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

Rock determined Plume encountered bedrock

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

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

30-045-10488

Operator: Dugan Production (*Site Closed by El Paso Field Services*) Telephone: _____

Address: _____

Facility Or: Paul Hall #1, Meter 73284
Well Name

Location: Unit or Qtr/Qtr Sec N Sec 20 T 31 R 13 County San Juan

Pit Type: Separator _____ Dehydrator _____ Other Drip

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

Pit Location: Pit dimensions: length 14', width 13', depth 1'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 79'

Direction from reference: 341 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 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (0 points) 10
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) 0
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches.)	Less than 200 feet 200 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) (0 points) 0

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 02/06/95 Date completed: 02/06/95

Remediation Method: (Check all appropriate sections.)
Excavation _____ Approx. cubic yards _____
Landfarmed _____ Insitu Bioremediation _____
Other Backfill Pit Without Excavation

Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)
Onsite N/A Offsite N/A

General Description of Remedial Action: Arrived, dug sample hole. Hit rock 4'. Soil grayish brown, strong hydro-carbon 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 4'
Sample Date 02/06/95 Sample time 12:30

Sample Results

Benzene(ppm) Not reported

Total BTEX(ppm) Not reported

Field headspace(ppm) 276

TPH 2410

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 4/23/03

Signature Scott T. Pope

Printed Name and Title Scott Pope, Senior Environmental Scientist

elpaso

PIT CLOSURE REQUEST

Paul Hall #1
Meter/Line ID 73284

SITE DETAILS

Legals - Twn: 31N	**Rng: 13W**	**Sec: 20**	**Unit: N**
NMOCD Hazard Ranking: 10		**Land Type: BLM**	
Operator: Dugan Production Corp.		**Pit Closure Date: 2/6/95**	

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 4 feet (ft) below ground surface (bgs) where bedrock was encountered 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 276 ppm, laboratory analysis indicated a TPH concentration of 2,410 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 borehole was completed with auger refusal (sandstone) at 15-16 ft bgs. A soil sample was collected at 15-16 ft bgs for field headspace and laboratory analysis for TPH and total BTEX. No groundwater was encountered in the soil boring. Headspace analysis indicated an organic vapor content of 232 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of 3.82 mg/kg, and a TPH concentration of 68 mg/kg. The benzene, total BTEX, and TPH concentrations were below recommended remediation levels for the Hazard Ranking Score of 10.

No Phase III activities were performed.

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 8 years.
- Bedrock was encountered at 4 feet bgs making additional excavation impractical and further downward migration of contaminants unlikely.
- 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., direct contact exposure pathways are unlikely to be completed.
- Auger refusal in sandstone was encountered at 16 feet bgs.
- Groundwater was not encountered in the soil boring at 16 ft bgs; local geologic features indicate the depth to groundwater is greater than 50 ft bgs.

REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 73284 Location: Paul Hall #1

Operator #: _____ Operator Name: _____ P/L District: _____

Coordinates: Letter: N Section 20 Township: 31 Range: 13

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 ☐ (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 _____

(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 Barker Arroyo.

(assess) 12/16/97

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 73284 Location: PAUL HALL #1
Operator #: _____ Operator Name: DUGAN PROD. P/L District: KUTZ
Coordinates: Letter: N Section 20 Township: 31 Range: 13
Or Latitude _____ Longitude _____
Pit Type: Dehydrator X Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 1.4.95 Area: 02 Run: 42

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 _____
(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: 10 **POINTS**

REMARKS

Remarks : REDLINE SHOWS INSIDE BUT TOPO SHOWS LOCATION OUTSIDE V-2. 2 PITS ON LOCATION. DENY PIT BELONGS TO EPNG. WILL CLOSE PIT.

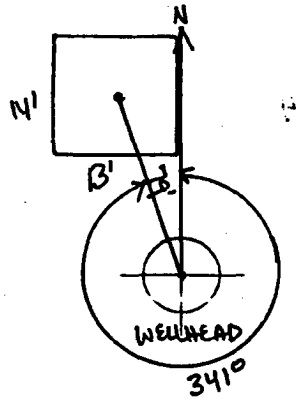
PUSH IN

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 341° Footage from Wellhead 79'

b) Length : 14' Width : 13' Depth : 1'



REMARKS

Remarks :

PHOTOS - 1215

Completed By:

Robert Thompson
Signature

1.4.95
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 73284 Location: Paul Hall #1

Coordinates: Letter: N Section 20 Township: 31 Range: 13

Or Latitude _____ Longitude _____

Date Started : 2-6-95 Run: 02 42

FIELD OBSERVATIONS

Sample Number(s): MK 354 _____ _____ _____

Sample Depth: 4' Feet

Final PID Reading 276 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: 2-6-95 Pit Closed By: BEI

REMARKS

Remarks : Arrived Dug Sample Hole, Hit Rock 4'
Soil Grayish Brown Strong Hydrocarbon odor

Signature of Specialist: Morgan Killion

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH- 1
Well # NA
Page 1 of 1

HILIP SERVICES CORP.
300 Monroe Road
ar[redacted] New Mexico 87401
50[redacted]262 FAX (505) 326-2388

Project Number 19643 Phase 1001.77
Project Name EPFS PITS >10
Project Location PAUL HALL #1 73284

Elevation
Borehole Location LTR: N S: 20 T: 31 R: 13
GWL Depth NA
Drilled By K. PADILLA
Well Logged By H. BRADBURY
Date Started 9/8/98
Date Completed 9/8/98

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 BZ	BH	S/HS	Drilling Conditions & Blow Counts
0				EXCAVATION SAMPLE COLLECTED AT 4'						BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
10	1	10-11	6	LT BR SANDSTONE, FINE SAND, LOW CEMENTED, DRY			0	0	58 44	1450 HRS
15	2	15-16		DK BR SILTSTONE. LOW-MOD CEMENTATION, DRY			0	0	218 232	~~1506~~ HRS 1509 hard drilling
20	~~3~~	~~17-20~~		TOB 16'						
25										
30										
35										
40										

Comments: HAB25 SENT TO LAB FOR TPH, BTEX GW NOT ENCOUNTERED
BH GROUTED TO SURFACE AUGER REFUSAL AT 15-16

Geologist Signature H. Bradbury

8/18/98\Drillog

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	HAB25	980627
MTR CODE | SITE NAME:	73284	Paul Hall #1
SAMPLE DATE | TIME (Hrs):	9/8/98	1509
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	9/15/98	9/17/98
DATE OF BTEX EXT. | ANAL.:	9/14/98	9/14/98
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	0.51	MG/KG				
ETHYL BENZENE	<0.5	MG/KG				
TOTAL XYLENES	3.31	MG/KG				
TOTAL BTEX	3.82	MG/KG				
TPH (MOD.8015)	68	MG/KG				
HEADSPACE PID	232	PPM				
PERCENT SOLIDS	88.4	%				

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

The Surrogate Recovery was at 96.7 % for this sample All QA/QC was acceptable.

ive:

DF = Dilution Factor Used

Approved By: John Stubblefield Date: 10/1/98