

**DEPUTY OIL & GAS INSPECTOR**

OCT 28 1997

**ENVIRONMENTAL PROTECTION OFFICE**

**DULCE, NEW MEXICO 87528**

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

# PIT REMEDIATION AND CLOSURE REPORT

<b>Operator:</b> PNM Gas Services		<b>Telephone:</b> 324-3764	
<b>Address:</b> 603 W. Elm Street Farmington, NM 87401			
<b>Facility or Well Name:</b> ARIZONA JICARILLA #8			
<b>Location:</b>	Unit: D	Sec. 25	T. 25 N R. 4 W County: Rio Arriba
<b>Pit Type:</b>	Separator <input checked="" type="checkbox"/>	Dehydrator <input type="checkbox"/>	Other <input type="checkbox"/>
<b>Land Type:</b> Jicarilla Apache			

<b>Pit Location:</b>	<b>Pit dimensions:</b>	length: 17'	width: 15'	depth: 18'
(Attach diagram)	<b>Reference:</b>	wellhead <input checked="" type="checkbox"/>	other <input type="checkbox"/>	
	<b>Footage from reference:</b>	15'		
	<b>Direction from reference:</b>	Straight Degrees East North <input checked="" type="checkbox"/> West South <input type="checkbox"/>		

<b>Depth to Ground Water:</b> <small>(Vertical distance from contaminants to seasonal high water elevation or ground water)</small>	Less than 50 feet	(20 points)	e
	50 feet to 99 feet	(10 points)	
	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)	e
	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)	e
	200 feet to 1,000 feet	(10 points)	
	Greater than 1,000 feet	(0 points)	
<b>Distance to Ephemeral Stream (dry wash):</b> <small>(Horizontal distance to all downstream streams having a width of at least 10 feet)</small>	Less than or equal to 100 feet	(10 points)	e
	Greater than 100 feet	(0 points)	
<b>Distance to Nearest Lake, Playa, or Watering Pond:</b> <small>(Horizontal distance to all downstream lakes, playas, and livestock or wildlife water ponds)</small>	Less than or equal to 100 feet	(10 points)	e
	Greater than 100 feet	(0 points)	

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

Date Remediation Started: 4/28/97 Date Completed: 6/4/97

Remediation Method: Excavation X Approx. Cubic Yards 170

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds): 170

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 as to get a below 100 ppm head space reading. Bottom of pit was solid rock.

Ground Water Encountered: No X Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit Closure Sampling:

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

Sample Location North East South and West side walls

Sample depth 16'

Sample date 4/28/97 Sample time 1:50 P

Sample Results

Soil: Benzene (ppm) 0.0648 Water: Benzene (ppb) \_\_\_\_\_

Total BTEX (ppm) 1.2566 Toluene (ppb) \_\_\_\_\_

Field headspace (ppm) 91.7 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 5/9/97 PRINTED NAME Ronald A. Dedrick

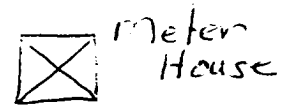
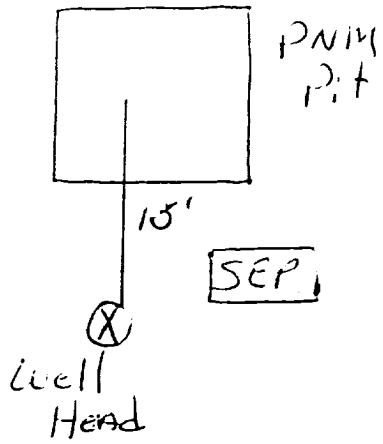
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II

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): SPRAY + close

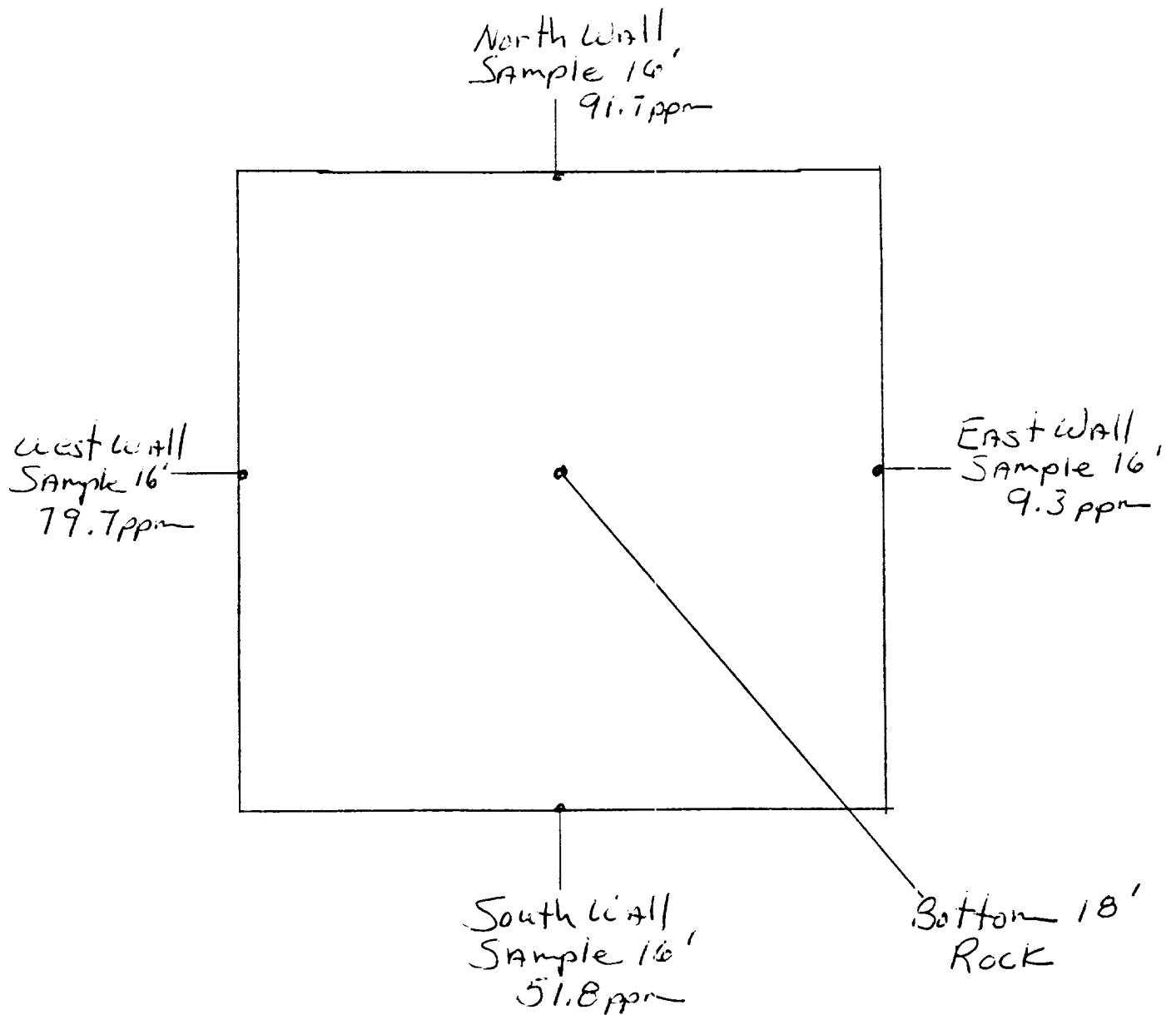
SIGNED: Steve C. Munnell DATE: 5-14-97

Arizona Jicarilla #8  
Sec. 25 T25N R4W Unit D  
BROG



Arizona Jicarilla T8  
Sec. 25 T25N R4W Unit D  
BROG

17' x 15' x 18'



5' Sample - 1026 ppm  
10' Sample - 888 ppm  
15' Sample - 433 ppm  
18' Sample - Rock

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: *9-May-97*  
COC No.: *5431*  
Sample No.: *14418*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Arizona Jicarilla #8 Run 12-61*

Project Location: *9704281507; 4pt. Composite*

Sampled by: *SO* Date: *28-Apr-97* Time: *15:07*

Analyzed by: *HR/DC* Date: *8-May-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	5.0	mg/kg

ND - Not Detected at Limit of Quantitation

#### Quality Assurance Report

DRO QC No.: *0519-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	100	105	4.8	15%

#### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	101	102	(70-130)	1	20%

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

Approved by: *[Signature]*

Date: *5/9/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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: *9-May-97*  
COC No.: *5431*  
Sample No.: *14418*  
Job No.: *2-1000*

Project Name: ***PNM Gas Services - Arizona Jicarilla #8 Run 12-61***

Project Location: ***9704281507; 4pt. Composite***

Sampled by: *SO* Date: *28-Apr-97* Time: *15:07*

Analyzed by: *DC* Date: *7-May-97*

Sample Matrix: *Soil*

#### ***Laboratory Analysis***

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	64.8	ug/kg	1.0	ug/kg
<i>Toluene</i>	91.0	ug/kg	1.0	ug/kg
<i>Ethylbenzene</i>	84.7	ug/kg	1.0	ug/kg
<i>m,p-Xylene</i>	572.1	ug/kg	1.0	ug/kg
<i>o-Xylene</i>	444.1	ug/kg	1.0	ug/kg
	<i>TOTAL</i>	1256.6		ug/kg

ND - Not Detected at Limit of Quantitation

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

*Approved by:*

*Date:*

**P.O. BOX 2606 • FARMINGTON, NM 87499**

*- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -*

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

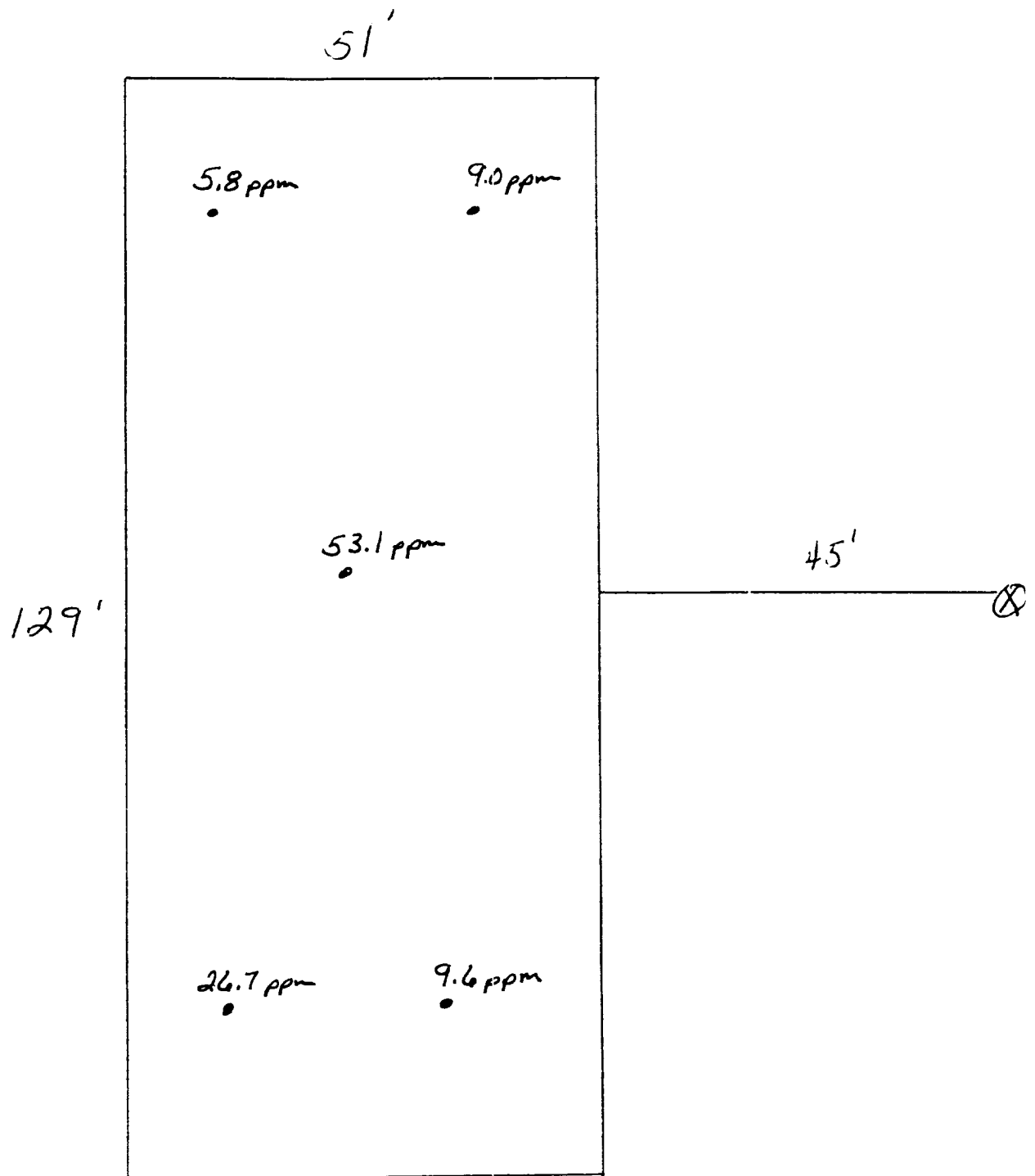
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NATURAL  
RESOURCE DEPT  
AND OIL-GAS  
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: <u>PNM Gas Services</u> <u>BR06</u> Telephone: <u>324-3764</u>	
Address: <u>503 W. Elm Street Farmington, NM 87401</u>	
Facility or Well Name: <u>Arizona Jicarilla #8</u>	
Location: Unit: <u>D</u> Sec. <u>25</u> T. <u>25</u> N. R. <u>4</u> W County <u>Rio Arriba</u>	
Land Type: <u>Jicarilla Apache</u>	
Date Remediation Started: <u>4/26/97</u> Date Completed: <u>5/22/97</u>	
Remediation Method: Landfilled <u>X</u> Approx. cubic yards <u>170</u> Composted <u>—</u> Other <u>—</u>	
Depth to Ground Water: (pts.) <u>✓</u> Distance to an Ephemeral Stream: (pts.) <u>✓</u> Distance to Nearest Lake, Playa, or Watering Pond: (pts.) <u>✓</u> Wellhead Protection Area: (pts.) <u>✓</u> Distance to Surface Water: (pts.) <u>✓</u> Ranking Score (Total Points): <u>✓</u>	Final Closure Sampling: Sampling Date: <u>5/12/97</u> Time <u>1021</u> Sampling Results: Field Headspace (ppm) <u>53.1</u> TPH (ppm) <u>ND</u> Method <u>8015</u> Other <u>—</u>
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
DATE <u>5/22/97</u> PRINTED NAME <u>Ronald A. Dedrick</u>	
SIGNATURE <u>Ronald A. Dedrick</u> AND TITLE <u>Environmental Technician II</u>	
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE	
APPROVED: YES <u>X</u> NO <u>—</u> (REASON) <u>—</u>	
SIGNED: <u>[Signature]</u> DATE: <u>5-29-97</u>	

Arizona Ticanilla #8  
Sec. 25 T.25 N R.4 W Unit D  
BRUG

Land farm





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: *22-May-97*  
COC No.: *5453*  
Sample No.: *14625*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Arizona Jicarilla #8 Landfarm Run 12-61*  
Project Location: *9705121021; 5pt. Composite*  
Sampled by: *RB* Date: *12-May-97* Time: *10:21*  
Analyzed by: *HR/DC* Date: *16-May-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	5.0	mg/kg

ND - Not Detected at Limit of Quantitation

#### Quality Assurance Report

DRO QC No.: *0519-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	100	104	4.2	15%

#### Matrix Spike

Parameter	1- Percent Recovered	2- Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	96	88	(70-130)	9	20%

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

Approved by: *[Signature]*  
Date: *5/22/97*