

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

SUBMIT COPY TO  
 NATURAL RESOURCE DEPT  
 AND OIL & GAS ADMINISTRATION

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 C-2 (Conoco)  
 Location: Unit or Qtr/Qtr Sec M Sec 11 T26N R4W County Rio Arriba  
 Pit Type: Separator  Dehydrator  Other   
 Land Type: Jicarilla Apache

Pit Location: Pit dimensions: length 28', width 23', depth 14'  
 (Attach diagram) Reference: wellhead , other   
 Footage from reference: 75'  
 Direction from reference: 85° Degrees  East  North   
 West  South of East

Depth To Groundwater: 75 feet  
 (Vertical distance from contaminants to seasonal high water elevation of groundwater)  
 DEPUTY OIL & GAS INSPECTOR  
 OCT 19 1996

Less than 50 feet	(20 points)	
50 feet to 99 feet	(10 points)	<u>0</u>
Greater than 100 feet	(0 points)	

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)	<u>10</u>

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)	<u>0</u>

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)	<u>0</u>

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)	<u>0</u>
Greater than 1000 feet	(0 points)	

RANKING SCORE (TOTAL POINTS): 10

Jicarilla C-2

Date Remediation Started: 6/3/96 Date Completed: 6/26/96

Remediation Method: Excavation X Approx. cubic yards 334  
(Check all appropriate sections) Landfarmed X Amt. landfarmed (yd<sup>3</sup>) 334

Other \_\_\_\_\_

Remediation Location: Onsite X Offsite \_\_\_\_\_  
(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Removal of contaminated soil to a field head space readings of less than 100 ppm on 4 walls & bottom.

Groundwater Encountered: No X 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 14'

Sample date 6/3/96 Sample time 1135

Sample Results

Soil: Benzene (ppm) \_\_\_\_\_ Water: Benzene (ppb) \_\_\_\_\_  
Total BTEX (ppm) \_\_\_\_\_ Toluene (ppb) \_\_\_\_\_  
Field Headspace (ppm) 41.2 Ethylbenzene (ppb) \_\_\_\_\_  
TPH 8015 (ppm) 67.7 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

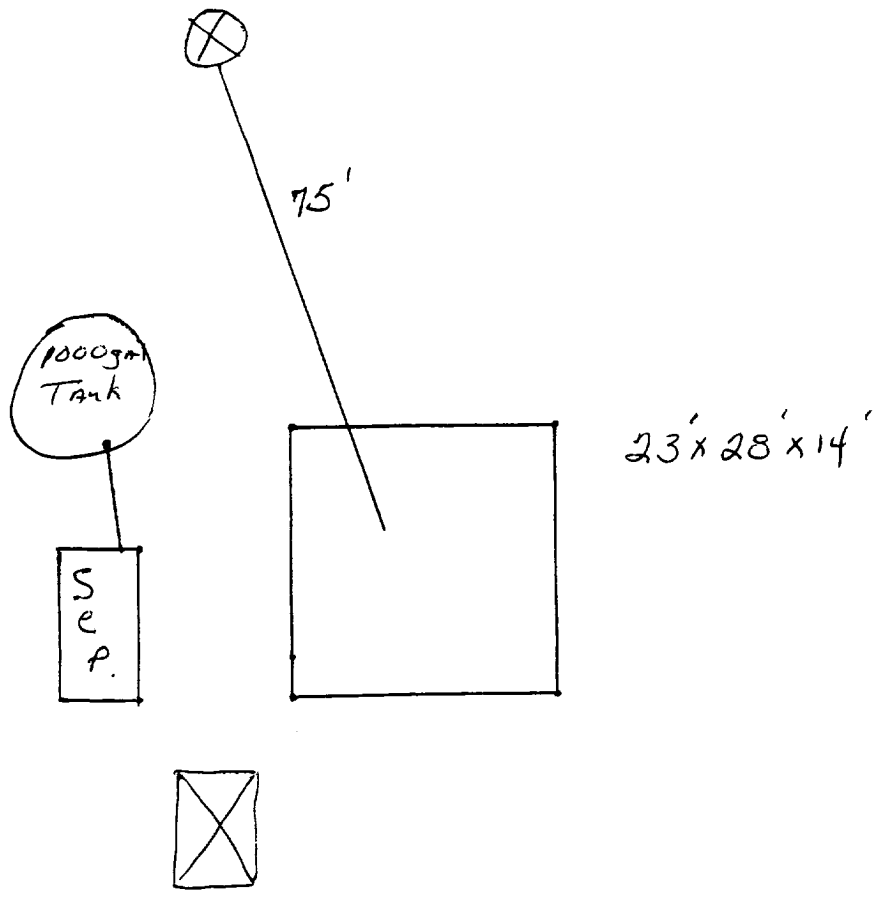
DATE 6/9/96 PRINTED NAME Ronald A. Dedrick  
SIGNATURE Ronald A. Dedrick AND TITLE E.T.

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

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

SIGNED: Steve Manuel DATE: 6-12-96

Jicarilla C-2 Conoco  
Sec. 11 T26N R4W Unit M



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: *8-Jun-96*  
 COC No.: *4675*  
 Sample No. *11115*  
 Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla C #2 LD*  
 Project Location: *9606041040; 5pt. Composite*  
 Sampled by: *RR* Date: *4-Jun-96* Time: *10:40*  
 Analyzed by: *HR* Date: *7-Jun-96*  
 Sample Matrix: *Soil*

**Laboratory Analysis**

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	<i>74.9</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

**Quality Assurance Report**

DRO QC No.: *0475-QC*

**Calibration Check**

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
<i>Diesel Range (C10 - C28)</i>	<i>&lt;5.0</i>	<i>ppm</i>	<i>1,765</i>	<i>1,897</i>	<i>7.5</i>	<i>15%</i>

**Matrix Spike**

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
<i>Diesel Range (C10-C28)</i>	<i>106</i>	<i>105</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: *6/8/96*

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- 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: *8-Jun-96*  
 COC No.: *4675*  
 Sample No. *11114*  
 Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla C #2*  
 Project Location: *9606031140; 5pt. Composite*  
 Sampled by: *RR* Date: *3-Jun-96* Time: *11:40*  
 Analyzed by: *HR* Date: *7-Jun-96*  
 Sample Matrix: *Soil*

**Laboratory Analysis**

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	<i>67.7</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

**Quality Assurance Report**

DRO QC No.: *0475-QC*

**Calibration Check**

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
<i>Diesel Range (C10 - C28)</i>	<i>&lt;5.0</i>	<i>ppm</i>	<i>1,765</i>	<i>1,897</i>	<i>7.5</i>	<i>15%</i>

**Matrix Spike**

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
<i>Diesel Range (C10-C28)</i>	<i>106</i>	<i>105</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: *6/8/96*

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LAB: (505) 325-5667

**AROMATIC VOLATILE ORGANICS**

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

Date: *8-Jun-96*  
 COC No.: *4675*  
 Sample No.: *11115*  
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla C #2 LD*  
 Project Location: *9606041040; 5pt. Composite*  
 Sampled by: *RR* Date: *4-Jun-96* Time: *10:40*  
 Analyzed by: *DC* Date: *7-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>	1.3	ug/kg	0.2	ug/kg
<i>Toluene</i>	4.8	ug/kg	0.2	ug/kg
<i>Ethylbenzene</i>	1.2	ug/kg	0.2	ug/kg
<i>m,p-Xylene</i>	5.7	ug/kg	0.2	ug/kg
<i>o-Xylene</i>	3.4	ug/kg	0.2	ug/kg
	<i>TOTAL</i>	16.3		ug/kg

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

Approved by: *[Signature]*  
 Date: *6/8/96*

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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, New Mexico 87400  
Facility or Well Name: Jicarilla C-2 (Conoco)  
Location: Unit or Qtr/Qtr Sec M Sec 11 T26N R4W County Rio Huerfano  
Land Type: Jicarilla Apache

Date Remediation Started: 6/3/96 Date Completed: 6/26/96  
Remediation Method: Landfarmed X Approx. cubic yards 333.33  
Composted \_\_\_\_\_  
Other \_\_\_\_\_

Depth To Groundwater: (pts.) 4  
Distance to an Ephemeral Stream (pts.) 10  
Distance to Nearest Lake, Playa, or Watering Pond (pts.) 4  
Wellhead Protection Area: (pts.) 4  
Distance To Surface Water: (pts.) 4  
RANKING SCORE (TOTAL POINTS): 10

Final Closure Sampling:  
Sampling Date: 6/19/96 Time: 1038  
Sample Results:  
Field Headspace (ppm) 2.5  
TPH (ppm) 45.0 Method 6015  
Other \_\_\_\_\_

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

DATE 6/24/96 PRINTED NAME Ronald W Dedrick  
SIGNATURE Ronald W Dedrick AND TITLE E.T.

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: [Signature] DATE: 6-24-96

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: *21-Jun-96*  
 COC No.: *4563*  
 Sample No. *11237*  
 Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla C-2 Soil Farm Run 12-51*  
 Project Location: *9606191038; 5pt. Composite*  
 Sampled by: *RD* Date: *19-Jun-96* Time: *10:38*  
 Analyzed by: *DC* Date: *20-Jun-96*  
 Sample Matrix: *Soil*

**Laboratory Analysis**

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
<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.: *0475-QC*

**Calibration Check**

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
<i>Diesel Range (C10 - C28)</i>	<i>&lt;5.0</i>	<i>ppm</i>	<i>2,000</i>	<i>1,746</i>	<i>12.7</i>	<i>15%</i>

**Matrix Spike**

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
<i>Diesel Range (C10-C28)</i>	<i>103</i>	<i>94</i>	<i>(70-130)</i>	<i>6</i>	<i>20%</i>

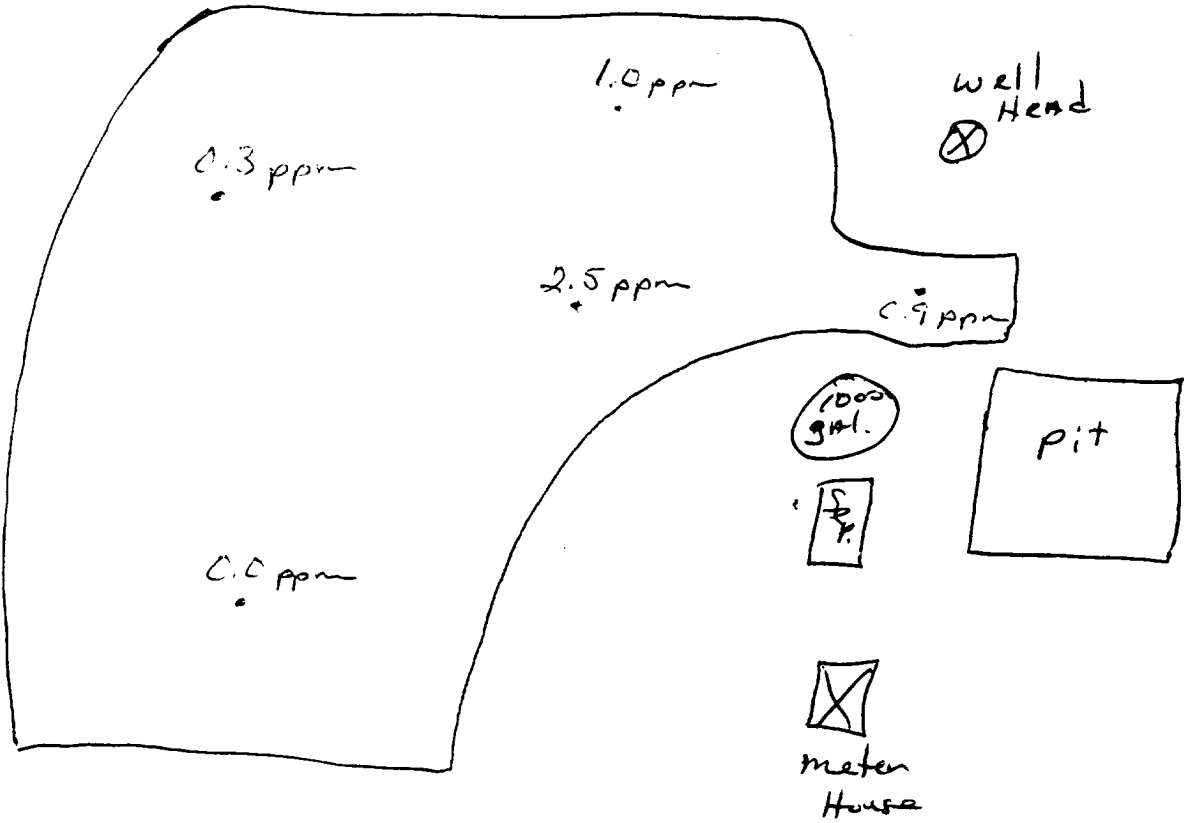
**Method** - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: *[Signature]*  
 Date: *6/21/96*

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100'x90'x1'  
333.33 cu. yds.



Turned 24 Times