

*Lenny E. ...*  
DEPUTY OIL & GAS INSPECTOR

FEB 26 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 (BROG) **Telephone:** 324-3764

**Address:** 603 W. Elm Street Farmington, NM 87401

**Facility or Well Name:** Jicarilla G-9

**Location:** Unit: B Sec. 1 T. 24 N R. 5 W County Rio Arriba

**Pit Type:** Separator      Dehydrator X Other     

**Land Type:** Jicarilla Apache

**Pit Location:** Pit dimensions: length 26' width 14' depth 12'

(Attach diagram) Reference: wellhead X other     

Footage from reference: 81'

Direction from reference: Straight Degrees      East      North     

X West of South     

<b>Depth to Ground Water:</b> <small>(Vertical distance from contaminants to seasonal high water elevation of ground water)</small>	Less than 50 feet (20 points)	
	50 feet to 99 feet (10 points)	<u>0</u>
	Greater than 100 feet (0 points)	
<b>Wellhead Protection Area:</b> <small>(Less than 200 feet from a private domestic water source, or, less than 1,000 feet from all other water sources)</small>	Yes (20 points)	<u>0</u>
	No (0 points)	
<b>Distance to Surface Water:</b> <small>(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)</small>	Less than 200 feet (20 points)	
	200 feet to 1,000 feet (10 points)	<u>0</u>
	Greater than 1,000 feet (0 points)	
<b>Distance to Ephemeral Stream (dry wash):</b> <small>(Horizontal distance to all downgradient streams having a width of at least 10 feet)</small>	Less than or equal to 100 feet (10 points)	<u>0</u>
	Greater than 100 feet (0 points)	
<b>Distance to Nearest Lake, Playa, or Watering Pond:</b> <small>(Horizontal distance to all downgradient lakes, playas, and livestock or wildlife water ponds)</small>	Less than or equal to 100 feet (10 points)	<u>0</u>
	Greater than 100 feet (0 points)	
<b>RANKING SCORE (TOTAL POINTS):</b>		<u>0</u>

NOV - 9 1997  
OIL & GAS DIV.

Date Remediation Started: 6/26/97 Date Completed: 8/25/97

Remediation Method: Excavation X Approx. Cubic Yards 162

(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds): 162

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 pit bottom.

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

Sample depth 12'

Sample date 6/26/97 Sample time 0841

**Sample Results**

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

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

Field headspace (ppm) 87.8 Ethylbenzene (ppb) \_\_\_\_\_

TPH ND 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 7/2/97 PRINTED NAME Ronald A. Dedrick

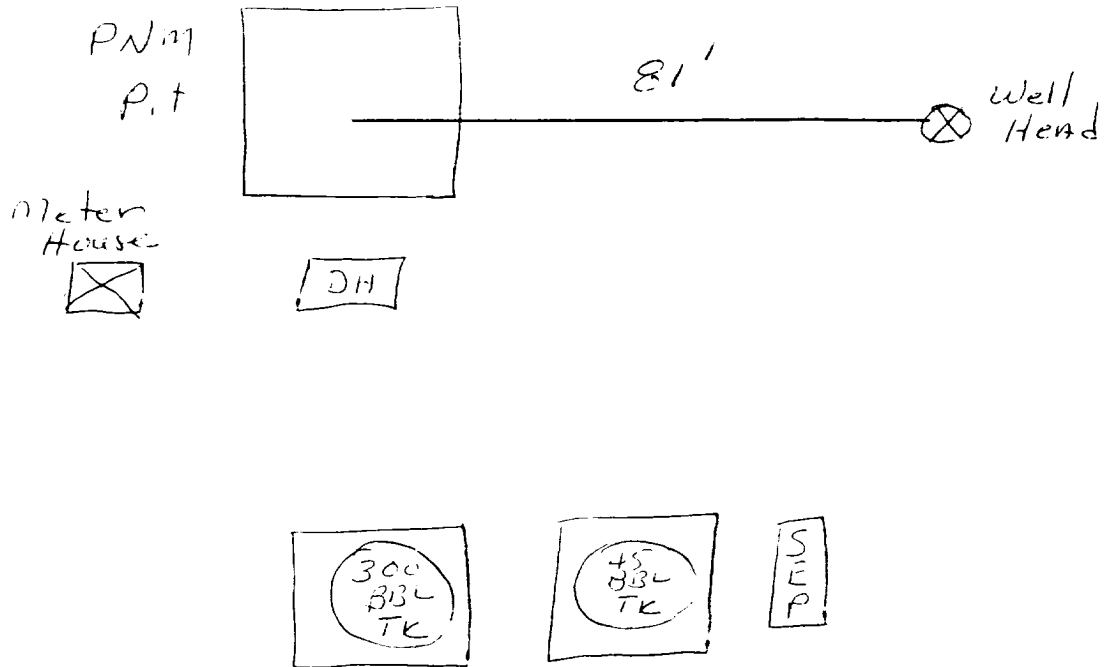
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II

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: Ken C. Munnell DATE: 7-3-97

Jicarilla G-9  
Sec. 1 T26N R5W Unit B  
BROG



Jicarilla G-9  
Sec 1 T26N R5W Unit B  
BROG

26' x 14' x 12'

North Wall  
Sample 11'  
5.1 ppm

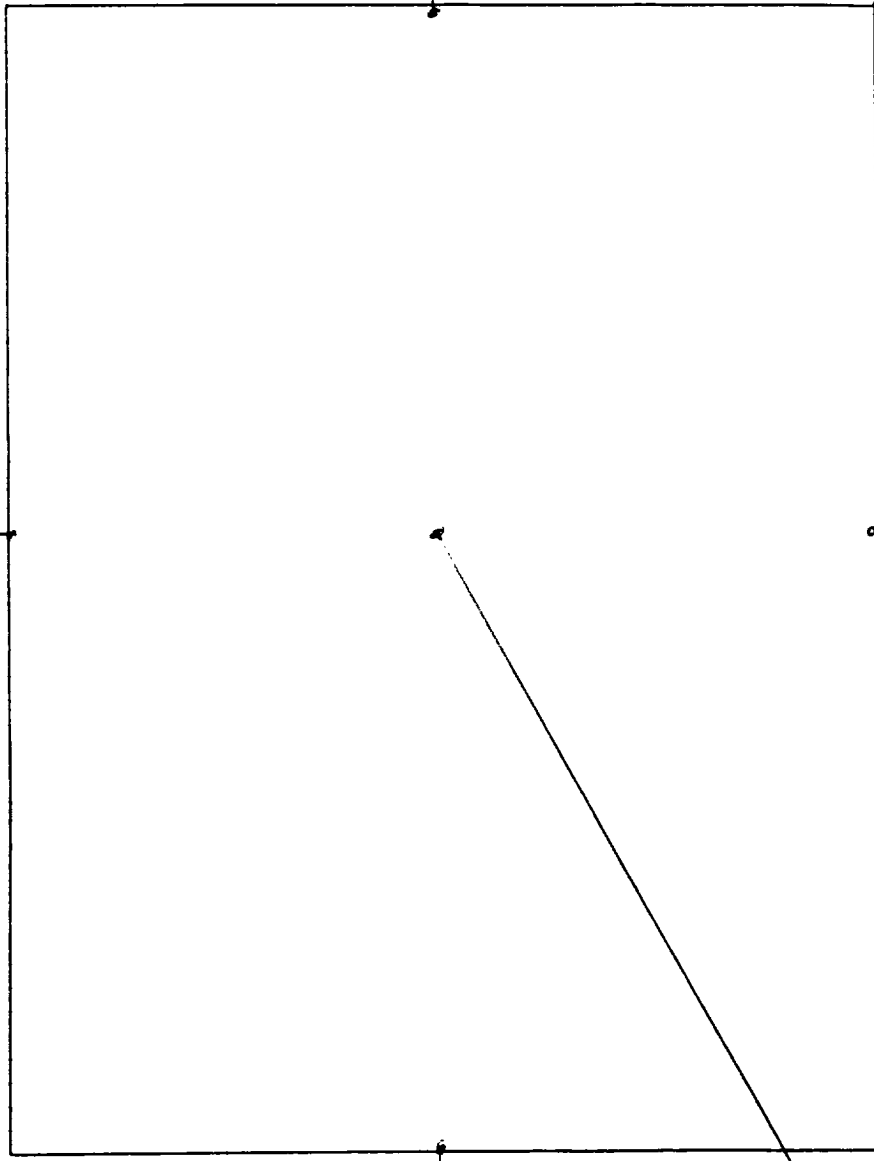
West Wall  
Sample 11'  
53.7 ppm

East Wall  
Sample 11'  
22.8 ppm

South Wall  
Sample 11'  
84.7 ppm

Bottom  
Sample 12'  
87.8 ppm

5' Sample - 489 ppm  
0' Sample - 202 ppm





**ANALYTICAL REPORT**

Attn: *Denver Bearden* Date: 1-Jul-97  
 Company: *PNM Gas Services* COC No.: 5498  
 Address: *603 W. Elm* Sample No.: 15097  
 City, State: *Farmington, NM 87401* Job No.: 2-1000

Project Name: **PNM Gas Services - Jicarilla G-9**  
 Project Location: **9706260841; 5pt. Composite**  
 Sampled by: TE Date: 26-Jun-97 Time: 8:41  
 Analyzed by: DC/HR Date: 27-Jun-97  
 Sample Matrix: Soil

*Laboratory Analysis*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	ND	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

*Quality Assurance Report*

DRO QC No.: 0548-STD


*Continuing Calibration Verification*

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	ND	ppm	200	204	1.8	15%

*Matrix Spike*

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	93	89	(70-130)	5	20%

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

Approved by:   
 Date: 7/1/97

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

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NATURAL  
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ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: PNM Gas Services (BRCG) Telephone: 324-3764  
Address: 603 W. Elm Street Farmington, NM 87401  
Facility or Well Name: Jicarilla G-9  
Location: Unit: B Sec. 1 T. 24 N R. 5 W County Rio Arriba  
Land Type: Jicarilla Apache

Date Remediation Started: 6/24/97 Date Completed: 7/3/97  
Remediation Method: Landfarmed  Approx. cubic yards 162  
Composted   
Other

Depth to Ground Water: (pts.) <u>0</u>	<b>Final Closure Sampling:</b> Sampling Date: <u>7/3/97</u> Time <u>1237</u> Sampling Results: Field Headspace (ppm) <u>47.3</u> TPH (ppm) <u>24</u> Method <u>8015</u> Other _____
Distance to an Ephemeral Stream: (pts.) <u>0</u>	
Distance to Nearest Lake, Playa, or Watering Pond: (pts.) <u>0</u>	
Wellhead Protection Area: (pts.) <u>0</u>	
Distance to Surface Water: (pts.) <u>0</u>	
Ranking Score (Total Points): <u>0</u>	

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

DATE 7/9/97 PRINTED NAME Ronald A. Dedrick  
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II

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

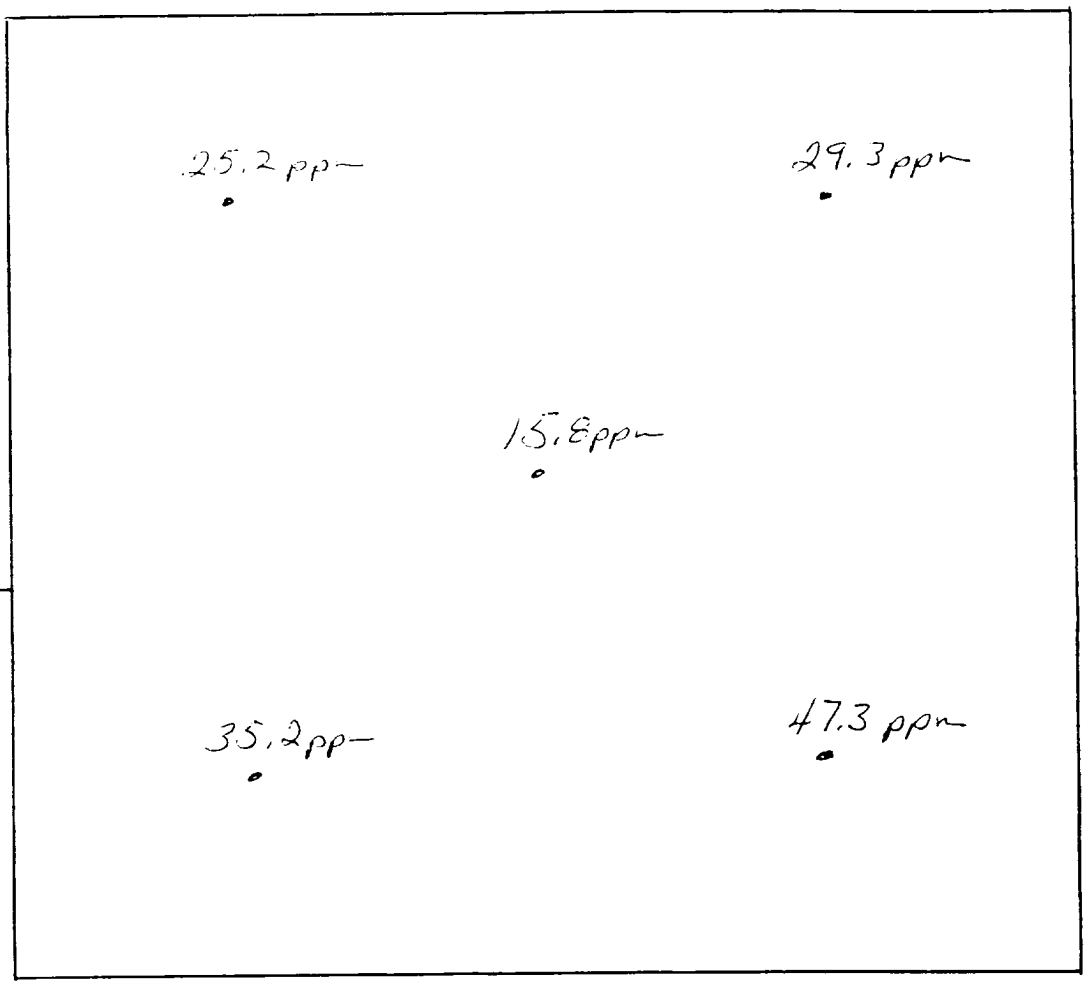
APPROVED: YES  NO  (REASON) use as Backfill

SIGNED: [Signature] DATE: 7-9-97

Jicarilla G-9  
Sec 1 T24N R54W Unit B  
BROG

Land farm

87'



63'

Well  
Head 21'  
⊗

25.2 ppm

29.3 ppm

15.8 ppm

35.2 ppm

47.3 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

**ANALYTICAL REPORT**

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

Date: *8-Jul-97*  
 COC No.: *5507*  
 Sample No.: *15194*  
 Job No.: *2-1000*

Project Name: ***PNM Gas Services -Jicarilla G-9 Landfarm***  
 Project Location: ***9707031237; 5pt. Composite***  
 Sampled by: *RB* Date: *3-Jul-97* Time: *12:37*  
 Analyzed by: *DC/HR* Date: *8-Jul-97*  
 Sample Matrix: *Soil*

**Laboratory Analysis**

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	24	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

**Quality Assurance Report**

DRO QC No.: 0548-STD

**Continuing Calibration Verification**

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	ND	ppm	200	185	7.8	15%

**Matrix Spike**

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	84	89	(70-130)	5	20%

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

Approved by: *Heidi Reese*  
 Date: *7/9/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -