

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

DEPUTY OIL & GAS INSPECTOR

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: Ar. Apache 04
Location: Unit: D Sec. 9 T. 25 N R. 4 W County Rio Arriba
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: Jicarilla Apache

Pit Location: Pit dimensions: length 18' width 18' depth 3
(Attach diagram) Reference: wellhead ☒ other ☐
Footage from reference: 93'
Direction from reference: Straight Degrees 0 East ☐ North ☐
West ☐ of 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)	<u>0</u>
Greater than 100 feet	(0 points)	

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)	<u>0</u>

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)	<u>0</u>

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)	<u>10</u>

**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)	<u>0</u>

RANKING SCORE (TOTAL POINTS):

10

Date Remediation Started: 10/5/98 Date Completed: 12/15/98
Remediation Method: Excavation X Approx. Cubic Yards 549 554 ^{RAD 1/19/99}
(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds): 549 554 ^{RAD 1/19/99}
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 all four side walls as to get a below 100ppm headspace reading Pit bottom is sandstone

Final excavation: 210' X 25' X 23'.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit Closure Sampling:

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

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

Sample depth 23'

Sample date 10/6/98 Sample time 0851
0852

Sample Results

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

Total BTEX (ppm) 90,300 Toluene (ppb) _____

Field headspace (ppm) 1867 Ethylbenzene (ppb) _____
^{160 RAD}

TPH 1867 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 10/27/98 PRINTED NAME Roy Burnham

SIGNATURE Roy Burnham AND TITLE Environmental Technician II

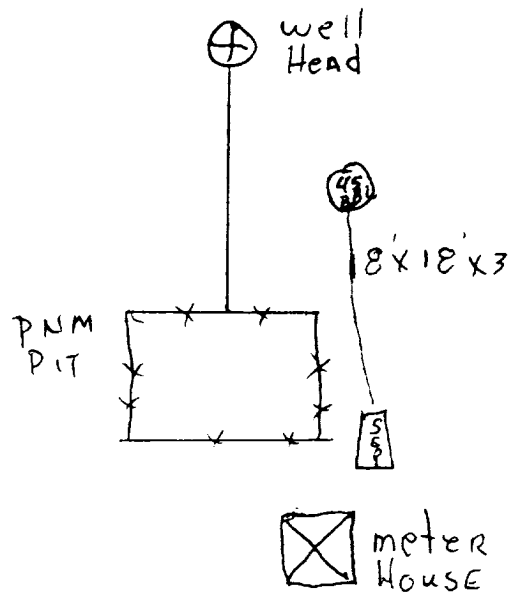
AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

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

SIGNED: Ken C. M... .. DATE: 11-30-98

Ax, Apache 04
Sec- 9 - T-25N - R4W
Conoco

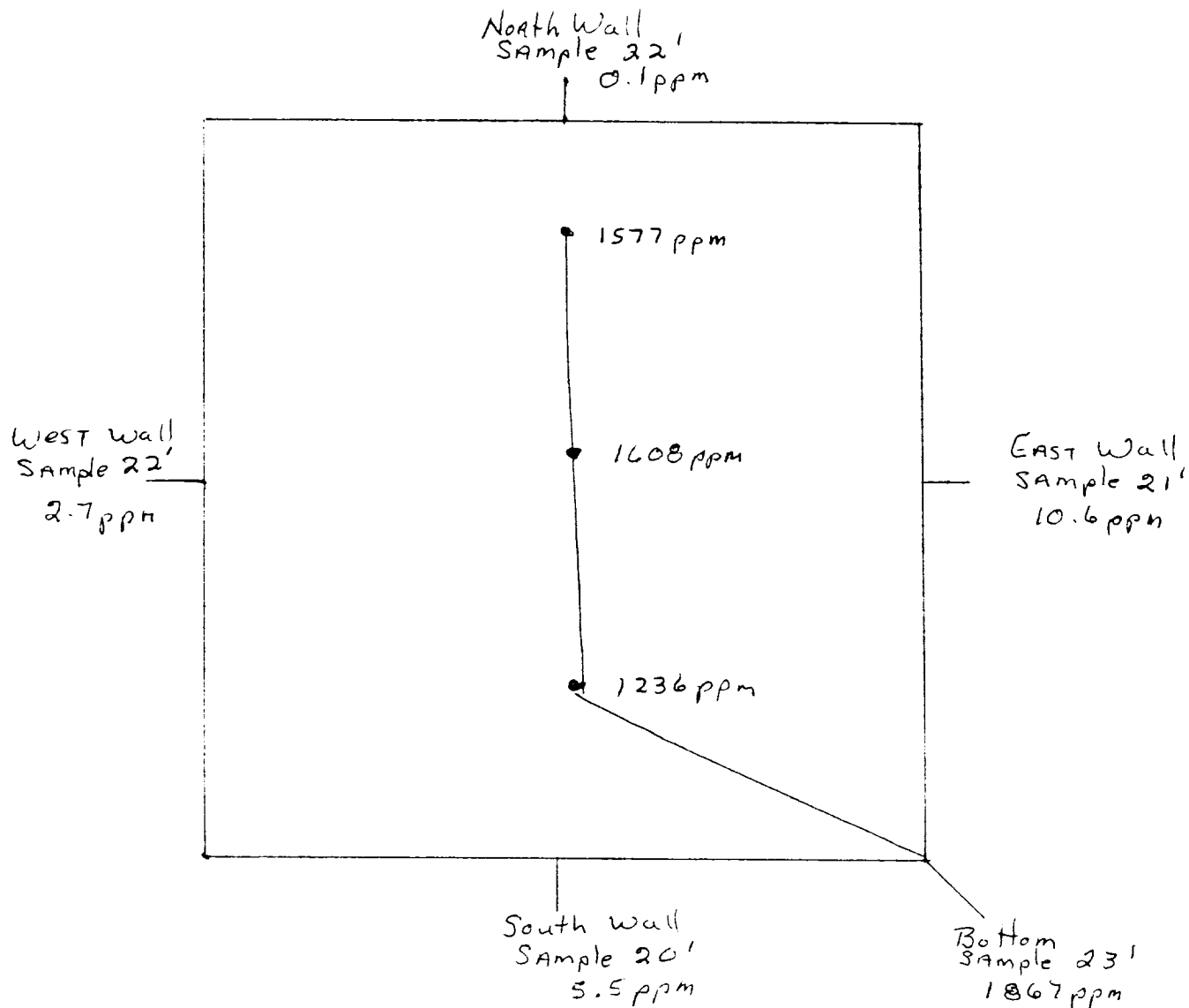
Site Drawing



Ax. Apache 04
Sec-9 T25N R4W 4L-D
Conoco

EXCAVATION DRAWING

26' x 25' x 23'



OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 23-Oct-98

CLIENT: PNM - Public Service Company of NM
Project: Jicarilla Pit Remediation
Lab Order: 9810033

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: 23-Oct-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Axi Apache O4
Work Order:	9810033	Client Sample ID:	9810060852; 3pt. Comp. Bottom
Lab ID:	9810033-02A	Matrix:	SOIL
Project:	Jicarilla Pit Remediation	Collection Date:	10/6/98 8:52:00 AM
		COC Record:	7393

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS						
T/R Hydrocarbons: C10-C28	160	25		mg/Kg	1	10/20/98
BTEX						
Benzene	ND	1000		µg/Kg	1000	10/16/98
Toluene	5100	2000		µg/Kg	1000	10/16/98
Ethylbenzene	9200	1000		µg/Kg	1000	10/16/98
m,p-Xylene	62000	2000		µg/Kg	1000	10/16/98
o-Xylene	14000	1000		µg/Kg	1000	10/16/98

90300
90.3 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	Surrogate - Surrogate

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OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 23-Oct-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Axi Apache O4
Work Order:	9810033	Client Sample ID:	9810060851; 4pt. Comp. Walls
Lab ID:	9810033-01A	Matrix:	SOIL
Project:	Jicarilla Pit Remediation	Collection Date:	10/6/98 8:51:00 AM
		COC Record:	7393

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	10/14/98

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

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Environmental Services

Well Name:	Axi Apache O #4
Well Legals:	Unit D, Sec 9, 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 Axi Apache O #4 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 260 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Lapis Point, 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 544 cubic yards of soil from the former pit. Subsurface lateral contamination has been remediated (see attached map and analytical results for the side wall profiles). Source removal minimizes the possibility of surface water contamination.
4. Sandstone was encountered at 23 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 #4 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.

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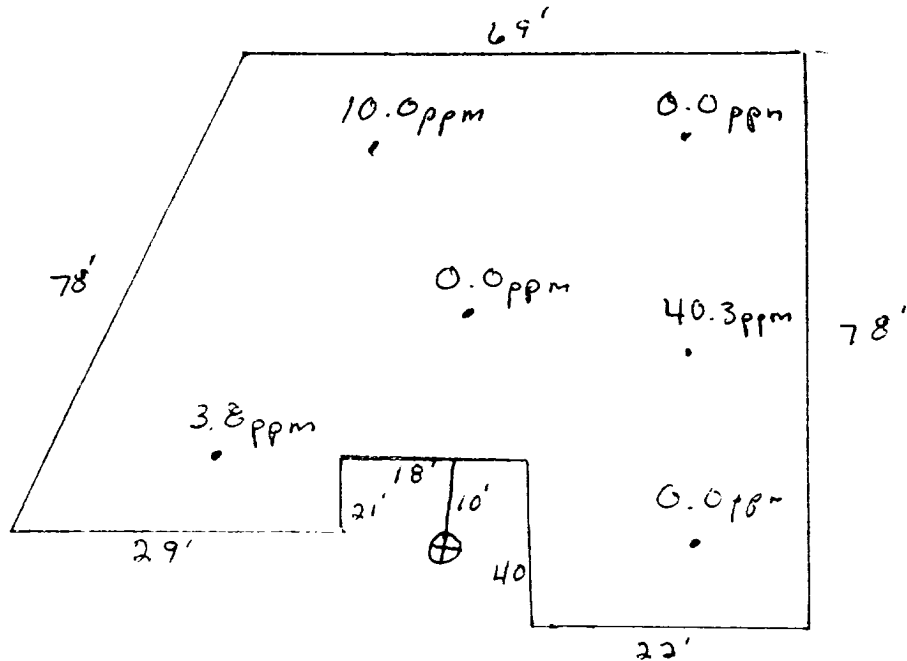
SUBMIT 1 COPY TO
NATURAL
RESOURCE DEPT
AND OIL GAS
ADMINISTRATION

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 04</u>	
Location: Unit: <u>D</u> Sec. <u>9</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>10/5/98</u> Date Completed: <u>12/7/98</u>	
Remediation Method: Landfarmed <input checked="" type="checkbox"/> Approx. cubic yards <u>544</u> Composted <input type="checkbox"/> Other <input type="checkbox"/>	
Depth to Ground Water: (pts.) <u>0</u>	Final Closure Sampling: Sampling Date: <u>11/24/98</u> Time <u>1030</u> Sampling Results: Field Headspace (ppm) <u>40.3</u> TPH (ppm) <u>ND</u> Method <u>8015</u> Other _____
Distance to an Ephemeral Stream: (pts.) <u>10</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>10</u>	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
DATE <u>12/12/98</u> PRINTED NAME <u>Roy Burnham</u>	
SIGNATURE <u>Roy Burnham</u> AND TITLE <u>Environmental Technician II</u>	
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE	
APPROVED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> (REASON) <u>was as Bestfill</u>	
SIGNED: <u>K. C. Mamm</u> DATE: <u>12-15-98</u>	

R. Apache C-4
Sec. 0 T-25N R-4W 4LD
Conoco

LAND FARM. DRAWING



Not for Scale

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 08-Dec-98

CLIENT: PNM - Public Service Company of NM
Project: Jicarilla Pit Remediation Landfarms
Lab Order: 9811079

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: 08-Dec-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Axi Apache O-4 LF
Work Order:	9811079	Client Sample ID:	9811241030; 6pt Composite
Lab ID:	9811079-01A	Matrix:	SOIL
Project:	Jicarilla Pit Remediation Landfarms	Collection Date:	11/24/98 10:30:00 AM
		COC Record:	7443

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	12/7/98

Qualifiers:

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