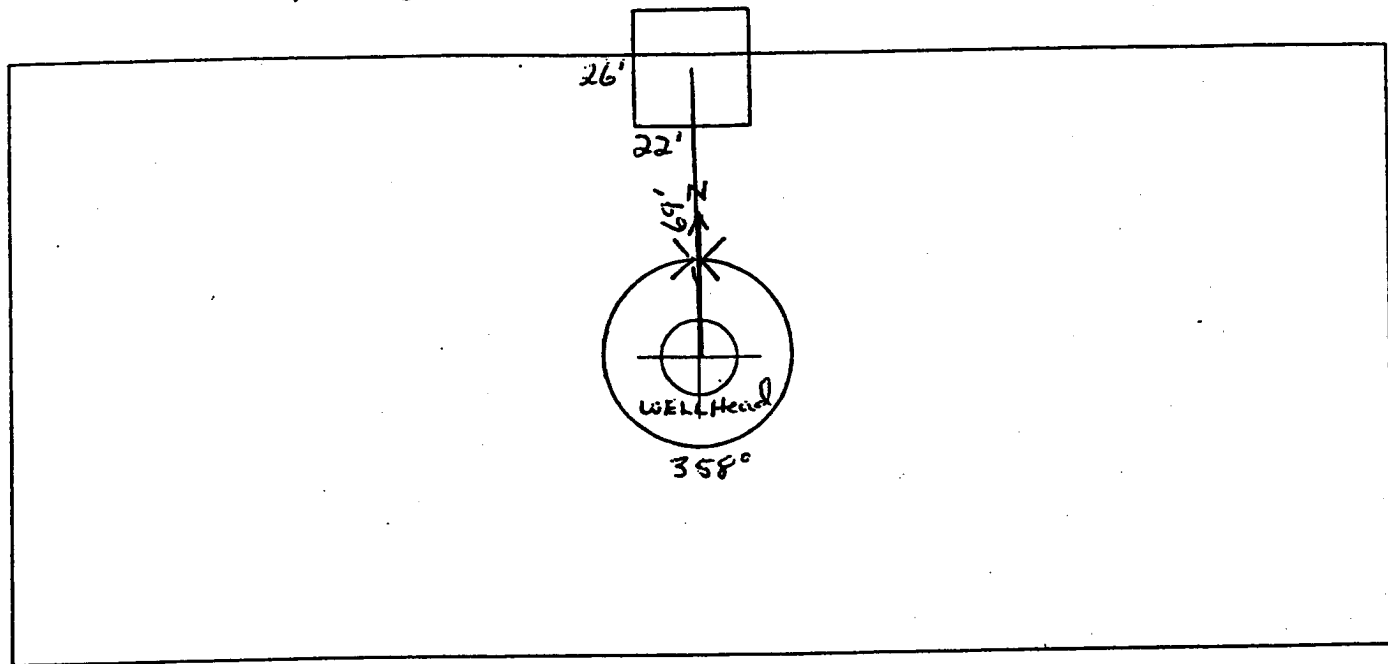
REMARKS

Remarks : Redline shows outside Topo shows outside 1/2
2 pits on loc. One has Dehy in service with liner, Old
one has Dehy in service with liner, Old

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 358° Footage from Wellhead 69'
b) Length : 26' Width : 22' Depth : 3'



REMARKS

Remarks :

Photos: 1040

Completed By:

James J. Ferraro
Signature

3/8/95
Date



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:

KP 469

93179

3-27-95

N/A

3/28/95

N/A

VG

946763

N/A

151D

3/28/95

N/A

Light brown sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	2690 2695	MSX 3/28/95 MG/KG			2.04	28
HEADSPACE PID	384	PPM				
PERCENT SOLIDS	89.0	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Anal. By:

JS

Date:

4/6/95

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 93179 Location: SAN JUAN 28-6 # 71A
 Coordinates: Letter: N Section 13 Township: 28 Range: 06
 Or Latitude _____ Longitude _____
 Date Started : 3-27-95 Run: 10 91

FIELD OBSERVATIONS

Sample Number(s): KP 469
 Sample Depth: 3' Feet
 Final PID Reading 384 PID Reading Depth 3' 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: 3-27-95 Pit Closed By: B.E.T

REMARKS

Remarks : Some line markers. dug a test hole to 3' took
samples. Soil looked gray. with H.C odor. Hit sand stone closed Pit.
Hit sand stone at 3'

Signature of Specialist: Kelly Padilla



Page _____ of _____

White - Testing Laboratory Canary - EPNG Lab Pink - Field Sampler

RECORD OF SUBSURFACE EXPLORATION

HILIP SERVICES CORP.

10000 E. Road
New Mexico 87401
(505) 326-2382 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 SAN JUAN 2E-6 #71A 9.3179

levation
Borehole Location LTR: N S: 13 T: 28 R: 6
MWL Depth NA
Drilled By K. PADILLA
Well Logged By H. BRADBURY
Date Started 11/17/98
Date Completed 11/17/98

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 3'						BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
5	1	5-6	12	LT BR SILTSTONE, LOW CEMENTATION, DRY			0	0	620 765	1048 hrs
10	2	10-11	12	LT BR SILTSTONE, LOW-MDD CEMENTATION, DRY			0	3	122 65	1102 hrs
15				TOB 12'						
20										
25										
30										
35										
40										

Notes: HAB73 (10-11') SENT TO LAB FOR TPH BTEX GLW NOT
ENCOUNTERED BH GROUTED TO SURFACE
AUGER REFUSED AT 12'
Geologist Signature Holly Bradbury



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	HAB73	980822
MTR CODE SITE NAME:	93179	San Juan 28-6 #71A
SAMPLE DATE TIME (Hrs):	11/17/98	1102
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	11/23/98	11/27/98
DATE OF BTEX EXT. ANAL.:	11/19/98	11/20/98
TYPE DESCRIPTION:	VG	SOIL

Field Remarks: 10-11'

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	65	PPM				
PERCENT SOLIDS	95.4	%				

-- TPH is by EPA Method 8015 and BTEX is by EPA Method 8020 --

Surrogate Recovery was at 99.1 % for this sample All QA/QC was acceptable.
ative:

DF = Dilution Factor Used

Approved By:

John Fadden

Date:

12/21/98

GAS CHROMATOGRAPHY RESULTS

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

PINNACLE I.D.: 811074

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	980817	NON-AQ	11/16/98	11/23/98	11/26/98	1
02	980818	NON-AQ	11/16/98	11/23/98	11/26/98	1
03	980819	NON-AQ	11/16/98	11/23/98	11/26/98	1
PARAMETER		DET. LIMIT	UNITS	01	02	03
FUEL HYDROCARBONS, C6-C10		10	MG/KG	45	< 10	12
FUEL HYDROCARBONS, C10-C22		5.0	MG/KG	400	< 5.0	52
FUEL HYDROCARBONS, C22-C36		5.0	MG/KG	150	< 5.0	14
CALCULATED SUM:				595		78
SURROGATE:						
O-TERPHENYL (%)				118	86	84
SURROGATE LIMITS		(66 - 151)				

CHEMIST NOTES:
N/A

PINNACLE
LABORATORIES

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.: 811074

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	FACTOR
04	980820	NON-AQ	11/16/98	11/23/98	11/26/98	1
05	980821	NON-AQ	11/16/98	11/23/98	11/26/98	1
06	980822	NON-AQ	11/17/98	11/23/98	11/27/98	1
PARAMETER		DET. LIMIT	UNITS	04	05	06
FUEL HYDROCARBONS, C6-C10		10	MG/KG	240	15	< 10
FUEL HYDROCARBONS, C10-C22		5.0	MG/KG	130	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36		5.0	MG/KG	40	< 5.0	< 5.0
CALCULATED SUM:				410	15.0	
SURROGATE:						
O-TERPHENYL (%)				87	90	84
SURROGATE LIMITS		(66 - 151)				

CHEMIST NOTES:
N/A

BTEX SOIL SAMPLE WORKSHEET

File	:	980822	Date Printed	:	11/23/98
Soil Mass (g)	:	5.06	Multiplier (L/g)	:	0.00099
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):		200
Shot Volume (uL)	:	50	CAL FACTOR (Report):		0.19763

	DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L) : <0.5	Benzene (mg/Kg):	#VALUE!	0.494
Toluene (ug/L) : <0.5	Toluene (mg/Kg):	#VALUE!	0.494
Ethylbenzene (ug/L) : <0.5	Ethylbenzene (mg/Kg):	#VALUE!	0.494
p & m-xylene (ug/L) : <1.0	p & m-xylene (mg/Kg):	#VALUE!	0.988
o-xylene (ug/L) : <0.5	o-xylene (mg/Kg):	#VALUE!	0.494
	Total xylenes (mg/Kg):	#VALUE!	1.482
	Total BTEX (mg/Kg):	#VALUE!	

CHAIN OF CUSTODY RECORD

12-28-98 Anal.
12-29-98 Chem.
12-29-98 Spec.

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10.

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