

Denny S. Faust
DEPUTY OIL & GAS INSPECTOR

FEB 08 1989

JICARILLA APACHE TRIBE

ENVIRONMENTAL PROTECTION OFFICE

P.O. BOX 507
DULCE, NEW MEXICO 87528

SUBMIT 1 COPY TO
NATURAL
RESOURCE DEPT
AND OIL GAS
ADMINISTRATION

18154
BTEX

Approved

PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (Conoco) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Axi Apache 0-13

Location: Unit: I Sec. 4 T. 25 N R. 4 W County Rio Arriba

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type: Jicarilla Apache

Pit Location: Pit dimensions: length 15' width 15' depth 1'

(Attach diagram) Reference: wellhead ☒ other ☐

Footage from reference: 100

Direction from reference: 45 Degrees ☒ 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 (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 points)

0

Wellhead Protection Area:

(Less than 200 feet from a private domestic water source, or; less than 1,000 feet from all other water sources)

Yes (20 points)
No (0 points)

0

Distance to Surface Water:

(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)

Less than 200 feet (20 points)
200 feet to 1,000 feet (10 points)
Greater than 1,000 feet (0 points)

0

Distance to Ephemeral Stream (dry wash):

(Horizontal distance to all downgradient streams having a width of at least 10 feet)

Less than or equal to 100 feet (10 points)
Greater than 100 feet (0 points)

0

Distance to Nearest Lake, Playa, or Watering Pond:

(Horizontal distance to all downgradient lakes, playas, and livestock or wildlife water ponds)

Less than or equal to 100 feet (10 points)
Greater than 100 feet (0 points)

0

RANKING SCORE (TOTAL POINTS):

0

Date Remediation Started: 10/23/98 Date Completed: 12/21/98

Remediation Method: Excavation X Approx. Cubic Yards 15

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds): 15

Other _____

Remediation Location: Onsite X Offsite _____

(i.e., landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action:

Removed contaminated soil from Pit center this is a solid sandstone Pit scraped sides and bottom of Pit. grabbed wall samples and 3 ft composite of bottom
Final excavation: 10' X 8' X 5'.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit Closure Sampling:

Sample Location North, East, South, West side walls and Pit bottom

(if multiple samples, attach sample result and diagram of sample locations and depths.)

Sample depth 5'

Sample date 10/23/98 Sample time 1335/1336

Sample Results

Soil: Benzene (ppm) 442.5 Water: Benzene (ppb) _____

Total BTEX (ppm) 205.5 Toluene (ppb) _____

Field headspace (ppm) 998 (bottom) Ethylbenzene (ppb) _____

TPH 420 ppm Method 8015 Total Xylenes (ppb) _____

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 MY BELIEF

DATE 11/21/98 PRINTED NAME Roy Burnham

SIGNATURE Roy Burnham AND TITLE Environmental Technician II

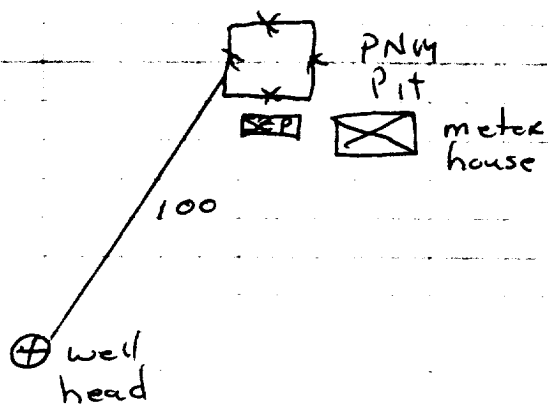
AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON): R.A. Attacher

SIGNED: Ken C. Mando DATE: 12-15-98

Ax1 Apache 0-13
Sec-4 T-25N R-4W UCI
Conoco

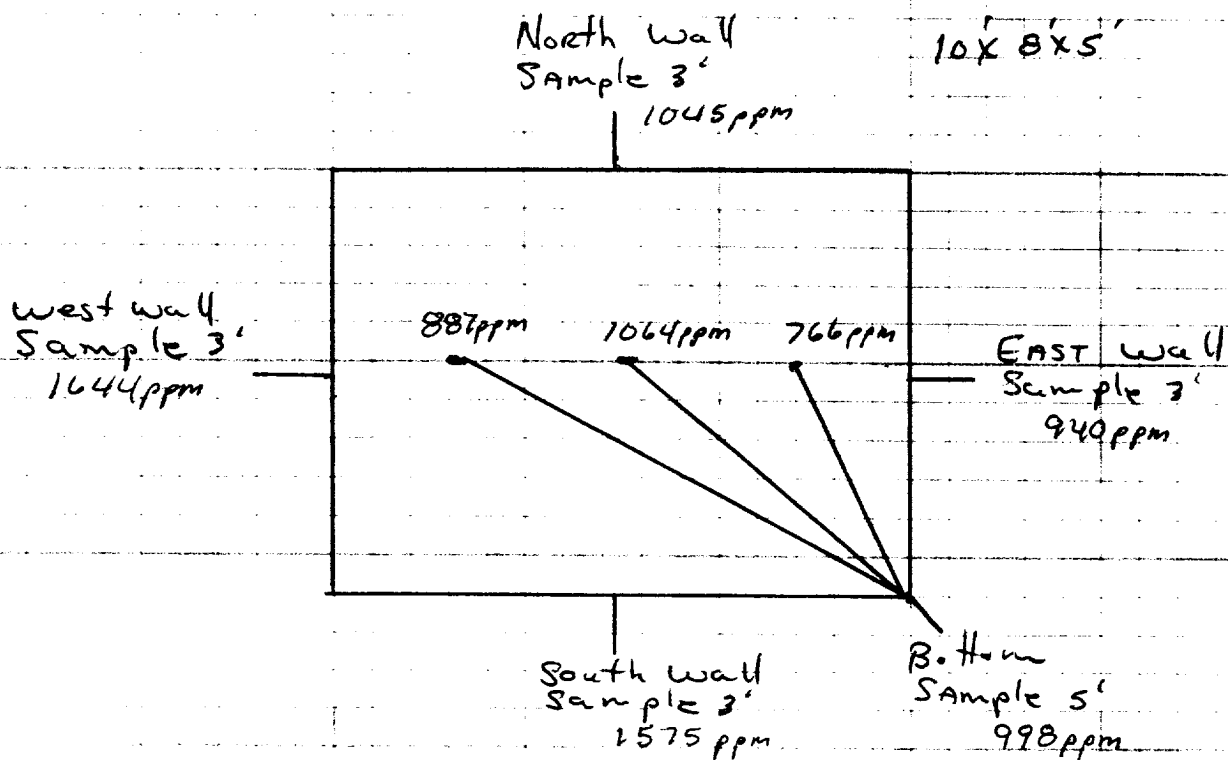
Site Drawing



Not to Scale

AXI Apache O-13
Sec-4 T-25N R-4W ULI
Conoco

EXCAVATION DRAWING



OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 10-Nov-98

CLIENT: PNM - Public Service Company of NM

Project: PNM Pit Remediation

Lab Order: 9810070

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 10-Nov-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Axi Apache O-13
Work Order:	9810070	Client Sample ID:	9810231336; 3pt. Comp. Bottom
Lab ID:	9810070-08A	Matrix:	SOIL
Project:	PNM Pit Remediation	Collection Date:	10/23/98 1:36:00 PM
		COC Record:	7358

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	420	25		mg/Kg	1	11/5/98
BTEX		SW8020A				Analyst: DC
Benzene	2500	1000		µg/Kg	1000	10/29/98
Toluene	36000	2000		µg/Kg	1000	10/29/98
Ethylbenzene	14000	1000		µg/Kg	1000	10/29/98
m,p-Xylene	130000	2000		µg/Kg	1000	10/29/98
o-Xylene	23000	1000		µg/Kg	1000	10/29/98

205500
205.500 ppm

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 10-Nov-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Axi Apache O-13
Work Order:	9810070	Client Sample ID:	9810231335; 4pt. Comp. Walls
Lab ID:	9810070-07A	Matrix:	SOIL
Project:	PNM Pit Remediation	Collection Date:	10/23/98 1:35:00 PM
		COC Record:	7358

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	200	25		mg/Kg	1	11/5/98
BTEX		SW8020A				Analyst: DC
Benzene	4400	2500		µg/Kg	2500	10/29/98
Toluene	49000	5000		µg/Kg	2500	10/29/98
Ethylbenzene	17000	2500		µg/Kg	2500	10/29/98
m,p-Xylene	110000	5000		µg/Kg	2500	10/29/98
o-Xylene	23000	2500		µg/Kg	2500	10/29/98

203400
203.400 ppm

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

1 of 1



Environmental Services

Well Name:	Axi Apache O #13
Well Legals:	Unit I, Sec 4, T25N, R4W
Pit Type:	Separator
Horizontal Distance to Surface Water:	Greater than 1,000 feet
Groundwater Depth:	Greater than 100 feet

RISK ANALYSIS

PNM requests closure of their former pit on the Jicarilla O #13 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 313 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Schmitz Ranch, NM series 7.5 minute topographic map.)
2. The site is located outside of the "vulnerable area" as defined under OCC Order No. R-7940-C.
3. PNM excavated 15 cubic yards of soil from the former pit. Subsurface lateral contamination has been remediated (see attached analytical results). Source removal minimizes the possibility of surface water contamination.
4. Sandstone was encountered at 5 feet below ground surface. Bedrock/sandstone provides a barrier between remaining contamination and groundwater. Vertical migration through bedrock or sandstone to groundwater is unlikely.
5. PNM excavated and performed remediation to the maximum depth and horizontal extent practicable.

PNM believes their former pit on the Axi Apache O #13 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.

JICARILLA APACHE TRIBE
ENVIRONMENTAL
PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

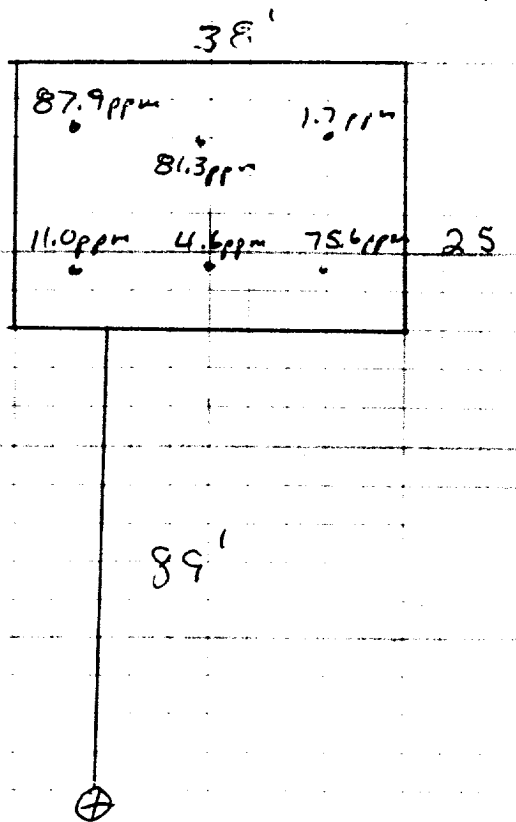
SUBMIT 1 COPY TO
NATURAL
RESOURCE DEPT
AND OIL-GAS
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: <u>PNM Gas Services (Conoco)</u> Telephone: <u>324-3764</u>	
Address: <u>603 W. Elm Street Farmington, NM 87401</u>	
Facility or Well Name: <u>Ax. Apache O-13</u>	
Location: Unit: <u>I</u> Sec. <u>4</u> T. <u>25 N</u> R. <u>4 W</u> County <u>Rio Arriba</u>	
Land Type: <u>Jicarilla Apache</u>	
Date Remediation Started: <u>10/23/98</u> Date Completed: <u>12/11/98</u>	
Remediation Method: Landfarmed <u>X</u> Approx. cubic yards <u>15</u> Composted <u>—</u> Other <u>—</u>	
Depth to Ground Water: (pts.) <u>0</u> Distance to an Ephemeral Stream: (pts.) <u>0</u> Distance to Nearest Lake, Playa, or Watering Pond: (pts.) <u>0</u> Wellhead Protection Area: (pts.) <u>0</u> Distance to Surface Water: (pts.) <u>0</u> Ranking Score (Total Points): <u>0</u>	Final Closure Sampling: Sampling Date: <u>12/9/98</u> Time <u>0933</u> Sampling Results: Field Headspace (ppm) <u>87.9</u> TPH (ppm) <u>ND</u> Method <u>8015</u> Other <u>—</u>
<p>I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF</p> <p>DATE <u>12/17/98</u> PRINTED NAME <u>Roy Burnham</u></p> <p>SIGNATURE <u>Roy Burnham</u> AND TITLE <u>Environmental Technician II</u></p>	
<p>AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE</p> <p>APPROVED: YES <u>X</u> NO <u>—</u> (REASON) <u>—</u></p> <p>SIGNED: <u>Kurt Mammill</u> DATE: <u>12-21-98</u></p>	

Avi Apache O-13
Sec-4 T-25N R-4W 461
Conoco

LANDFARM DRAWING



Not to Scale

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 15-Dec-98

CLIENT: PNM - Public Service Company of NM

Project: Jicarilla Pit Remediation

Lab Order: 9812017

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 15-Dec-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Axi Apache O-13 LF
Work Order:	9812017	Client Sample ID:	9812090933 6pt Composite
Lab ID:	9812017-03A	Matrix:	SOIL
Project:	Jicarilla Pit Remediation	Collection Date:	12/9/98 9:33:00 AM
		COC Record:	7449

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	12/11/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - No: Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -