

Dennis E. Faust
DEPUTY OIL & GAS INSPECTOR

OCT 19 1996

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

SUBMIT TO
NATURAL RESOURCE

RECEIVED
JUL 30 1996

PIT REMEDIATION AND CLOSURE REPORT

OIL CON. DIV.
DIST. 3

Operator: PNM Gas Services Telephone: 324-3763
Address: 603 W. Elm Farmington, N Mex 87401
Facility or Well Name: Jicarilla A-15 Drip (Williams)
Location: Unit or Qtr/Qtr Sec 14 T26N R4W County Rio Arriba
Pit Type: Separator ☐ Dehydrator ☐ Other Drip
Land Type: Jicarilla Apache

Pit Location: Pit dimensions: length 25', width 21', depth 16'
(Attach diagram)
Reference: wellhead ☐, other Drip Column
Footage from reference: 15'
Direction from reference: Due Degrees East North
✓ West South

Depth To Groundwater: Less than 50 feet (20 points)
(Vertical distance from 50 feet to 99 feet (10 points)
contaminants to seasonal Greater than 100 feet (0 points) 0
high water elevation of groundwater)

Distance to an Ephemeral Stream: Less than 100 feet (10 points)
(Downgradient dry wash greater than Greater than 100 feet (0 points) 0
ten feet in width)

Distance to Nearest Lake, Playa, or Watering Pond: Less than 100 feet (10 points)
(Downgradient lakes, playas and Greater than 100 feet (0 points) 0
livestock or wildlife watering ponds)

Wellhead Protection Area: Yes (20 points)
(Less than 200 feet from a private No (0 points) 0
domestic water source, or: less than
1000 feet from all other water sources)

Distance To Surface Water: Less than 100 feet (20 points)
(Horizontal distance to perennial 100 feet to 1000 feet (10 points)
lakes, ponds, rivers, streams, creeks, Greater than 1000 feet (0 points) 0
irrigation canals and ditches)

RANKING SCORE (TOTAL POINTS): 0

Jicarilla A-15 Drip

Date Remediation Started: 5/31/96 Date Completed: _____
Remediation Method: Excavation ☒ Approx. cubic yards 300 yds.
(Check all appropriate sections) Landfarmed _____ Amt. landfarmed (yd^3) 300

Other _____

Remediation Location: Onsite ☐ Offsite ☒ TNT Landfarm
(i.e. landfarmed onsite, name and location of offsite facility) Schmitz Ranch, N. Mex

General Description of Remedial Action: Removed contaminated soil
bottom of pit was a hard shell with alot of sandstone

Groundwater Encountered: No ☒ Yes _____ Depth _____

Final Pit: Sample location North, East, South, West side
Closure Sampling: walls and bottom of pit
(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 16'
Sample date 5/31/96 Sample time 1155

Sample Results

Soil: Benzene (ppm) 1.066 Water: Benzene (ppb) _____
Total BTEX (ppm) 28.162 mg/kg Toluene (ppb) _____
Field Headspace (ppm) _____ Ethylbenzene (ppb) _____
TPH 8015 (ppm) <5.0 mg/kg Total Xylenes (ppb) _____

Groundwater Sample: Yes _____ No ☒ (If yes, attach sample results)

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

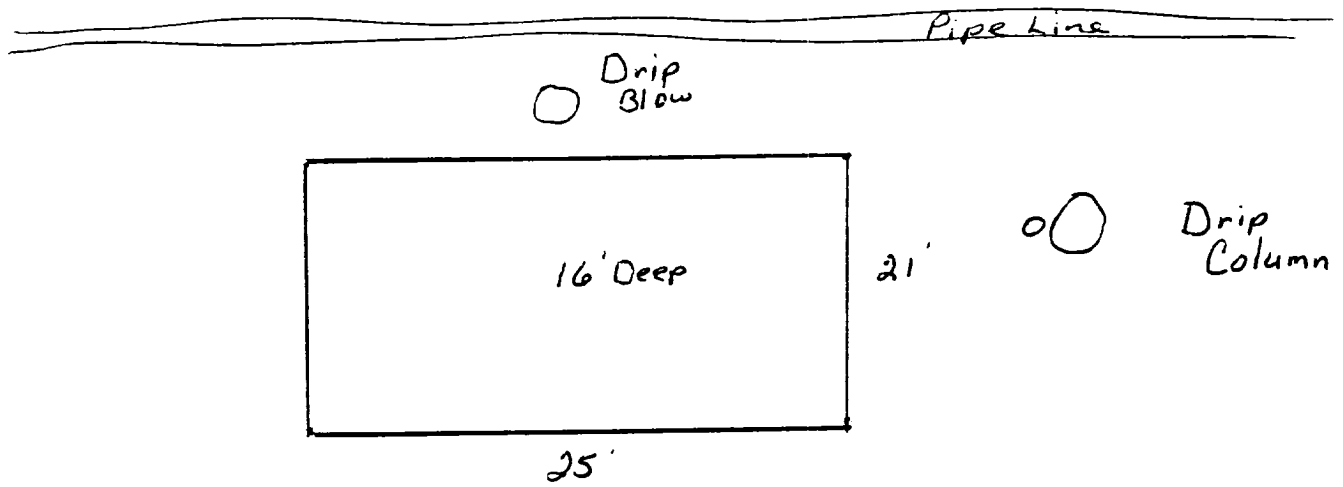
DATE 6/4/96 PRINTED NAME Ronald A. Dedrick
SIGNATURE Ronald A. Dedrick AND TITLE E.T.

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

APPROVED: YES ☒ NO _____ (REASON) _____

SIGNED: Kerry C. Mammitt DATE: 6-5-96

Jicarilla A-15 Drip
Williams
Sec. 14 T26N R4W



OFF: (505) 325-8786



LAB: (505) 325-5667

Diesel Range Organics

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

Date: *4-Jun-96*
COC No.: *4674*
Sample No. *11038*
Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla A-15 Drip*
Project Location: *9605311155; West Wall*
Sampled by: *RD* Date: *31-May-96* Time: *11:55*
Analyzed by: *HR* Date: *3-Jun-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><5.0</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

Quality Assurance Report

DRO QC No.: *0475-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><5.0</i>	<i>ppm</i>	<i>2,000</i>	<i>1,840</i>	<i>8.0</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>97</i>	<i>99</i>	<i>(70-130)</i>	<i>2</i>	<i>20%</i>

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

Approved by: *[Signature]*
Date: *5/4/96*

P. O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-8786



LAB: (505) 325-5667

Diesel Range Organics

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

Date: **4-Jun-96**
COC No.: **4674**
Sample No. **11039**
Job No. **2-1000**

Project Name: **PNM Gas Services - Jicarilla A-15 Drip**
Project Location: **9605311157; South Wall**
Sampled by: **RD** Date: **31-May-96** Time: **11:57**
Analyzed by: **HR** Date: **3-Jun-96**
Sample Matrix: **Soil**

Laboratory Analysis

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

Quality Assurance Report

DRO QC No.: **0475-QC**

Calibration Check

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Diesel Range (C10 - C28)	< 5.0	ppm	2,000	1,840	8.0	15%

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Diesel Range (C10-C28)	97	99	(70-130)	2	20%

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

Approved by:
Date: **6/4/96**

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OFF: (505) 325-8786



LAB: (505) 325-5667

Diesel Range Organics

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

Date: **4-Jun-96**
COC No.: **4674**
Sample No. **11040**
Job No. **2-1000**

Project Name: **PNM Gas Services - Jicarilla A-15 Drip**
Project Location: **9605311200; East Wall**
Sampled by: **RD** Date: **31-May-96** Time: **12:00**
Analyzed by: **HR** Date: **3-Jun-96**
Sample Matrix: **Soil**

Laboratory Analysis

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

Quality Assurance Report

DRO QC No.: **0475-QC**

Calibration Check

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Diesel Range (C10 - C28)	< 5.0	ppm	2,000	1,840	8.0	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Diesel Range (C10-C28)	97	99	(70-130)	2	20%

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

Approved by: 
Date: **6/4/96**

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LAB: (505) 325-5667

Diesel Range Organics

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

Date: *4-Jun-96*
COC No.: *4674*
Sample No. *11042*
Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla A-15 Drip*
Project Location: *9605311209; North Wall*
Sampled by: *RD* Date: *31-May-96* Time: *12:09*
Analyzed by: *HR* Date: *3-Jun-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><5.0</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

Quality Assurance Report

DRO QC No.: *0475-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><5.0</i>	<i>ppm</i>	<i>2,000</i>	<i>1,840</i>	<i>8.0</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>97</i>	<i>99</i>	<i>(70-130)</i>	<i>2</i>	<i>20%</i>

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

Approved by: *[Signature]*
Date: *6/4/96*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

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

Date: *4-Jun-96*
COC No.: *4674*
Sample No.: *11042*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla A-15 Drip*
Project Location: *9605311209; North Wall*
Sampled by: *RD* Date: *31-May-96* Time: *12:09*
Analyzed by: *DC* Date: *3-Jun-96*
Sample Matrix: *Soil*

Laboratory Analysis

<i>Component</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Benzene</i>	<i>0.3</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>15.2</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>21.2</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>5.7</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>11.6</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>TOTAL</i>	<i>54.1</i>	<i>ug/kg</i>		

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

Approved by: *DC*
Date: *6/4/96*

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OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

Diesel Range Organics

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

Date: *4-Jun-96*
COC No.: *4674*
Sample No. *11041*
Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla A-15 Drip*
Project Location: *9605311205; Bottom of Pit*
Sampled by: *RD* Date: *31-May-96* Time: *12:05*
Analyzed by: *HR* Date: *3-Jun-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>< 5.0</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

Quality Assurance Report

DRO QC No.: *0475-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>< 5.0</i>	<i>ppm</i>	<i>2,000</i>	<i>1,840</i>	<i>8.0</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>97</i>	<i>99</i>	<i>(70-130)</i>	<i>2</i>	<i>20%</i>

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

Approved by: *[Signature]*
Date: *6/4/96*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

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

Date: *4-Jun-96*
COC No.: *4674*
Sample No. *11041*
Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla A-15 Drip*
Project Location: *9605311205; Bottom of Pit*
Sampled by: *RD* Date: *31-May-96* Time: *12:05*
Analyzed by: *DC* Date: *3-Jun-96*
Sample Matrix: *Soil*

Aromatic Volatile Organics

Component	Result	Units of Measure	Detection Limit	Units of Measure
<i>Benzene</i>	<i>1066.6</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>13926.0</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>1156.6</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>10300.6</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>1712.4</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
	<i>TOTAL</i>	<i>28162.1</i>		<i>ug/kg</i>

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

Approved by: *DC*
Date: *6/4/96*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -