

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
20 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
Cobbles
at 12 feet
TPH-320

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

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

30-045-07767

Operator: Amoco by EPFS Telephone _____

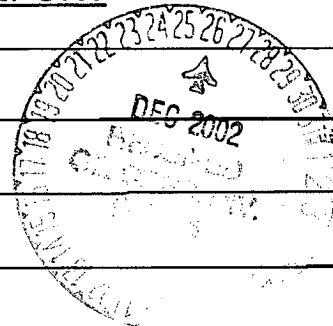
Address: _____

Facility Or: Gallegos Canyon Unit Com A#142, Meter 14039
Well Name _____

Location: Unit or Qtr/Qtr Sec O Sec 25 T 29 R 12 County San Juan

Pit Type: Separator _____ Dehydrator X Other _____

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



Pit Location: Pit dimensions: length 14', width 13', depth 2'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 231'

Direction from reference: 206 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>20</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): 20

Date Remediation Started: 04/27/94 Date completed: 04/27/94

Remediation Method: Excavation X Approx. cubic yards 30
(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: No line markers. Pit has discolored soil - black. Excavation was more
Contaminated the deeper we dug. 12' pulled sample.

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 04/27/94 Sample time 15:40

Sample Results

Benzene(ppm) <1.2

Total BTEX(ppm) 43.5

Field headspace(ppm) 341

TPH 1640

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

Gallegos Canyon Unit Com A #142 Meter/Line ID 14039

SITE DETAILS

Legals - Twn: 29N

Rng: 12W

Sec: 25

Unit: O

NMOCD Hazard Ranking: 20

Land Type: FEE

Operator: Amoco Production Company

Pit Closure Date: 4/27/94

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 12 feet (ft) below ground surface (bgs) and a soil sample was collected for field headspace and laboratory analysis for TPH and BTEX. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 341 ppm; laboratory analysis indicated a benzene concentration of <1.2 mg/kg, a total BTEX concentration of 43.5 mg/kg, and a TPH concentration of 1,640 mg/kg, although the surrogate recovery was low due to matrix interference. The TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score of 20.

Approximately 30 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 with auger refusal at 12 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 12-12.5 ft bgs. Headspace analysis indicated an organic vapor content of N/A ppm (insufficient sample volume for headspace PID); laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of 34.4 mg/kg, and a TPH concentration of 320 mg/kg. The benzene and total BTEX concentrations were below recommended remediation levels for the Hazard Ranking Score.

No Phase III excavation was done.

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.
- The impacted soils were excavated to the practical extent of the equipment and subsurface conditions. All excavated soil was disposed of at an off-site location.
- Bedrock was encountered at 12 feet bgs making further contaminant migration unlikely.
- The test pit 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.



PIT CLOSURE REQUEST

- 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 12 ft bgs; local geologic features indicate the depth to groundwater is greater than 100 ft bgs.
- Benzene and total BTEX concentrations were below recommended remediation levels for the Hazard Ranking Score.
- During the time period between the Phase I and Phase II samples (which were essentially at the same depth), BTEX concentrations were reduced by 20 percent, and TPH concentrations were reduced by 80 percent indicating that residual hydrocarbons 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

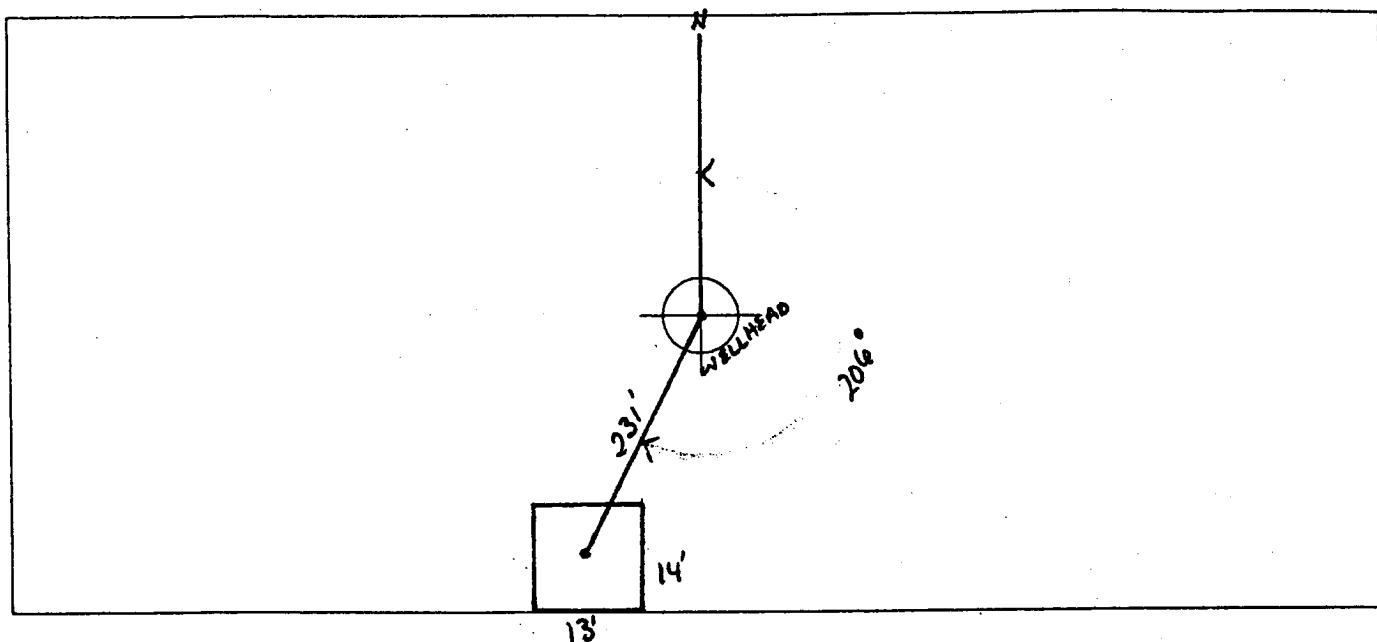
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>14039</u> Location: <u>GALLEGOS CANYON UNIT COM A #142</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>Amoco</u> P/L District: <u>KUTZ</u></p> <p>Coordinates: Letter: <u>0</u> Section <u>25</u> Township: <u>29</u> Range: <u>12</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Visit Date: <u>4.4.94</u> Run: <u>02</u> <u>33</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: Inside <input type="checkbox"/> Land Type: BLM <input type="checkbox"/> (From NMOCD Vulnerable <input type="checkbox"/> Maps) Zone <input checked="" type="checkbox"/> State <input type="checkbox"/> Outside <input type="checkbox"/> Fee <input checked="" type="checkbox"/> Indian _____</p> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> 50 Ft to 99 Ft (10 points) <input type="checkbox"/> Greater Than 100 Ft (0 points) <input checked="" type="checkbox"/></p> <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? <input checked="" type="checkbox"/> YES (20 points) <input type="checkbox"/> NO (0 points)</p> <p>Horizontal Distance to Surface Water Body</p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/></p> <p>Name of Surface Water Body _____</p> <p>(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>TOTAL HAZARD RANKING SCORE: <u>20</u> POINTS</p>
REMARKS	<p>Remarks : <u>TWO PITS ON LOCATION. WILL CLOSE ONLY ONE. PIT IS DRY. LOCATION IS UP ON TOP OF A MESA OVER LOOKING THE SAN JUAN RIVER. THERE IS A HOUSE JUST EAST OF LOCATION.</u></p>

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 206° Footage to Wellhead 231'
b) Degrees from North _____ Footage to Dogleg _____
Dogleg Name _____
c) Length : 14' Width : 13' Depth : 2'



Remarks :

STARTED TAKING PICTURES AT 3:28 P.M.DUMP TRUCK- BOBTAIL

REMARKS

Completed By:

Robert Thompson
Signature

4.4.94

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 14039 Location: Gullegos Canyon Unit Com A #142
 Coordinates: Letter: 0 Section 25 Township: 29 Range: 12
 Or Latitude _____ Longitude _____
 Date Started : 4-27-94 Area: 02 Run: 33

FIELD OBSERVATIONS

Sample Number(s): ⁹⁴⁵⁰²⁵ VW 37
 Sample Depth: 12' Feet
 Final PID Reading 341 PID Reading Depth 12 Feet
 Yes No
 Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet

CLOSURE

Remediation Method :
 Excavation ☒ (1) Approx. Cubic Yards 30
 Onsite Bioremediation ☐ (2)
 Backfill Pit Without Excavation ☐ (3)
 Soil Disposition:
 Envirotech ☐ (1) ☒ (3) Tierra
 Other Facility ☐ (2) Name: _____
 Pit Closure Date: 4-27-94 Pit Closed By: BET

REMARKS

Remarks : NO line markers. Pit has discolored soil - Black. excavation
was made contaminated the to ⁴⁻²⁷⁻⁹⁴ deeper we dug. 12' pulled sample.

Signature of Specialist: Vale Wilson



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW37	945025
MTR CODE SITE NAME:	14039	N/A
SAMPLE DATE TIME (Hrs):	4/27/94	1540
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	4-28-96	4/28/94
DATE OF BTEX EXT. ANAL.:	5/9/94	5/10/94
TYPE DESCRIPTION:	VC	Dark brown coarse sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	41.2	MG/KG		X10		
TOLUENE	1.9	MG/KG		X10		
ETHYL BENZENE	2.4	MG/KG		X10		
TOTAL XYLENES	38	MG/KG		X10		
TOTAL BTEX	43.5	MG/KG				
TPH (418.1) 1640	1637 1640	MG/KG			2.24	28
HEADSPACE PID	341	PPM				
PERCENT SOLIDS	92	%				

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

The Surrogate Recovery was at 59 % for this sample All QA/QC was acceptable.

Notes:

ATI Results attached. Surrogate recovery was outside ATI QC limits due to matrix interference.

DF = Dilution Factor Used

Approved By:

John Santolucito

Date:

5/21/94

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, MTBE (EPA 8020)
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 405313
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
16	945023	NON-AQ	04/27/94	05/09/94	05/10/94	1
17	945024	NON-AQ	04/27/94	05/09/94	05/10/94	20
18	945025	NON-AQ	04/27/94	05/09/94	05/10/94	50
PARAMETER			UNITS	16	17	18
BENZENE			MG/KG	<0.025	<0.5	<1.2
TOLUENE			MG/KG	<0.025	<0.5	1.9
METHYLBENZENE			MG/KG	<0.025	4.2	2.4
TOTAL XYLENES			MG/KG	<0.025	51	38
METHYL-t-BUTYL ETHER			MG/KG	<0.12	<2.4	<6.0

SURROGATE:
 BROMOFLUOROBENZENE (%) 89 96 59*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

00 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

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

Project Name EPNG PITS
Project Number 14509 Phase 6000 77
Project Location Gallegos Canyon Unit Cam A #142 14039

Well Logged By CM Chance
Personnel On-Site K Padilla, F. Rivera, R. Charlie
Contractors On-Site _____
Client Personnel On-Site _____

Elevation _____
Borehole Location 00 - S25 - T29 - R12
GWL Depth _____
Logged By CM CHANCE
Drilled By K Padilla
Date/Time Started 10/31/95 - 1050
Date/Time Completed 10/31/95 - 1145

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			Drilling Conditions & Blow Counts
							Units: PPM	S		
							BZ	BH	HS	
0				Backfill to 12'						
5										
10										
11	1	12-25	4"	Gry COBBLE fragments, w/ vt-f sand, v. dense, dry			0	10	525	-cobbles @ ~11' -Refusal @ 12' -11066
12.5				TDB 12.5'						
15										
20										
25										
30										
35										
40										

Comments:

Refusal w/ augers @ 12'. Insufficient sample volume for both headspace & lab sample
CMC17A (12-12.5') sent to lab (BTEX, TOH) BH grouted to surface

Geologist Signature

Corey Chance



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC172	947715
MTR CODE SITE NAME:	14039	Gallagher Canyon Unit Com A #142
SAMPLE DATE TIME (Hrs):	10-31-95	1106
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	11/1/95	
DATE OF BTEX EXT. ANAL.:	11/1/95	11/1/95
TYPE DESCRIPTION:	V6	gray sand & sandstone

Field Remarks: insufficient sample volume for headspace PID.

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	4.3	MG/KG				
ETHYL BENZENE	1.7	MG/KG				
TOTAL XYLENES	28.4	MG/KG				
TOTAL BTEX	34.4	MG/KG				
TPH (418.1)	320	MG/KG			2.06	28
HEADSPACE PID	n/a	PPM				
PERCENT SOLIDS	97.3	%				

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

Surrogate Recovery was at 84% for this sample All QA/QC was acceptable.

ervative:

AT1 Results for mod. 8015 attached (150).

DF = Dilution Factor Used

Approved By: [Signature]

Date: 11/3/95

BTEX SOIL SAMPLE WORKSHEET

File : 947715
Soil Mass (g) : 4.98
Extraction vol. (mL) : 10
Shot Volume (uL) : 50

Date Printed : 11/3/95
Multiplier (L/g) : 0.00100
CAL FACTOR (Analytical): 200
CAL FACTOR (Report): 0.20080

Benzene (ug/L) : 0.45
Toluene (ug/L) : 21.50
Ethylbenzene (ug/L) : 8.29
p & m-xylene (ug/L) : 116.00
o-xylene (ug/L) : 25.50

DILUTION FACTOR:	1	Det. Limit
Benzene (mg/Kg):	0.090	0.502
Toluene (mg/Kg):	4.317	0.502
Ethylbenzene (mg/Kg):	1.665	0.502
p & m-xylene (mg/Kg):	23.293	1.004
o-xylene (mg/Kg):	5.120	0.502
Total xylenes (mg/Kg):	28.414	1.506
Total BTEX (mg/Kg):	34.486	



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED
CLIENT : EL PASO NATURAL GAS ATI I.D.: 511319
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE/PHASE II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	947714	NON-AQ	10/31/95	11/09/95	11/09/95	1
02	947715	NON-AQ	10/31/95	11/09/95	11/09/95	1
03	947720	NON-AQ	11/01/95	11/09/95	11/11/95	5
PARAMETER			UNITS	01	02	03
FUEL HYDROCARBONS			MG/KG	<5	150	2700
HYDROCARBON RANGE				-	C7-C28	C7-C16
HYDROCARBONS QUANTITATED USING				-	GASOLINE	GASOLINE

SURROGATE:

O-TERPHENYL (%)

103 115 108