

*Kenneth L. Foust*  
DEPUTY OIL & GAS INSPECTOR

FEB 25 1997

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

RECEIVED  
OCT 31 1996

PIT REMEDIATION AND CLOSURE REPORT

OIL CON. DIV.

DATE: 3

Operator: PNM Gas Services Amoco Telephone: 324-3764  
Address: 603 W. Elm Street Farmington, NM 87401  
Facility or Well Name: Jicarilla Apache 102-1  
Location: Unit: N Sec. 10 T. 26 N R. 4 W County Rio Arriba  
Pit Type: Separator X Dehydrator      Other       
Land Type: Jicarilla Apache

Pit Location: Pit dimensions: length 24' width 24' depth 22'  
(Attach diagram) Reference: wellhead X other       
Footage from reference: 216'  
Direction from reference: 75 Degrees      East      North       
     West      South     

**Depth to Ground Water:**

(Vertical distance from contaminants  
to seasonal high water elevation of  
ground water)

Less than 50 feet	(20 points)	<u>0</u>
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)	<u>0</u>
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)	
200 feet to 1,000 feet	(10 points)	<u>0</u>
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)	<u>0</u>
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)	<u>0</u>
Greater than 100 feet	(0 points)	

**RANKING SCORE (TOTAL POINTS):** 0

Date Remediation Started: 8/13/96 Date Completed: 8/15/96

Remediation Method: Excavation X Approx. Cubic Yards 469

(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds): 469

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 walls and pit bottom as to get a below 100 ppm head space reading.

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

Final Pit Closure Sampling:

Sample Location North East South and West side walls and pit Bottom

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

Sample depth 22'

Sample date 8/14/96 Sample time 0901

Sample Results

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

Total BTEX (ppm) \_\_\_\_\_ Toluene (ppb) \_\_\_\_\_

Field headspace (ppm) 29.6 Ethylbenzene (ppb) \_\_\_\_\_

TPH <5.0 ppm Method ROLK 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 8/18/96 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): \_\_\_\_\_

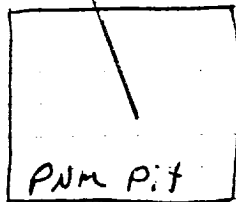
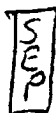
SIGNED: [Signature] DATE: 8-19-96

Jicarilla Apache 102-1  
Sec. 10 T26N R4W Unit N  
Amoco

Well head



216'



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: *16-Aug-96*  
 COC No.: *4844*  
 Sample No. *11787*  
 Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla Apache 102-1 Run 12-51*  
 Project Location: *9608140901; 5pt. Composite*

Sampled by: *EP* Date: *14-Aug-96* Time: *9:01*  
 Analyzed by: *DC/HR* Date: *16-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>97</i>	<i>2.9</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: *[Signature]*Date: *8/16/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

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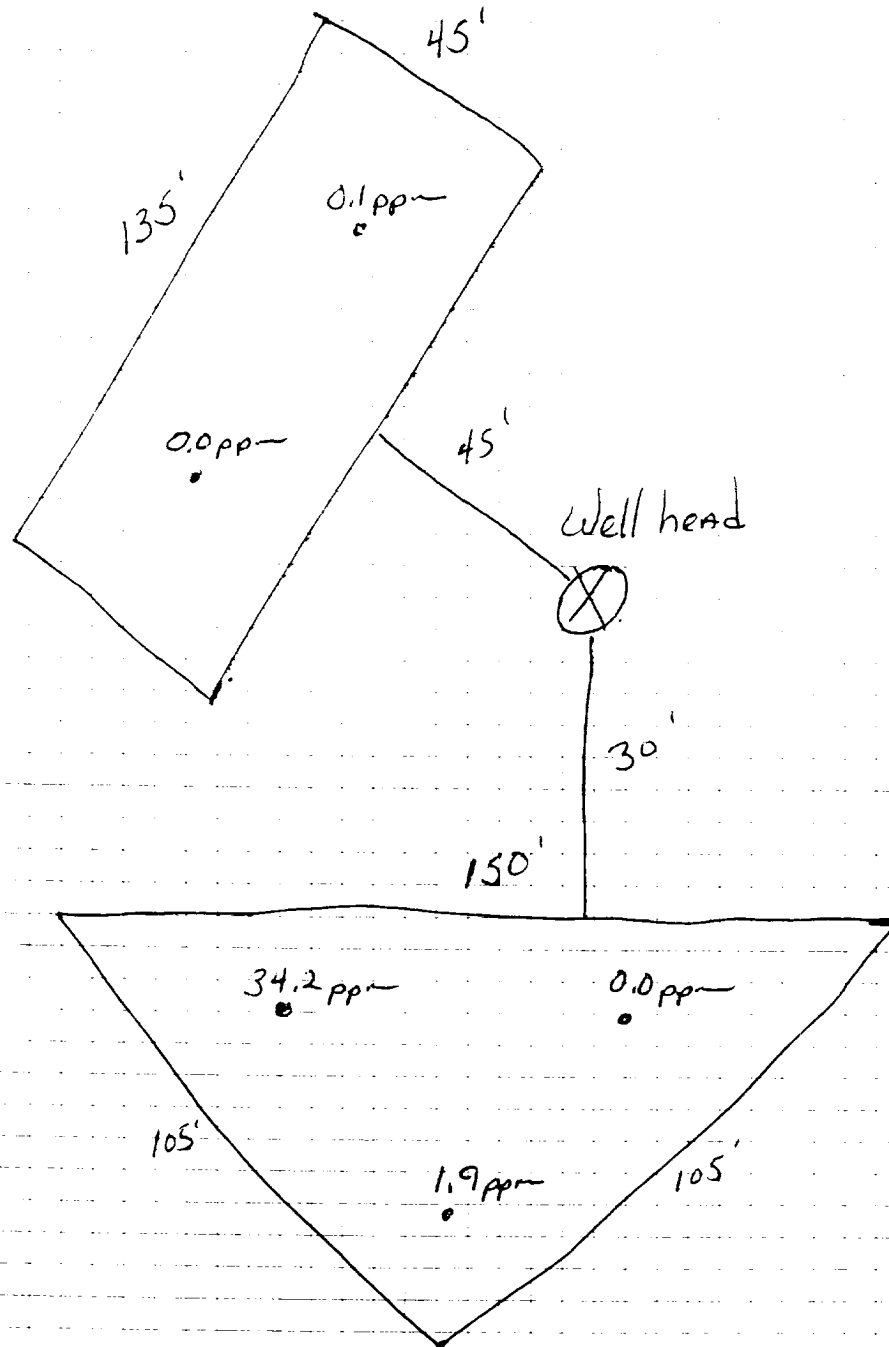
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NATURAL  
RESOURCE DEPT  
AND OIL GAS  
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

<b>Operator:</b> PNM Gas Services (Amoco) <b>Telephone:</b> 324-3764	
<b>Address:</b> 503 W. Elm Street Farmington, NM 87401	
<b>Facility or Well Name:</b> Jicarilla Apache 102-1	
<b>Location:</b>	<b>Unit:</b> N <b>Sec.</b> 10 <b>T.</b> 26 <b>N.</b> R. 4 <b>W.</b> <b>County:</b> Rio Arriba
<b>Land Type:</b> Jicarilla Apache	
<b>Date Remediation Started:</b> 8/13/96	<b>Date Completed:</b> 9/5/96
<b>Remediation Method:</b> Landfarmed <input checked="" type="checkbox"/> Composted <input type="checkbox"/> Other <input type="checkbox"/>	<b>Approx. cubic yards:</b> 469
<b>Depth to Ground Water:</b> (pts.) 0	<b>Final Closure Sampling:</b>  <b>Sampling Date:</b> 9/2/96 <b>Time:</b> 1046 <b>Sampling Results:</b> <b>Field Headspace (ppm):</b> 34.2 <b>TPH (ppm):</b> 45.0 <b>Method:</b> 8015 <b>Other:</b> _____
<b>Distance to an Ephemeral Stream:</b> (pts.) 0	
<b>Distance to Nearest Lake, Playa, or Watering Pond:</b> (pts.) 0	
<b>Wellhead Protection Area:</b> (pts.) 0	
<b>Distance to Surface Water:</b> (pts.) 0	
<b>Ranking Score (Total Points):</b> 0	
<b>I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF</b>	
<b>DATE:</b> 9/7/96	<b>PRINTED NAME:</b> Ronald A. Dedrick
<b>SIGNATURE:</b> <u>Ronald A. Dedrick</u>	<b>AND TITLE:</b> Environmental Technician II
<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> 9/9/96

Jicarilla Apache 102-1  
Sec. 10 T26N R4W Unit N  
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: *7-Sep-96*  
COC No.: *4871*  
Sample No. *12028*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla Apache 102-1 Landfarm Run 12-51*  
Project Location: *9609031046; 5pt. Composite*  
Sampled by: *RB* Date: *3-Sep-96* Time: *10:46*  
Analyzed by: *DC/BV* Date: *6-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>110</i>	<i>9.9</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>104</i>	<i>96</i>	<i>(70-130)</i>	<i>5</i>	<i>20%</i>

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

Approved by: *[Signature]*

Date: *9/7/96*

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