

Kenney E. Faust  
DEPUTY OIL & GAS INSPECTOR

FEB 28 1997

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

SUBMIT COPY  
NATURAL RESOURCE  
AND OIL & GAS ADMINISTRATION

RECEIVED  
FEB 28 1997

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 E-11 Conoco

Location: Unit or Qtr/Qtr Sec C Sec 22 T 24N R 4W County Rio Arriba

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type: Jicarilla Apache

Pit Location: Pit dimensions: length 22', width 18', depth 10'  
(Attach diagram)

Reference: wellhead ☒, other ☐

Footage from reference: 50'

Direction from reference: 45° 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) 10

**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):** 10

Date Remediation Started: 7/2/96 Date Completed: 8/5/96

Remediation Method: Excavation X Approx. cubic yards 120

(Check all appropriate sections) Landfarmed X ~~Other~~ 120

Other \_\_\_\_\_

Remediation Location: Onsite    Offsite   

(i.e. landfarmed onsite,

name and location of  
offsite facility) \_\_\_\_\_

General Description of Remedial Action: Pit is located in sand stone - cleaned out  
And dug sand stone to clean walls. Below 100ppm head space  
Bottom still held son

Groundwater Encountered: No X Yes    Depth    contamination

Final Pit: Sample location East South, West side walls

Closure Sampling: North wall and Pit bottom solid rock.

(if multiple samples,

attach sample results

and diagram of sample

locations and depths)

Sample depth 9'

Sample date 7/2/96 Sample time 0833

#### Sample Results

Soil: Benzene (ppm) 0.0013 Water: Benzene (ppb)   

Total BTEX (ppm) 0.0111 Toluene (ppb)   

8000

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 7/2/96 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.

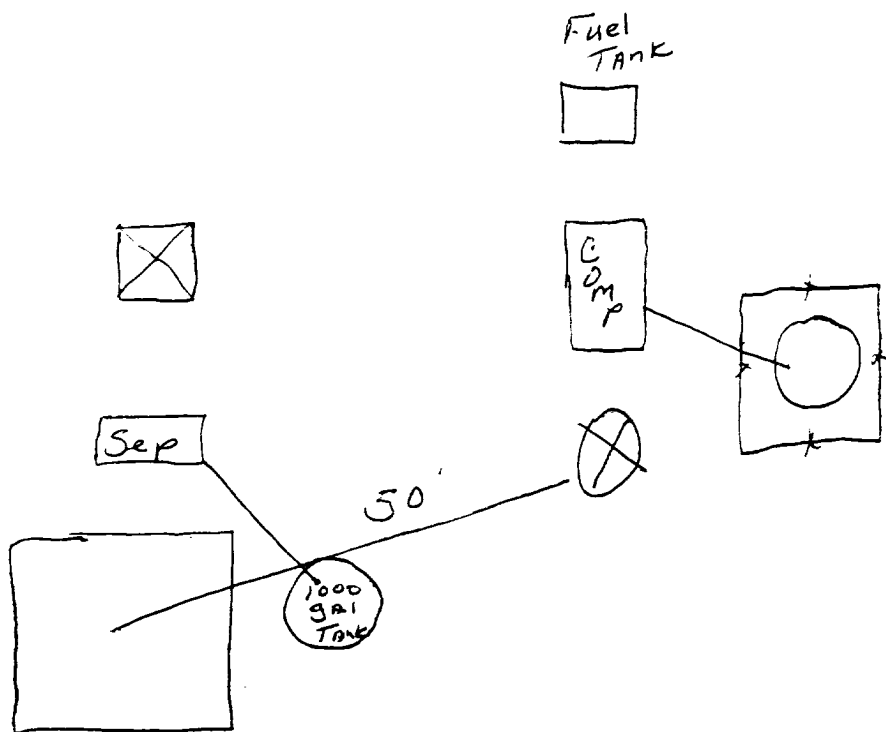
APPROVED: YES X NO    (REASON)   

SIGNED: Joe C. Marshall DATE: 7-9-96

Jicarilla E-11

Sec. 22 T26N R4W Unit C

Conoco



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: *8-Jul-96*  
COC No.: *4782*  
Sample No. *11407*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla E-11*  
Project Location: *9607020833; 3pt. Composite*  
Sampled by: *EP* Date: *2-Jul-96* Time: *8:33*  
Analyzed by: *DC* Date: *3-Jul-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.: *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>&lt; 5.0</i>	<i>ppm</i>	<i>2,000</i>	<i>1,915</i>	<i>4.3</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>117</i>	<i>112</i>	<i>(70-130)</i>	<i>3</i>	<i>20%</i>

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

Approved by: *[Signature]*  
Date: *2/3/96*

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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: *8-Jul-96*  
COC No.: *4782*  
Sample No.: *11407*  
Job No.: *2-1000*

Project Name: ***PNM Gas Services - Jicarilla E-11***  
Project Location: ***9607020833; 3pt. Composite***  
Sampled by: *EP* Date: *2-Jul-96* Time: *8:33*  
Analyzed by: *DC* Date: *3-Jul-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>	2.2	ug/kg	0.2	ug/kg
<i>Ethylbenzene</i>	2.2	ug/kg	0.2	ug/kg
<i>m,p-Xylene</i>	4.4	ug/kg	0.2	ug/kg
<i>o-Xylene</i>	0.9	ug/kg	0.2	ug/kg
<b><i>TOTAL</i></b>		11.1		ug/kg

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

Approved by: *[Signature]*  
Date: *7/8/96*

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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, N Mex. 87401  
Facility or Well Name: Jicarilla E-11 (Conoco)  
Location: Unit or Qtr/Qtr Sec C Sec 22 T 26N R 4W County Rio Arriba  
Land Type: Jicarilla Apache

Date Remediation Started: 7/2/96 Date Completed: 8/5/96  
Remediation Method: Landfarmed X Approx. cubic yards 120  
Composted         
Other       

Depth To Groundwater: (pts.) 0  
Distance to an Ephemeral Stream (pts.) 10  
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): 10

**Final Closure Sampling:**  
Sampling Date: 7/25/96 Time: 0645  
Sample Results:  
Field Headspace (ppm) 41.4  
TPH (ppm) 55.0 Method 8015  
Other       

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

DATE 7/29/96 PRINTED NAME Ronald A. Dedrick  
SIGNATURE Ronald A. Dedrick AND TITLE E.T.

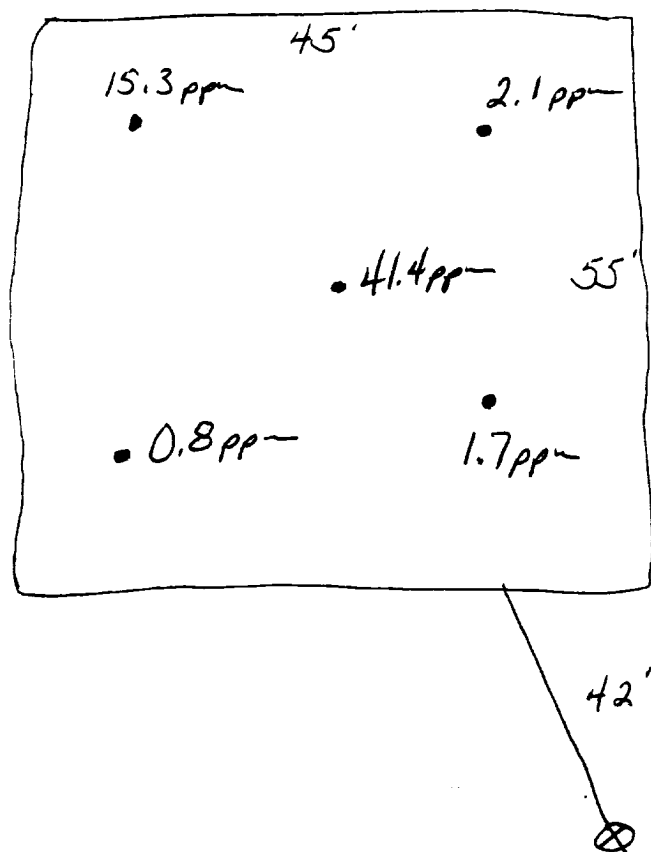
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES ✓ NO        (REASON)       

SIGNED: Gabriel Julian DATE: 7/31/96

Jicarilla E-11  
Sec. 22 T26N R4W Unit C  
Conoco

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: *29-Jul-96*  
COC No.: *4806*  
Sample No. *11612*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Jicarilla E-11 Landfarm Run 12-51*  
Project Location: *9607250645; 5pt. Composite*  
Sampled by: *RB* Date: *25-Jul-96* Time: *6:45*  
Analyzed by: *DC* Date: *26-Jul-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.: 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>2,000</i>	<i>1,977</i>	<i>1.1</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>109</i>	<i>99</i>	<i>(70-130)</i>	<i>7</i>	<i>20%</i>

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

Approved by: *[Signature]*  
Date: *7/29/96*

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