

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

OK
why did
drill

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: Amoco Telephone: _____

Address: 30-039-07124

Facility Or: San Juan 28-7 Unit #86 (PC), Meter 72267

Well Name _____

Location: Unit or Qtr/Qtr Sec K Sec 7 T 27 R 7 County Rio Arriba

Pit Type: Separator _____ Dehydrator _____ Other Drip

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

Pit Location: Pit dimensions: length 17', width 16', depth 3'

(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 130'

Direction from reference: 82 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>0</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): 0

Date Remediation Started: 07/08/94 Date completed: 07/08/94

Remediation Method: Excavation X Approx. cubic yards 40
(Check all appropriate sections.) Landfarmed _____ Insitu Bioremediation _____
Other _____

Remediation Location: Onsite _____ Offsite Tierra
(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Excavated pit to 12', took PID sample, 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 12'

Sample Date 07/08/94 Sample time 11:00

Sample Results

Benzene(ppm) <0.05

Total BTEX(ppm) 1.6

Field headspace(ppm) 243

TPH 578

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

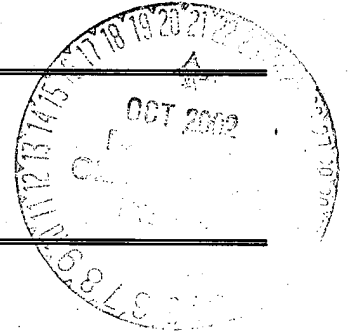
San Juan 28-7 Unit 86 (PC)
Meter/Line ID 72267

SITE DETAILS

Legals - Twn: 27N
NMOCD Hazard Ranking: 0
Operator: Amoco

Rng:7

Sec:7 Unit: K
Land Type: BLM
Pit Closure Date: 07/08/94



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.

The pit was excavated to 12 feet (ft) below ground surface (bgs) to the practical extent of the equipment, and a soil sample was collected for field headspace analysis and laboratory analysis for BTEX and TPH. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 132 ppm; laboratory analysis indicated a benzene concentration of <0.05 mg/kg, a total BTEX concentration of 1.6 mg/kg, and a TPH concentration of 578 mg/kg. The benzene and total BTEX concentrations were below their recommended remediation levels. The TPH concentration was also below its recommended remediation level for the Hazard Ranking Score of 0.

Approximately 40 cubic yards of soil were excavated and hauled to Tierra, a commercial landfarm, for treatment and disposal. The pit was backfilled with clean soil and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed to 17 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 15-17 ft bgs. Headspace analysis indicated an organic vapor content of 4 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 151 mg/kg. Benzene and total BTEX concentrations were below recommended remediation levels for the Hazard Ranking Score. The TPH concentration also was below its recommended remediation level of 5,000 mg/kg for the Hazard Ranking Score of 0.

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 six years.
- The impacted soil was excavated to the practical extent of the equipment and disposed of offsite.
- The excavation was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- Backfilling the pit with clean soil eliminated the potential for direct contact with hazardous constituents by livestock or the public; i.e., direct contact exposure pathways are incomplete.
- Groundwater was not encountered in the soil boring to 17 ft bgs.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.



PIT CLOSURE REQUEST

- TPH concentrations in the soil at 17 ft bgs were about 26% of the concentration at 12 ft bgs and below the closure standard. This strong attenuation with depth indicates that residual hydrocarbons will degrade by natural attenuation with minimal risk to the environment.
- The boring was terminated in a clay making further downward migration unlikely.

ATTACHMENTS

Field Pit Assessment Form

Revised Field Pit Assessment Form

Field Pit Remediation/Closure Form

Phase 2 Soil Boring Log

Laboratory Analytical Results

FIELD PIT SITE ASSESSMENT FORM

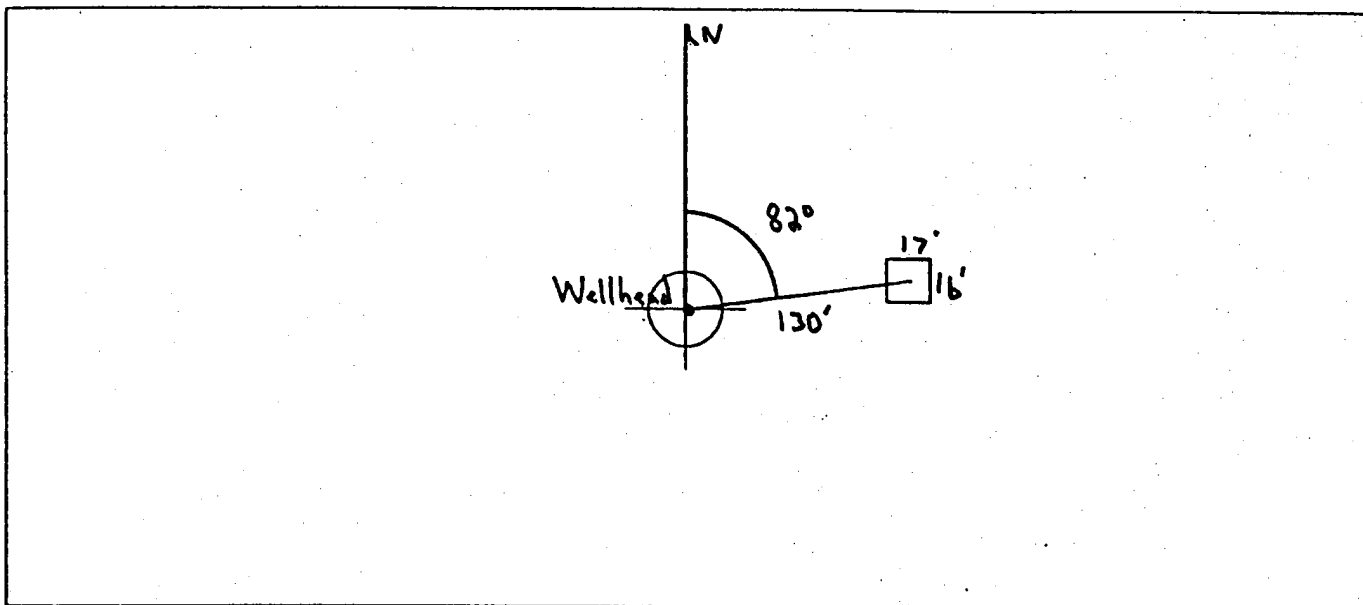
GENERAL	Meter: <u>72267</u> Location: <u>San Juan 28-7 Unit 86 (PC)</u> Operator #: <u>0203</u> Operator Name: <u>Americo</u> P/L District: <u>Blanco</u> Coordinates: Letter: <u>K</u> Section <u>7</u> Township: <u>27</u> Range: <u>7</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: <input checked="" type="checkbox"/> Line Drip: _____ Other: _____ Site Assessment Date: <u>6/4/94</u> Area: <u>03</u> Run: <u>22</u>	
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps)	
	Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)	Land Type: BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____
	Depth to Groundwater Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input 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? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)	
REMARKS	Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) <input checked="" type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3) Name of Surface Water Body <u>Smith Canyon</u> (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100' TOTAL HAZARD RANKING SCORE: <u>40</u> POINTS	
	Remarks : <u>Redline & Vols - Inside</u> <u>bpits. Close & (IMV & 1 PC) PC Dry</u>	

DIGED HALL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 82° Footage from Wellhead 130'
b) Length : 17' Width : 16' Depth : 3'



REMARKS

Remarks :

Pictures @ 1458 (22-25)Dump Truck

Completed By:

Cory Chase
Signature

6/4/94
Date

REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 72267 Location: SAN JUAN 28-7 UNIT 86 (PC)
 Operator #: _____ Operator Name: AMOCO P/L District: BLANCO
 Coordinates: Letter K Section 7 Township: 27 Range: 7
 or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
 Site Assessment Date: 6/4/94 Area: 03 Run: 32
 Revised Date: 9/25/02

SITE ASSESSMENT

NMOCOD Zone:
 (from NMOCOD Maps)

Land Type:

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

Inside ☒ (1)
 Outside ☐ (2)

Depth to Groundwater

Less than 50 Feet (20 points) ☐ (1)
 50 Feet to 99 Feet (10 Points) ☐ (2)
 Greater than 100 Feet (0 Points) ☒ (3)

Well Protection Area

Is it less than 1000 feet from well, spring or other source of fresh water extraction?
 or; Is it less than 200 feet from a private domestic water source?

☐ YES (20 Points) ☒ NO (0 Points)

Horizontal Distance to Surface Water Body

Less than 200 Feet (20 points) ☐ (1)
 200 Feet to 1000 Feet (10 Points) ☐ (2)
 Greater than 1000 Feet (0 Points) ☒ (3)

Name of Surface Water Body SANTA CANYON

(Surface Water Body: Perennial River, Stream, Creek, Irrigation Canal, Ditch, Lake, Pond)

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

TOTAL HAZARD RANKING SCORE 6 **POINTS**

REMARKS

Remarks: REVISION BASED ON RE-ASSESSMENT OF DEPTH TO
GROUNDWATER USING DELORE Software. DISTANCE TO NEAREST
SURFACE WATER BODY WAS ALSO REVISED.



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 136	945617
MTR CODE SITE NAME:	72267	N/A
SAMPLE DATE TIME (Hrs):	7-8-94	1100
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	7-12-94	7/12/94
DATE OF BTEX EXT. ANAL.:	7/14/94	7/16/94
TYPE DESCRIPTION:	VC	Brown sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.05	MG/KG	2			
TOLUENE	0.11	MG/KG	2			
ETHYL BENZENE	0.14	MG/KG	2			
TOTAL XYLENES	1.3	MG/KG	2			
TOTAL BTEX	1.6	MG/KG				
TPH (418.1)	578	MG/KG			2.16	28
HEADSPACE PID	243	PPM				
PERCENT SOLIDS	93.8	%				

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

Surrogate Recovery was at 118 % for this sample All QA/QC was acceptable.

Interpretive:

AT1 results attached. Surrogate recovery was outside AT1 QC limits due to matrix interference.

DF = Dilution Factor Used

20

8/8/94

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 407346
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	945616	NON-AQ	07/08/94	07/14/94	07/16/94	1
08	945617	NON-AQ	07/08/94	07/14/94	07/16/94	2
09	945618	NON-AQ	07/08/94	07/14/94	07/16/94	5

PARAMETER	UNITS	07	08	09
BENZENE	MG/KG	<0.025	<0.05	<0.13
TOLUENE	MG/KG	1.6	0.11	11
ETHYLBENZENE	MG/KG	<0.025	0.14	3.9
TOTAL XYLENES	MG/KG	16	1.3	63

SURROGATE:

BROMOFLUOROBENZENE (%) 103 118* 72

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>72267</u> Location: <u>SAN JUAN 28-7 Unit 86 (PC)</u></p> <p>Coordinates: Letter: <u>K</u> Section <u>7</u> Township: <u>27</u> Range: <u>7</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>7/8/94</u> Run: <u>03</u> <u>32</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>KD 136</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>243 ppm</u> PID Reading Depth <u>12'</u> Feet</p> <p style="text-align: center;">Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>40</u></p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> <input checked="" type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>7/8/94</u> Pit Closed By: <u>BEI</u></p>
REMARKS	<p>Remarks : <u>Excavated pit to 12', Took PID Sample, Closed pit.</u></p> <p>_____</p> <p>_____</p>
	<p>Signature of Specialist: <u><i>Harry Danner</i></u></p>



Page _____ of _____

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

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2282 FAX (505) 326-2388

Borehole # BH-1

Well #

Page 1 of 1

Project Name

EPNG PITS

Project Number

14509

Phase

6000 77

Project Location

San Juan 28-7 11 sec 86 72267

Elevation

Borehole Location

OK-S7-T27-R7

GWL Depth

Logged By

CM CHANCE

Drilled By

K Padilla S. Snider

Date/Time Started

9/7/95-0940

Date/Time Completed

9/7/95-1000

Well Logged By

CM Chance

Personnel On-Site

K Padilla D Roberts H Keil

Contractors On-Site

Client Personnel On-Site

Drilling Method

4 1/4" ID HSA

Air Monitoring Method

PID, CGI

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	HS	
0				Backfill to 12'						
5										
10										
15	1	15-17	4"	Br sandy CLAY, w/ sand, soft, dry			0	2	2/4	0944 hrs
20				TOB 17'						
25										
30										
35										
40										

Comments:

CMC 102(15-17') sent to lab (RTEX, TPH). BH grouted to surface
Sample bagged & iced prior to containerization

Geologist Signature

CM Chance

[illegible]



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC 102	947411
MTR CODE SITE NAME:	72267	San Juan 28-7 Unit 86
SAMPLE DATE TIME (Hrs):	09/07/95	0944
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	9-8-95	
DATE OF BTEX EXT. ANAL.:	9/8/95	9/11/95
TYPE DESCRIPTION:	V6	DARK BROWN SAND & CLAY

Field Remarks:

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 (418.1)	151	MG/KG			203	28
HEADSPACE PID	4	PPM				
PERCENT SOLIDS	92.1	%				

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

The Surrogate Recovery was at
Narrative:

83%

for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

00

9-12-95

BTEX SOIL SAMPLE WORKSHEET

File : 947411
Soil Mass (g) : 5.01
Extraction vol. (mL) : 20
Shot Volume (uL) : 100

Date Printed : 9/12/95
Multiplier (L/g) : 0.00100
DF (Analytical) : 200
DF (Report) : 0.19960

			Det. Limit
Benzene (ug/L) :	0.00	Benzene (mg/Kg):	0.000 0.499
Toluene (ug/L) :	0.00	Toluene (mg/Kg):	0.000 0.499
Ethylbenzene (ug/L) :	0.00	Ethylbenzene (mg/Kg):	0.000 0.499
p & m-xylene (ug/L) :	0.00	p & m-xylene (mg/Kg):	0.000 0.998
o-xylene (ug/L) :	0.00	o-xylene (mg/Kg):	0.000 0.499
		Total xylenes (mg/Kg):	0.000 1.497
		Total BTEX (mg/Kg):	0.000