

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

DEPUTY OIL & GAS INSPECTOR

SUBMIT COPY 1  
NATURAL RESOURCE DEPT  
AND OIL & GAS ADMINISTRATION

FEB 28 1997

RECEIVED  
COT 1113

**PIT REMEDIATION AND CLOSURE REPORT**

Operator: PNM Gas Services Telephone: 324-3763  
Address: 603 W. Elm Farmington, N. Mex 87401  
Facility or Well Name: Jicarilla 103-7 (Meridian)  
Location: Unit or Qtr/Qtr Sec P Sec 19 T 26N R 4W County Rio Arriba  
Pit Type: Separator Dehydrator X Other \_\_\_\_\_  
Land Type: Jicarilla Apache

Pit Location: Pit dimensions: length 22, width 20, depth 8'  
(Attach diagram)  
Reference: wellhead X, other \_\_\_\_\_  
Footage from reference: 159'  
Direction from reference: 75 Degrees \_\_\_\_\_ East North \_\_\_\_\_  
\_\_\_\_\_ West of South of West

**Depth To Groundwater:**

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

Less than 50 feet (20 points)  
50 feet to 99 feet (10 points)  
Greater than 100 feet (0 points) 0

**Distance to an Ephemeral Stream**

(Downgradient dry wash greater than  
ten feet in width)

Less than 100 feet (10 points)  
Greater than 100 feet (0 points) 0

**Distance to Nearest Lake, Playa, or Watering Pond**

(Downgradient lakes, playas and  
livestock or wildlife watering ponds)

Less than 100 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  
1000 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 100 feet (20 points)  
100 feet to 1000 feet (10 points)  
Greater than 1000 feet (0 points) 0

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

Date Remediation Started: 7/18/96 Date Completed: 7/24/96

Remediation Method: Excavation X Approx. cubic yards 130

(Check all appropriate sections) Landfarmed X

Other \_\_\_\_\_

Remediation Location: Onsite X Offsite \_\_\_\_\_

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

General Description of Remedial Action: Removed contaminated soil to a below 100 ppm head space reading on all four walls. Bottom solid rock

Groundwater Encountered: No X Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit: Sample location North, East, South and

Closure Sampling: West side walls

(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 7'

Sample date 7/18/96 Sample time 1007

Sample Results

Soil: Benzene 8000 (ppm) C.C014 Water: Benzene (ppb) \_\_\_\_\_

Total BTEX (ppm) C.0444 Toluene (ppb) \_\_\_\_\_

Field Headspace (ppm) \_\_\_\_\_ Ethylbenzene (ppb) \_\_\_\_\_

TPH 8015 (ppm) <5.0 Total Xylenes (ppb) \_\_\_\_\_

Groundwater 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 BELIEF

DATE 7/22/96 PRINTED NAME Ronald H. Dedrick

SIGNATURE Ronald H. Dedrick AND TITLE E.T.

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

APPROVED: YES X NO \_\_\_\_\_ (REASON) \_\_\_\_\_

SIGNED: C. Mann DATE: 7-24-96

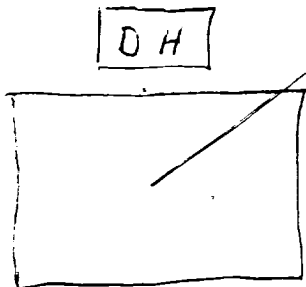
Jicarilla 103-7  
Sec. 19 T26N R4W  
meridian



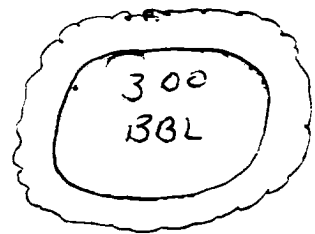
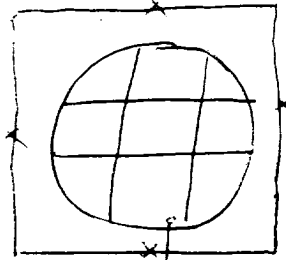
Well Head



159'



PNM Pit



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: *19-Jul-96*  
COC No.: *4799*  
Sample No. *11549*  
Job No. *2-1000*

Project Name: ***PNM Gas Services - Jicarilla 103-7 Run 12-51***

Project Location: ***9607181007; 4pt. Composite***

Sampled by: *EP* Date: *18-Jul-96* Time: *10:07*

Analyzed by: *HR/DC* Date: *19-Jul-96*

Sample Matrix: *Soil*

***Laboratory Analysis***

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

***Quality Assurance Report***

*DRO QC No.: 0479-QC*

***Calibration Check***

<b><i>Parameter</i></b>	<b><i>Method Blank</i></b>	<b><i>Unit of Measure</i></b>	<b><i>True Value</i></b>	<b><i>Analyzed Value</i></b>	<b><i>% Diff</i></b>	<b><i>Limit</i></b>
<b><i>Diesel Range (C10 - C28)</i></b>	<b><i>&lt;5.0</i></b>	<b><i>ppm</i></b>	<b><i>2,000</i></b>	<b><i>1,912</i></b>	<b><i>4.4</i></b>	<b><i>15%</i></b>

***Matrix Spike***

<b><i>Parameter</i></b>	<b><i>1 - Percent Recovered</i></b>	<b><i>2 - Percent Recovered</i></b>	<b><i>Limit</i></b>	<b><i>%RSD</i></b>	<b><i>Limit</i></b>
<b><i>Diesel Range (C10-C28)</i></b>	<b><i>98</i></b>	<b><i>100</i></b>	<b><i>(70-130)</i></b>	<b><i>2</i></b>	<b><i>20%</i></b>

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

Approved by: *[Signature]*  
Date: *7/19/96*

**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: *19-Jul-96*  
COC No.: *4799*  
Sample No.: *11549*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla 103-7 Run 12-51*

Project Location: *9607181007; 4pt. Composite*

Sampled by: *EP* Date: *18-Jul-96* Time: *10:07*

Analyzed by: *HR/DC* Date: *19-Jul-96*

Sample Matrix: *Soil*

#### Laboratory Analysis

Component	Result	Unit of Measure	Detection Limit	Unit of Measure
<i>Benzene</i>	<i>1.4</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>35.2</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>0.6</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>5.1</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>2.1</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
	<i>TOTAL</i>	<i>44.4</i>		<i>ug/kg</i>

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

Approved by: *JAC*  
Date: *2/19/96*

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ENVIRONMENTAL PROTECTION OFFICE  
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DULCE, NEW MEXICO 87528

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

ON-SITE SOIL REMEDIATION REPORT

Operator: PNM Gas Services Telephone: 324-3763  
Address: 603 W. Elm Farmington, N. Mex 87401  
Facility or Well Name: Jicarilla 103-7  
Location: Unit or Qtr/Qtr Sec \_\_\_\_\_ Sec 19 T26N R4W County Rio Arriba  
Land Type: Jicarilla Apache

Date Remediation Started: 7/18/96 Date Completed: \_\_\_\_\_  
Remediation Method: Landfarmed X Approx. cubic yards 130  
Composted \_\_\_\_\_  
Other \_\_\_\_\_

Depth To Groundwater: (pts.) 0  
Distance to an Ephemeral Stream (pts.) 0  
Distance to Nearest Lake, Playa,  
or Watering Pond (pts.) 0  
Wellhead Protection Area: (pts.) 0  
Distance To Surface Water: (pts.) 0  
RANKING SCORE (TOTAL POINTS): 0

**Final Closure Sampling:**  
Sampling Date: 8/13/96 Time: 0951  
Sample Results:  
Field Headspace (ppm) 67.7  
TPH (ppm) 2376 Method 3015  
Other \_\_\_\_\_

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 8/18/96 PRINTED NAME Ronald A. Dedrick  
SIGNATURE Ronald A. Dedrick AND TITLE ET

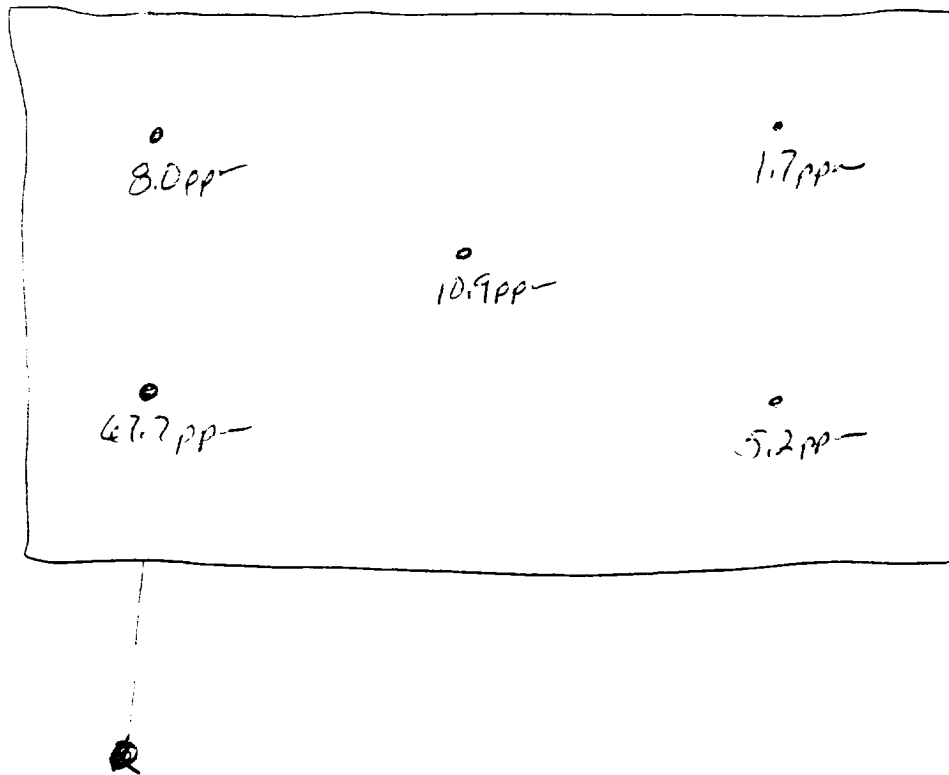
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO \_\_\_\_\_ (REASON) \_\_\_\_\_

SIGNED: Kee C. Mammill DATE: 8-19-96

Jicarilla 103-7  
Sec. 19 T26N R4W  
Meridian

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: *15-Aug-96*  
COC No.: *4838*  
Sample No. *11782*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla 103-7 Landfarm Run 12-51*  
Project Location: *9608130951; 5pt. Composite*  
Sampled by: *RD* Date: *13-Aug-96* Time: *9:51*  
Analyzed by: *DC/HR* Date: *15-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>2376.3</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

### *Quality Assurance Report*

DRO QC No.: *0479-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>98</i>	<i>2.4</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: *8/15/96*

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