

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

*Risk did not
defrned
plume
TPH 184*

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: Meridian Oil Telephone: _____

Address: 30-039-05999

Facility Or: Canyon Largo Unit #36; Meter 71351
Well Name _____

Location: Unit or Qtr/Qtr Sec P Sec 13 T 25 R 6 County Rio Arriba

Pit Type: Separator _____ Dehydrator _____ Other Drip

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

Pit Location: Pit dimensions: length 10', width 10', depth 2'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 100'

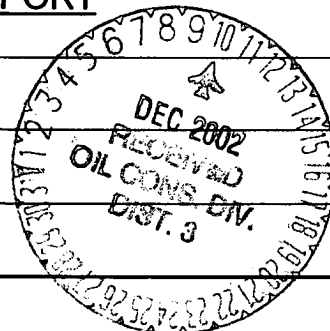
Direction from reference: 70 Degrees X East North _____
of _____ West South _____

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) <u>20</u>
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Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources.)	Yes (20 points) No (0 points) <u>0</u>
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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) <u>0</u>
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RANKING SCORE (TOTAL POINTS): 20



Date Remediation Started: 10/26/94 Date completed: 10/27/94

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

Other _____

Remediation Location: Onsite _____ Offsite Envirotech
(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: 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 12'

Sample Date 10/27/94 Sample time 09:30

Sample Results

Benzene(ppm) <0.5

Total BTEX(ppm) 76.4

Field headspace(ppm) 397

TPH 2490

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

11/8/03

Signature

Scott T. Pope

Printed Name
and Title

Scott T. Pope
Senior Env. Scientist



PIT CLOSURE REQUEST

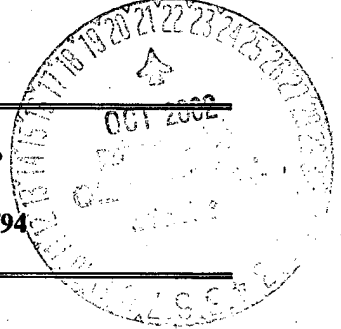
Canyon Largo Unit #36
Meter/Line ID 71351

SITE DETAILS

Legals - Twn: 25N
NMOCD Hazard Ranking: 20
Operator: Meridian

Rng: 6

Sec: 13 Unit: P
Land Type: BLM
Pit Closure Date: 10/26/94



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 397 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of 76.4 mg/kg, and a TPH concentration of 2,490 mg/kg. The benzene concentration was below its recommended remediation level for the Hazard Ranking Score. The total BTEX and TPH measurements exceeded recommended remediation levels for the Hazard Ranking Score of 20.

Approximately 40 cubic yards of soil were excavated and hauled to Envirotech, 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 refusal at 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 247 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of 107 mg/kg, and a TPH concentration of 184 mg/kg. The benzene concentration was below its recommended level for the Hazard Ranking Score; total BTEX and TPH concentrations exceeded recommended remediation levels for the Hazard Ranking Score.

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 seven 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.



PIT CLOSURE REQUEST

- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- Bedrock was encountered in the soil boring at 17 ft bgs, making excavation below this depth impractical.
- TPH concentrations in the soil at 17 feet bgs are approximately 7 percent of the concentrations at 12 feet bgs. This strong attenuation with depth indicates that residual hydrocarbons will 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 2 Soil Boring Log

Laboratory Analytical Results

FIELD PIT SITE ASSESSMENT FORM

12

GENERAL

Meter: 71351 Location: Canyon Largo Unit #36
 Operator #: 2999 Operator Name: Merrina P/L District: Ojito
 Coordinates: Letter: P Section 13 Township: 25 Range: 6W
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
 Site Assessment Date: 7-19-94 Area: 06 Run: 62

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 Gonzales 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: 40 POINTS

REMARKS

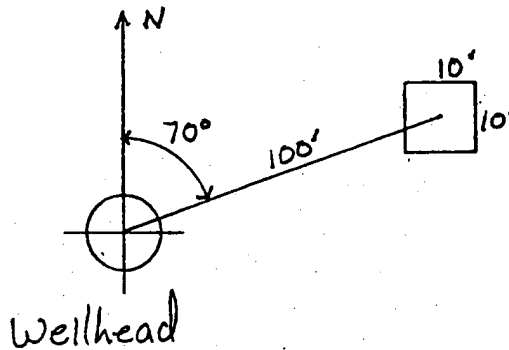
Remarks : Redline V.Z. - inside Topo VZ - inside

one pit - dry

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 70 Footage from Wellhead 100
b) Length : 10 Width : 10 Depth : 2



REMARKS

Remarks :

Photo-17-20 Roll #5

Completed By:

Forwalt

Signature

7-19-94

Date

GENERAL

SITE ASSESSMENT

REMARKS

Remarks: REVISION BASED ON DISTANCE TO NEAREST
SURFACE BODY.

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 71351 Location: Canyon Largo unit #36
 Coordinates: Letter: P Section 13 Township: 25 Range: 6W
 Or Latitude _____ Longitude _____
 Date Started : 10/26/94 Run: 06 62

FIELD OBSERVATIONS

Sample Number(s): KD 354
 Sample Depth: 12' Feet
 Final PID Reading 397 ppm PID Reading Depth 12' Feet
 Yes No
 Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet

CLOSURE

Remediation Method :
 Excavation ☒ Approx. Cubic Yards 40
 Onsite Bioremediation ☐
 Backfill Pit Without Excavation ☐
 Soil Disposition:
 Envirotech ☒ Tierra ☐
 Other Facility ☐ Name: _____
 Pit Closure Date: 10/27/94 Pit Closed By: BEI

REMARKS

Remarks : EXCAVATED pit ^{10/26/94} TO 12', TOOK PID sample, closed
Pit.

Signature of Specialist: Romy Danner



Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

[illegible]

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

FM-08-0565A (Rev. 03-94)



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 354	946460
MTR CODE SITE NAME:	71351	N/A
SAMPLE DATE TIME (Hrs):	10-27-94	0930
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	10-28-94	10-28-94
DATE OF BTEX EXT. ANAL.:	11-1-94	11-2-94
TYPE DESCRIPTION:	VC	Dark Brown sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG	20			
TOLUENE	<0.5	MG/KG	20			
ETHYL BENZENE	4.4	MG/KG	20			
TOTAL XYLENES	71	MG/KG	20			
TOTAL BTEX	76.4	MG/KG				
TPH (418.1)	2490	MG/KG			1.99	28
HEADSPACE PID	397	PPM				
PERCENT SOLIDS	89.4	%				

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

Surrogate Recovery was at 106% for this sample All QA/QC was acceptable.
Narrative:

ATI Results attached

DF = Dilution Factor Used

Date:

11/17/94



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 411303
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
13	946460	NON-AQ	10/27/94	11/01/94	11/02/94	20
14	946461	NON-AQ	10/27/94	11/01/94	11/03/94	50
15	946462	NON-AQ	10/27/94	11/01/94	11/02/94	20

PARAMETER	UNITS	13	14	15
BENZENE	MG/KG	<0.5	<1.3	<0.5
TOLUENE	MG/KG	<0.5	<1.3	19
ETHYLBENZENE	MG/KG	4.4	13	5.3
TOTAL XYLENES	MG/KG	71	150	77

SURROGATE:

BROMOFLUOROBENZENE (%)	106	160*	61*
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*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1

Well # _____

Page 1 of 1

Project Name EPNG PITS

Project Number 14509

Phase 6000 177

Project Location Canyon Largo Unit #36 71251

Elevation _____

Borehole Location _____

GWL Depth _____

Logged By CM CHANCE

Drilled By M. DONOHUE K. Padilla

Date/Time Started 6/5/95-1400

Date/Time Completed 6/5/95-1445

Well Logged By CM Chance

Personnel On-Site K. Padilla, F. Rivera

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			Drilling Conditions & Blow Counts
							Units: PPM	\$	HS	
0				Backfill to 12'						
5										
10										
15	1	15-17	4"	Br silty CLAY, to v. sand, soft, med plastic, sl moist ls grey sandstone, sl crystalline, v. hard			0	10	92/247	1405 hr ~ Refusal @ 17'
20				TOB 17'						
25										
30										
35										
40										

Comments:

15-17' sample (CMC37) sent to lab (BTEX, TPH). Unable to drive 2nd
split spoon (very hard ss). G-put BH to surface

Geologist Signature _____

CONTRACT LABORATORY P. O. NUMBER

15.0.95 75.0.95



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

Phase II
Canyon Largo Unit # 36

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	cmc 37	946871
MTR CODE SITE NAME:	71351	N/A
SAMPLE DATE TIME (Hrs):	6-5-95	1405
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	6-7-95	6-7-95
DATE OF BTEX EXT. ANAL.:	6-13-95	6-14-95
TYPE DESCRIPTION:	VG	Dark Brown clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.5	MG/KG	20			
TOLUENE	47	MG/KG	20			
ETHYL BENZENE	4.8	MG/KG	20			
TOTAL XYLENES	53	MG/KG	20			
TOTAL BTEX	107	MG/KG				
TPH (418.1)	184	MG/KG			2.02	28
HEADSPACE PID	247	PPM				
PERCENT SOLIDS	83.7	%				

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

The Surrogate Recovery was at 103 % for this sample All QA/QC was acceptable.
Negative:

ATI Results attached for BTEX and Modified 8015

DF = Dilution Factor Used

Approved By:

Date: 6/28/95



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 506339
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946871	NON-AQ	06/05/95	06/13/95	06/14/95	20
PARAMETER			UNITS	01		
BENZENE			MG/KG	<0.5		
TOLUENE			MG/KG	47		
ETHYLBENZENE			MG/KG	6.8		
TOTAL XYLENES			MG/KG	53		

SURROGATE:

BROMOFLUOROBENZENE (%)

103



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 506339
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946871	NON-AQ	06/05/95	06/12/95	06/12/95	1
PARAMETER			UNITS	01		
FUEL HYDROCARBONS			MG/KG	1000		
HYDROCARBON RANGE				C6-C14		
HYDROCARBONS QUANTITATED USING				GASOLINE		

SURROGATE:

O-TERPHENYL (%)

90