

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
Bedrock

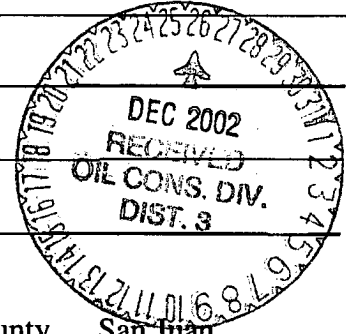
Submit 1 copy to
appropriate
District Office
and 1 copy to
the Santa Fe Office

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

30-045-08777

Operator: Cross Timbers by EPFS Telephone _____
Address: _____
Facility Or: State Gas Com U#1, Meter 72047
Well Name _____
Location: Unit or Qtr/Qtr Sec H Sec 2 T 29 R 10 County San Juan
Pit Type: Separator _____ Dehydrator _____ Other Drip
Land Type: BLM _____, State X, Fee _____ Other _____



Pit Location: Pit dimensions: length 19', width 16', depth 1'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 64'

Direction from reference: 30 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: 06/09/94 Date completed: 06/09/94

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: Landmarkers on site. Hit sandstone at 10', Gray soil 0-10'

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 10'

Sample Date 06/09/94 Sample time 11:45

Sample Results

Benzene(ppm) Not reported.

Total BTEX(ppm) Not reported.

Field headspace(ppm) 235

TPH 4190

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

State Gas Com U #1
Meter/Line ID 72047

SITE DETAILS

Legals - Twn: 29N	Rng: 10W	Sec: 2	Unit: H
NMOCD Hazard Ranking: 10		Land Type: STATE	
Operator: Crosstimbers		Pit Closure Date: 6/9/94	

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 sandstone 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 235 ppm; laboratory analysis showed a TPH concentration of 4,190 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 to 21 ft bgs where hard drilling was encountered. No groundwater was encountered in the soil boring. One laboratory sample was collected at 20-21 ft bgs. Headspace analysis indicated an organic vapor content of 22 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, total BTEX and TPH concentrations were below recommended remediation levels for the Hazard Ranking Score.

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 eight years.
- Sandstone bedrock was encountered at 10 feet bgs making further vertical migration 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., 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 21 ft bgs; local geologic features indicate the depth to groundwater is greater than 50 ft bgs.



PIT CLOSURE REQUEST

- Benzene, total BTEX, and TPH concentrations in the soil sample collected at the base of the Phase II soil boring at 21 ft bgs were non-detect, indicating that no significant downward constituent migration is occurring.
- Residual hydrocarbons, if any, 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	<p>Meter: <u>72047</u> Location: <u>STATE GAS COM U#1</u></p> <p>Operator #: _____ Operator Name: <u>CROSS TIMBERS</u> P/L District: _____</p> <p>Coordinates: Letter: <u>H</u> Section <u>2</u> Township: <u>29</u> Range: <u>10</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>4.27.98</u> Area: <u>10</u> Run: <u>73</u></p>																																																																																				
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <table style="width: 100%;"> <tr> <td style="width: 30%;">Inside</td> <td style="width: 10%;"><input type="checkbox"/></td> <td style="width: 10%;">(1)</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>Outside</td> <td><input checked="" type="checkbox"/></td> <td>(2)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>Land Type:</p> <table style="width: 100%;"> <tr> <td style="width: 30%;">BLM</td> <td style="width: 10%;"><input type="checkbox"/></td> <td style="width: 10%;">(1)</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>State</td> <td><input checked="" type="checkbox"/></td> <td>(2)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Fee</td> <td><input type="checkbox"/></td> <td>(3)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Indian</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>Depth to Groundwater</p> <table style="width: 100%;"> <tr> <td style="width: 50%;">Less Than 50 Feet (20 points)</td> <td style="width: 10%;"><input type="checkbox"/></td> <td style="width: 10%;">(1)</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>50 Ft to 99 Ft (10 points)</td> <td><input checked="" type="checkbox"/></td> <td>(2)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Greater Than 100 Ft (0 points)</td> <td><input type="checkbox"/></td> <td>(3)</td> <td></td> <td></td> <td></td> </tr> </table> <p>Wellhead Protection Area</p> <p>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?</p> <p style="text-align: center;"><input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p>Horizontal Distance to Surface Water Body</p> <table style="width: 100%;"> <tr> <td style="width: 50%;">Less Than 200 Ft (20 points)</td> <td style="width: 10%;"><input type="checkbox"/></td> <td style="width: 10%;">(1)</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>200 Ft to 1000 Ft (10 points)</td> <td><input type="checkbox"/></td> <td>(2)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Greater Than 1000 Ft (0 points)</td> <td><input checked="" type="checkbox"/></td> <td>(3)</td> <td></td> <td></td> <td></td> </tr> </table> <p>Name of Surface Water Body _____</p> <p>(Surface Water Body: Perennial Rivers, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream</p> <table style="width: 100%;"> <tr> <td style="width: 50%;"><input type="checkbox"/> (1) < 100'</td> <td style="width: 50%;">(Navajo Pits Only)</td> </tr> <tr> <td><input type="checkbox"/> (2) > 100'</td> <td></td> </tr> </table> <p>TOTAL HAZARD RANKING SCORE: <u>10</u> POINTS</p>	Inside	<input type="checkbox"/>	(1)						Outside	<input checked="" type="checkbox"/>	(2)						BLM	<input type="checkbox"/>	(1)					State	<input checked="" type="checkbox"/>	(2)					Fee	<input type="checkbox"/>	(3)					Indian							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)				Less Than 200 Ft (20 points)	<input type="checkbox"/>	(1)				200 Ft to 1000 Ft (10 points)	<input type="checkbox"/>	(2)				Greater Than 1000 Ft (0 points)	<input checked="" type="checkbox"/>	(3)				<input type="checkbox"/> (1) < 100'	(Navajo Pits Only)	<input type="checkbox"/> (2) > 100'	
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REMARKS	<p>Remarks : <u>Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. LOCATION IS IN A REMOTE AREA UP ON A HILL.</u></p>																																																																																				



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

VW 184

945416

MTR CODE | SITE NAME:

72047

N/A

SAMPLE DATE | TIME (Hrs):

6-9-94

1145

SAMPLED BY:

N/A

DATE OF TPH EXT. | ANAL.:

6/10/94

6/10/94

DATE OF BTEX EXT. | ANAL.:

N/A

N/A

TYPE | DESCRIPTION:

VG

Grey sand/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)	4190	MG/KG			2.09	28
HEADSPACE PID	235	PPM				
PERCENT SOLIDS	98.286.0	%				

6/12/94

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

Recovery was at
irradiance:

N/A

% for this sample All QA/QC was acceptable.

= Dilution Factor Used

Approved By:

John Lard

Date:

6/16/94

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 72047 Location: State Gas Com U #1
 Coordinates: Letter: H Section 2 Township: 29 Range: 10
 Or Latitude _____ Longitude _____
 Date Started : 6-9-94 Area: 10 Run: 73

FIELD OBSERVATIONS

Sample Number(s): VW184
 Sample Depth: 10' Feet
 Final PID Reading 235 PID Reading Depth 10' Feet
 Yes No
 Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet

CLOSURE

Remediation Method :
 Excavation ☐ (1) Approx. Cubic Yards _____
 Onsite Bioremediation ☐ (2)
 Backfill Pit Without Excavation ☒ (3)
 Soil Disposition:
 Envirotech ☐ (1) ☐ (3) Tierra
 Other Facility ☐ (2) Name: _____
 Pit Closure Date: 6-9-94 Pit Closed By: BEI

REMARKS

Remarks : line markers on site, hit sandstone at 10' Grey soil 0-10'

Signature of Specialist: Dale Wilson

RECORD OF SUBSURFACE EXPLORATION

PHILIP SERVICES CORP.

4000 Monroe Road
Farmington, New Mexico 87401
(505) 325-2388 FAX (505) 325-2388

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

Project Number 19643 Phase 1001.77
Project Name EPFS PITS >10
Project Location State Gas Com U #1 72047

Elevation _____
Borehole Location LTR: H S: Z T: 21 R: 10
GWL Depth NA
Drilled By K. PADILLA
Well Logged By H. BRADBURY
Date Started 7/10/98
Date Completed 9/10/98

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 10'						BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
5										
10										
15	1	15-16	12	LT BR SANDSTONE, FINE SAND, HARD CEMENTATION, dry			0	30	26 92	0909 hrs hard drilling
20	2	20-21	6	LT GR SANDSTONE, FINE SAND, MOD CEMENTATION, dry			0	1	8 22	0926 hrs
25				TOB 21						
30										
35										
40										

Comments: HAB29 20-21' SENT TO LAB FOR TPH. BTEX. GW NOT
ENCOUNTERED BH GROUTED TO SURFACE

Geologist Signature

H. Bradbury

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

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	HAB29	980638
MTR CODE SITE NAME:	72047	State Gas Com U 31
SAMPLE DATE TIME (Hrs):	9/10/98	0926
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: 20-21'

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	22	PPM				
PERCENT SOLIDS	93.9	%				

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

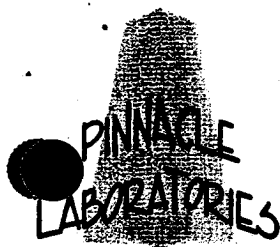
The Surrogate Recovery was at 101.7 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John L. Leland

Date: 10/1/98



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

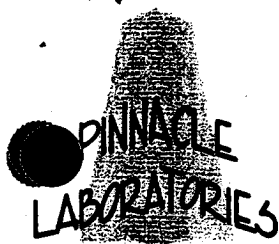
PINNACLE I.D.: 809038

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
13	980636	NON-AQ	9/9/98	9/15/98	9/17/98	10
14	980637	NON-AQ	9/9/98	9/15/98	9/17/98	10
15	980638	NON-AQ	9/10/98	9/15/98	9/17/98	1

PARAMETER	DET. LIMIT	UNITS	13	14	15
FUEL HYDROCARBONS, C6-C10	10	MG/KG	10000	170	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	1200	1600	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 50	380	< 5.0
CALCULATED SUM:			11200	2150	

SURROGATE:
O-TERPHENYL (%) 122 131 87
SURROGATE LIMITS (66 - 151)

CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

REAGENT BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)		
BLANK I.D.	: 091598	PINNACLE I.D.	: 809038
CLIENT	: EL PASO FIELD SERVICES	DATE EXTRACTED	: 9/15/98
PROJECT #	: (none)	DATE ANALYZED	: 9/16/98
PROJECT NAME	: PHASE II DRILLING	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:

CHLOROPHENYL (%)

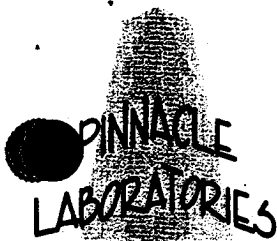
95

SURROGATE LIMITS (80 - 151)

CHEMIST NOTES:

N/A

Accepted
9-22-98
P.S.



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
MSMSD # : 809038-08
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : PHASE II DRILLING

PINNACLE I.D. : 809038
DATE EXTRACTED : 9/15/98
DATE ANALYZED : 9/16/98
SAMPLE MATRIX : NON-AQ
UNITS : MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<5.0	100	110	110	106	106	4	(56 - 148)	20

CHEMIST NOTES:

N

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Acceptable
JR
7/29/98