

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
Detonated
plume
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

30-045-21695

Operator: Koch Exploration (Site Closed by El Paso Field Services) Telephone: _____

Address: _____

Facility Or: Lambe #3A, Meter 89237

Well Name _____

Location: Unit or Qtr/Qtr Sec P Sec 21 T 31 R 10 County San Juan

Pit Type: Separator _____ Dehydrator _____ Other Drip

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

Pit Location: Pit dimensions: length 26', width 26', depth 4'

(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 104'

Direction from reference: 109 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: 09/30/94 Date completed: 09/30/94

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: Excavated test hole to 10', hit hard shale. Took PID sample, closed pit.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit: Sample location Four walls and center of pit composite
Closure Sampling:
(if multiple samples,
attach sample results
and diagram of sample
locations and depths) Sample depth 10'

Sample Date 09/30/94 Sample time 09:00

Sample Results

Benzene(ppm) Not reported

Total BTEX(ppm) Not reported

Field headspace(ppm) 279

TPH 5050

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



PIT CLOSURE REQUEST

**Lambe #3-A
Meter/Line ID 89237**

SITE DETAILS

Legals - Twn: 31N

Rng: 10W

Sec: 21

Unit: P

NMOCD Hazard Ranking: 10

Land Type: BLM

Operator: Koch Exploration Company

Pit Closure Date: 9/30/94

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 10 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 279 ppm; laboratory analysis indicated a TPH concentration of 5,050 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 auger refusal (bedrock) at 20 ft bgs. A soil sample was collected at 19-20 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 204 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of 7.76 mg/kg, and a TPH concentration of 2,400 mg/kg. The benzene and total BTEX concentrations were below recommended remediation levels for the Hazard Ranking Score of 10.

No Phase III activities were conducted.

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 10 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.
- Groundwater was not encountered in the soil boring at 20 ft bgs; local geologic features indicate the depth to groundwater is greater than 50 ft bgs.

REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 89237 Location: Lambe #3A
 Operator #: _____ Operator Name: _____ P/L District: _____
 Coordinates: Letter: P Section 21 Township: 31 Range: 10
 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:

☐ (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 Hart Canyon

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 89-237 Location: Lambe #3-A
 Operator #: 5540 Operator Name: Koch Exploration P/L District: Aztec
 Coordinates: Letter: P Section 21 Township: 31 Range: 10
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
 Site Assessment Date: 8/29/94 Area: 04 Run: 52

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 Hart Canyon

(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

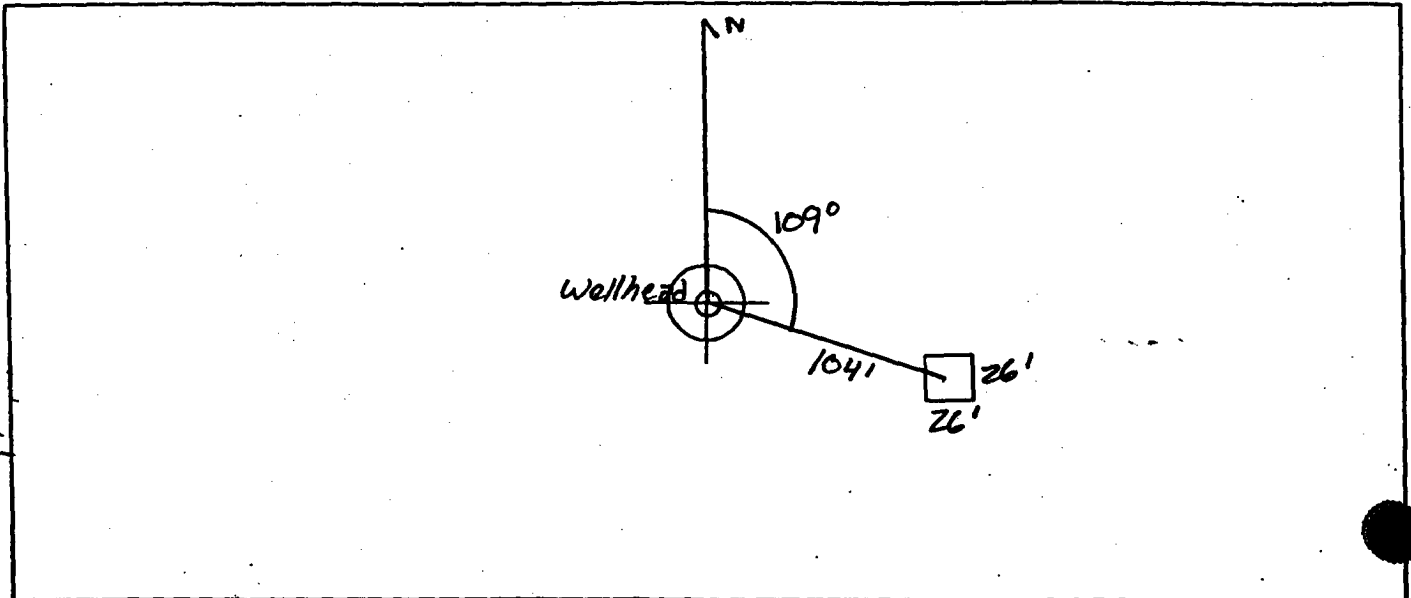
Remarks : Redline Book - Inside Vulnerable Zone Type - Outside
Four pits, location drip pit is dry, will close one pit.

PUSH IN

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 109° Footage from Wellhead 104'
b) Length : 26' Width : 26' Depth : 4'



REMARKS

Remarks :

Pictures @ 1005 (5-8, Roll 12)
Dump Truck

Completed By:

Mark Valley
Signature

8/29/94
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 89237 Location: Lambe #3-A
 Coordinates: Letter: P Section 21 Township: 31 Range: 10
 Or Latitude _____ Longitude _____
 Date Started : 9/30/94 Run: 04 52

FIELD OBSERVATIONS

Sample Number(s): KO 296
 Sample Depth: 10' Feet
 Final PID Reading 279 ppm PID Reading Depth 10' 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: 9/30/94 Pit Closed By: BEI

REMARKS

Remarks : Excavated test hole to 10', hit hard shale, took PID sample, closed pit.

Signature of Specialist: Huy Dean

RECORD OF SUBSURFACE EXPLORATION

PHILIP SERVICES CORP.

4080 Monroe Road

Farmington, New Mexico 87401

326-2262 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 LAMBE #3-A 89-237

Elevation _____
Borehole Location LTR: P S:21 T:31 R:10
GWL Depth NA
Drilled By K. PADILLA
Well Logged By H. BRADBURY
Date Started 9/4/98
Date Completed 9/4/98

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/H | | | Drilling Conditions & Blow Counts |
|-----------------|------------------|--------------------|--|---|----------------|--|---|-----|------------|--|
| 0 | | | | | | | | | | BZ=Breathing Zone BH=Borehole S/H=Sample/Headspace |
| 5 | | | | | | | | | | |
| 10 | | | | EXCAVATION SAMPLE collected at 10' | | | | | | |
| 15 | 1 | 15-16 | 6 | LT GR SANDSTONE, FINE SAND, MOD CEMENTED, dry | | | 0 | 244 | 184 | 1429 hrs |
| 20 | 2 | 19-20 | | LT GR SANDSTONE, FINE SAND, MOD CEMENTED, dry TOB 20' | | | 1 | 172 | 251 204 | 1454 hrs |
| 25 | | | | | | | | | | VERY HARD drilling |
| 30 | | | | | | | | | | |
| 35 | | | | | | | | | | |
| 40 | | | | | | | | | | |

Comments:

HAB24 SENT to lab for BTEX, TPH, GW NOT ENCOUNTERED
Auger Refused at 19-20' BH GROVED to SURFACE

Geologist Signature

H. Bradbury

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

SAMPLE IDENTIFICATION

| | | |
|----------------------------|-------------------|-----------|
| | Field ID | Lab ID |
| SAMPLE NUMBER: | HAB24-a | 980626 |
| MTR CODE SITE NAME: | 89237 | Lambe #3A |
| SAMPLE DATE TIME (Hrs): | 9/4/98 | 1454 |
| 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: 19-20'

RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|----------------|--------|-------|------------|---|------|-------|
| | | | DF | Q | M(g) | V(ml) |
| BENZENE | <0.5 | MG/KG | | | | |
| TOLUENE | 1.14 | MG/KG | | | | |
| ETHYL BENZENE | <0.5 | MG/KG | | | | |
| TOTAL XYLENES | 6.62 | MG/KG | | | | |
| TOTAL BTEX | 7.76 | MG/KG | | | | |
| TPH (MOD.8015) | 2,400 | MG/KG | | | | |
| HEADSPACE PID | 204 | PPM | | | | |
| PERCENT SOLIDS | 93.3 | % | | | | |

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

The Surrogate Recovery was at 95.4 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Savolter

Date: 10/1/98