

*Benjamin T. ...*  
DEPUTY OIL & GAS INSPECTOR

MAR 28 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

*Approved*  
PIT REMEDIATION AND CLOSURE REPORT

|   |  |                                |                |               |            |            |            |
|---|--|--------------------------------|----------------|---------------|------------|------------|------------|
| Operator:   | PNM Gas Services                       | ( <u>Amoco</u> )               | Telephone:     | 324-3764      |            |            |            |
| Address:  | 603 W. Elm Street Farmington, NM 87401 |                                |                |               |            |            |            |
| Facility or Well Name:  | <u>Jicarilla Apache 102-8E</u>         |                                |                |               |            |            |            |
| Location:   | Unit: <u>I</u>                         | Sec. <u>3</u>                  | T. <u>26</u> N | R. <u>4</u> W | County     | Rio Arriba |            |
| Pit Type:   | Separator                              | Dehydrator                     | <u>X</u>       | Other         |            |            |            |
| Land Type:  | <u>Jicarilla Apache</u>                |                                |                |               |            |            |            |
| Pit Location:   | Pit dimensions:                        | length                         | <u>28'</u>     | width         | <u>27'</u> | depth      | <u>16'</u> |
| (Attach diagram)  | Reference:                             | wellhead                       | <u>X</u>       | other         |            |            |            |
|   | Footage from reference:                | <u>78'</u>                     |                |               |            |            |            |
|   | Direction from reference:              | <u>75</u>                      | Degrees        | East          | North      |            |            |
|   |  |                                |                | West          | South      |            |            |
| Depth to Ground Water:  |  | Less than 50 feet              |                | (20 points)   |            |            |            |
| (Vertical distance from contaminants to seasonal high water elevation of ground water)                          |  | 50 feet to 99 feet             |                | (10 points)   | <u>0</u>   |            |            |
|   |  | Greater than 100 feet          |                | (0 points)    | <u>0</u>   |            |            |
| Wellhead Protection Area:   |  | Yes                            |                | (20 points)   | <u>0</u>   |            |            |
| (Less than 200 feet from a private domestic water source, or less than 1,000 feet from all other water sources) |  | No                             |                | (0 points)    | <u>0</u>   |            |            |
| Distance to Surface Water:  |  | Less than 200 feet             |                | (20 points)   |            |            |            |
| (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)         |  | 200 feet to 1,000 feet         |                | (10 points)   | <u>0</u>   |            |            |
|   |  | Greater than 1,000 feet        |                | (0 points)    | <u>0</u>   |            |            |
| Distance to Ephemeral Stream (dry wash):  |  | Less than or equal to 100 feet |                | (10 points)   | <u>0</u>   |            |            |
| (Horizontal distance to all downgradient streams having a width of at least 10 feet)                            |  | Greater than 100 feet          |                | (0 points)    | <u>0</u>   |            |            |
| Distance to Nearest Lake, Playa, or Watering Pond:  |  | Less than or equal to 100 feet |                | (10 points)   | <u>0</u>   |            |            |
| (Horizontal distance to all downgradient lakes, playas, and livestock or wildlife water ponds)                  |  | Greater than 100 feet          |                | (0 points)    | <u>0</u>   |            |            |
| RANKING SCORE (TOTAL POINTS):   |  |                                |                | <u>0</u>      |            |            |            |

Date Remediation Started: 8/19/96 Date Completed: 9/25/96

Remediation Method: Excavation X Approx. Cubic Yards 448

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds): 448

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 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, West side walls and Bottom of pit.

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

Sample depth 16'

Sample date 8/19/96 Sample time 1136

Sample Results

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

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

Field headspace (ppm) 73.3 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

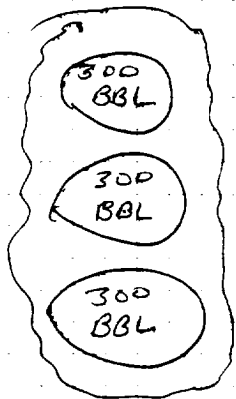
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II

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): \_\_\_\_\_

SIGNED: [Signature] DATE: 8-26-96

JICARITA PHONE 102 02  
Sec. 3 T26N R4W Unit I  
Amoco

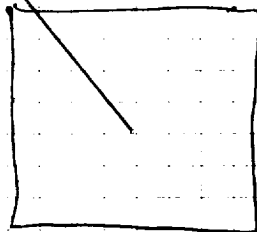


Sep.

Well head



78'



PNM pit



Meter house

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.: *4854*  
Sample No. *11864*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla Apache 102-8E Run 12-11*  
Project Location: *9608191136; 5pt. Composite*  
Sampled by: *EP* Date: *19-Aug-96* Time: *11:36*  
Analyzed by: *DC/HR* 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>88</i>                    | <i>101</i>                   | <i>(70-130)</i> | <i>10</i>   | <i>20%</i>   |

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

Approved by: *[Signature]*  
Date: *8/23/96*

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

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

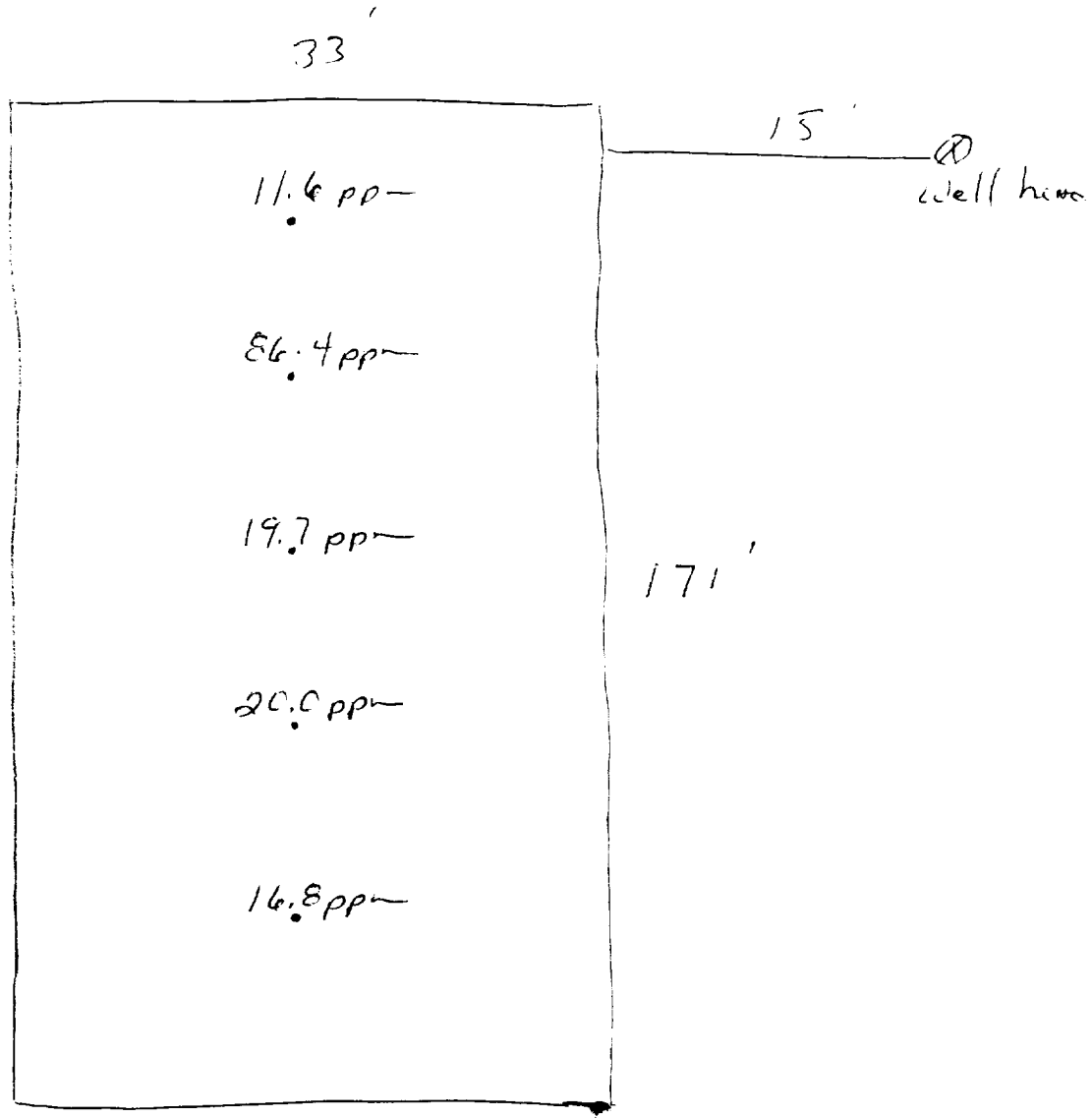
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NATURAL  
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AND OIL GAS  
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

|   |  |
|---|--|
| <b>Operator:</b> PNM Gas Services (Amoco) <b>Telephone:</b> 324-3764  |  |
| <b>Address:</b> 603 W. Elm Street Farmington, NM 87401  |  |
| <b>Facility or Well Name:</b> Jicarilla Apache 102-8E   |  |
| <b>Location:</b> Unit: I Sec. 3 T. 26 N R. 4 W County Rio Arriba  |  |
| <b>Land Type:</b> Jicarilla Apache  |  |
| <b>Date Remediation Started:</b> 8/19/96 <b>Date Completed:</b> 9/27/96   |  |
| <b>Remediation Method:</b> Landfarmed <input checked="" type="checkbox"/> <b>Approx. cubic yards:</b> 448   |  |
| Composted <input type="checkbox"/><br>Other <input type="checkbox"/>  |  |
| <b>Depth to Ground Water:</b> (pts.) <u>8</u>   | <b>Final Closure Sampling:</b><br><br><b>Sampling Date:</b> 9/24/96 <b>Time:</b> 1244<br><b>Sampling Results:</b><br><b>Field Headspace (ppm):</b> 86.4<br><b>TPH (ppm):</b> 34.0 <b>Method:</b> 8015<br><b>Other:</b> _____ |
| <b>Distance to an Ephemeral Stream:</b> (pts.) <u>8</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>48</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> 9/27/96 <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>Karen C. Mamm</u> <b>DATE:</b> 9-30-96  |  |

Jicarilla Apache 102-EE  
Sec. 3 T26N R4W  
Amoco



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.: *5311*  
Sample No. *12285*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla Apache 102-8E Landfarm Run 12-11*  
Project Location: *9609241244; 5pt. Composite*  
Sampled by: *RD* Date: *24-Sep-96* Time: *12:44*  
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>34.0</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*

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