

*Deming, B. But*  
DEPUTY OIL & GAS INSPECTOR

JICARILLA APACHE TRIBE

SUBMIT 1 COPY TO  
NATURAL  
RESOURCE DEPT  
AND OIL GAS  
ADMINISTRATION

MAR 28 1997

ENVIRONMENTAL PROTECTION OFFICE

P.O. BOX 507  
DULCE, NEW MEXICO 87528

*Approval*

PIT REMEDIATION AND CLOSURE REPORT

Operator:	PNM Gas Services		<i>Amoco</i>		Telephone:	324-3764	
Address:	603 W. Elm Street Farmington, NM 87401						
Facility or Well Name:	<i>Jicarilla Apache 102-8A</i>						
Location:	Unit:	<i>A</i>	Sec.	<i>3</i>	T	<i>26 N</i>	R. <i>4 W</i> County <i>Rio Arriba</i>
Pit Type:	Separator		Dehydrator		<i>X</i> Other		
Land Type:	<i>Jicarilla Apache</i>						
Pit Location:	Pit dimensions:		length <i>34'</i>		width <i>27'</i>		depth <i>12'</i>
(Attach diagram)	Reference:		wellhead <i>X</i>		other		
	Footage from reference:		<i>66'</i>				
	Direction from reference:		<i>Straight</i> Degrees		East North <i>X</i> 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)		<i>0</i>		
			50 feet to 99 feet (10 points)				
			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)		<i>0</i>		
			No (0 points)				
Distance to Surface Water:	(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)		Less than 200 feet (20 points)		<i>0</i>		
			200 feet to 1,000 feet (10 points)				
			Greater than 1,000 feet (0 points)				
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)		<i>10</i>		
			Greater than 100 feet (0 points)				
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)		<i>0</i>		
			Greater than 100 feet (0 points)				
RANKING SCORE (TOTAL POINTS):						<i>10</i>	

Date Remediation Started: 8/19/96 Date Completed: 9/25/96  
Remediation Method: Excavation X Approx. Cubic Yards 408  
(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds): 408  
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 100 ppm head space reading. Bottom of pit was solid sand stone Rock

Ground Water Encountered: No X Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit Closure Sampling:

Sample Location

North, East, South, and West side walls

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

Sample depth

11'

Sample date

8/19/96

Sample time

1540

Sample Results

Soil: Benzene (ppm) <0.0002

Water: Benzene (ppb) \_\_\_\_\_

Total BTEX (ppm) 0.0015

Toluene (ppb) \_\_\_\_\_

Field headspace (ppm) 5.9

Ethylbenzene (ppb) \_\_\_\_\_

TPH <5.0 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

8/25/96

PRINTED NAME

Ronald A. Dedrick

SIGNATURE

Ronald A. Dedrick

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):

spray w/ Fertilizer + close

SIGNED:

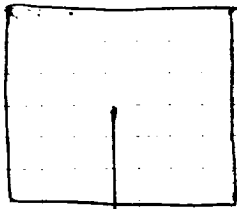
Kenn C. Marshall

DATE:

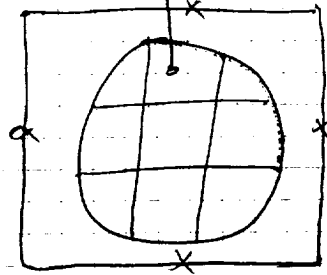
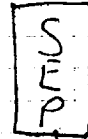
8-26-96

Jicarilla Apache 102-017  
Sec. 3 T26N R4W Unit-A  
Amoco

PNM Pit



66'



OFF: (505) 325-5667



LAB: (505) 325-1556

***Diesel Range Organics***

Attn: *Denver Bearden*  
Company: *PNM Gas Services*  
Address: *603 W. Elm*  
City, State: *Farmington, NM 87401*

Date: *23-Aug-96*  
COC No.: *4855*  
Sample No. *11865*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla Apache 102-8A Run 12-11*  
Project Location: *9608191540; 4pt. Composite*  
Sampled by: *EP* Date: *19-Aug-96* Time: *15:40*  
Analyzed by: *DC/BV* Date: *22-Aug-96*  
Sample Matrix: *Soil*

***Laboratory Analysis***

<i>Parameter</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Diesel Range Organics (C10 - C28)</i>	<i>&lt;5.0</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

***Quality Assurance Report***

*DRO QC No.: 0489-QC*

***Calibration Check***

<i>Parameter</i>	<i>Method Blank</i>	<i>Unit of Measure</i>	<i>True Value</i>	<i>Analyzed Value</i>	<i>% Diff</i>	<i>Limit</i>
<i>Diesel Range (C10 - C28)</i>	<i>&lt;5.0</i>	<i>ppm</i>	<i>100</i>	<i>104</i>	<i>3.9</i>	<i>15%</i>

***Matrix Spike***

<i>Parameter</i>	<i>1 - Percent Recovered</i>	<i>2 - Percent Recovered</i>	<i>Limit</i>	<i>%RSD</i>	<i>Limit</i>
<i>Diesel Range (C10-C28)</i>	<i>112</i>	<i>114</i>	<i>(70-130)</i>	<i>1</i>	<i>20%</i>

***Method*** - *SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography*

Approved by: *JaG*  
Date: *8/23/96*

**P.O. BOX 2606 • FARMINGTON, NM 87499**

**- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -**

OFF: (505) 325-5667



LAB: (505) 325-1556

**AROMATIC VOLATILE ORGANICS**

Attn: *Denver Bearden*  
Company: *PNM Gas Services*  
Address: *603 W. Elm*  
City, State: *Farmington, NM 87401*

Date: *23-Aug-96*  
COC No.: *4855*  
Sample No.: *11865*  
Job No.: *2-1000*

Project Name: ***PNM Gas Services - Jicarilla Apache 102-8A Run 12-11***

Project Location: ***9608191540; 4pt. Composite***

Sampled by: EP Date: *19-Aug-96* Time: *15:40*

Analyzed by: DC/BV Date: *22-Aug-96*

Sample Matrix: *Soil*

**Laboratory Analysis**

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
<i>Benzene</i>	<0.2	ug/kg	0.2	ug/kg
<i>Toluene</i>	0.7	ug/kg	0.2	ug/kg
<i>Ethylbenzene</i>	<0.2	ug/kg	0.2	ug/kg
<i>m,p-Xylene</i>	0.8	ug/kg	0.2	ug/kg
<i>o-Xylene</i>	<0.2	ug/kg	0.2	ug/kg
TOTAL		1.5		ug/kg

**Method** - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *JAG*  
Date: *8/23/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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

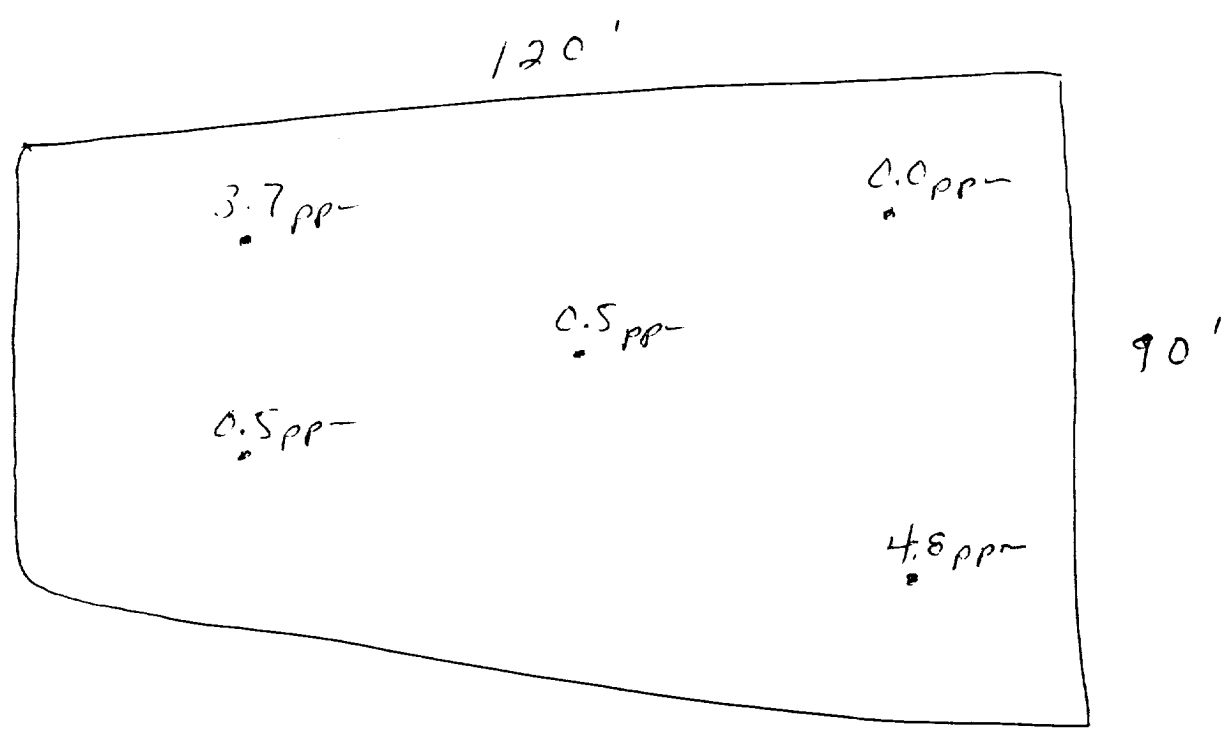
SUBMIT 1 COPY TO  
NATURAL  
RESOURCE DEPT  
AND OIL GAS  
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

<b>Operator:</b> <u>PNM Gas Services (Amoco)</u> <b>Telephone:</b> <u>324-3764</u>	
<b>Address:</b> <u>603 W. Elm Street Farmington, NM 87401</u>	
<b>Facility or Well Name:</b> <u>Jicarilla Apache 102-8A</u>	
<b>Location:</b> Unit: <u>A</u> Sec. <u>3</u> T. <u>26</u> N R. <u>4</u> W County <u>Rio Arriba</u>	
<b>Land Type:</b> <u>Jicarilla Apache</u>	
<b>Date Remediation Started:</b> <u>8/19/96</u> <b>Date Completed:</b> <u>9/27/96</u>	
<b>Remediation Method:</b> Landfarmed <input checked="" type="checkbox"/> Approx. cubic yards <u>408</u> Composted <input type="checkbox"/> Other <input type="checkbox"/>	
<b>Depth to Ground Water:</b> (pts.) <u>8</u>	<b>Final Closure Sampling:</b>  <b>Sampling Date:</b> <u>9/24/96</u> <b>Time</b> <u>1234</u> <b>Sampling Results:</b> <b>Field Headspace (ppm)</b> <u>4.8</u> <b>TPH (ppm)</b> <u>&lt;5.0</u> <b>Method</b> <u>8015</u> <b>Other</b> _____
<b>Distance to an Ephemeral Stream:</b> (pts.) <u>10</u>	
<b>Distance to Nearest Lake, Playa, or Watering Pond:</b> (pts.) <u>8</u>	
<b>Wellhead Protection Area:</b> (pts.) <u>8</u>	
<b>Distance to Surface Water:</b> (pts.) <u>8</u>	
<b>Ranking Score (Total Points):</b> <u>10</u>	
<b>I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF</b>	
<b>DATE</b> <u>9/27/96</u> <b>PRINTED NAME</b> <u>Ronald A. Dedrick</u>	
<b>SIGNATURE</b> <u>Ronald A. Dedrick</u> <b>AND TITLE</b> <u>Environmental Technician II</u>	
<b>AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE</b>	
<b>APPROVED:</b> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> (REASON) _____	
<b>SIGNED:</b> <u>[Signature]</u> <b>DATE:</b> <u>9-30-96</u>	

ICANILLA HACHE 102-2.4  
ec. 3 T26N R4W  
Amoco

Land farm



OFF: (505) 325-5667



LAB: (505) 325-1556

### *Diesel Range Organics*

Attn: *Denver Bearden*  
Company: *PNM Gas Services*  
Address: *603 W. Elm*  
City, State: *Farmington, NM 87401*

Date: *26-Sep-96*  
COC No.: *5310*  
Sample No. *12284*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla Apache 102-8A Landfarm Run 12-11*  
Project Location: *9609241234; 5pt. Composite*  
Sampled by: *RD* Date: *24-Sep-96* Time: *12:34*  
Analyzed by: *DC/HR* Date: *25-Sep-96*  
Sample Matrix: *Soil*

### *Laboratory Analysis*

<i>Parameter</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Diesel Range Organics (C10 - C28)</i>	<i>&lt;5.0</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

### *Quality Assurance Report*

*DRO QC No.: 0489-QC*

#### *Calibration Check*

<i>Parameter</i>	<i>Method Blank</i>	<i>Unit of Measure</i>	<i>True Value</i>	<i>Analyzed Value</i>	<i>% Diff</i>	<i>Limit</i>
<i>Diesel Range (C10 - C28)</i>	<i>&lt;5.0</i>	<i>ppm</i>	<i>100</i>	<i>101</i>	<i>1.3</i>	<i>15%</i>

#### *Matrix Spike*

<i>Parameter</i>	<i>1 - Percent Recovered</i>	<i>2 - Percent Recovered</i>	<i>Limit</i>	<i>%RSD</i>	<i>Limit</i>
<i>Diesel Range (C10-C28)</i>	<i>111</i>	<i>95</i>	<i>(70-130)</i>	<i>11</i>	<i>20%</i>

**Method** - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: *[Signature]*  
Date: *9/26/96*