

District I  
P O Box 1980 Hobbs NM

District II  
P O Drawer DD Artesia NM 88221

District III  
1000 Rio Brazos Rd Aztec NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco Street  
Santa Fe, New Mexico 87505

SUBMIT 1 COPY TO  
APPROPRIATE  
DISTRICT OFFICE  
AND 1 COPY TO  
SANTA FE OFFICE

**PIT REMEDIATION AND CLOSURE REPORT**

Operator: PNM Gas Services ( SRC )		Telephone: 324-3764	
Address: 603 W. Elm Street Farmington, NM 87401			
Facility or Well Name: Cain #13			
Location: Unit: D Sec. 16 T. 28 N R. 10 W County San Juan			
Pit Type: Separator <input checked="" type="checkbox"/> Dehydrator <input type="checkbox"/> Other <input type="checkbox"/>			
Land Type: BLM <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Other <input type="checkbox"/>			
Pit Location: Pit dimensions: length 10 width 10 depth 3			
(Attach diagram) Reference: wellhead <input checked="" type="checkbox"/> other <input type="checkbox"/>			
Footage from reference: 60'			
Direction from reference: 20 Degrees <input checked="" type="checkbox"/> East <input type="checkbox"/> North <input checked="" type="checkbox"/> West <input type="checkbox"/> South <input type="checkbox"/>			
Depth to Ground Water:		(20 points)	
(Vertical distance from contaminants to seasonal high water elevation of ground water)		(10 points)	
Less than 50 feet		( 0 points)	
50 feet to 99 feet		0	
Greater than 100 feet			
Wellhead Protection Area:		(20 points)	
(Less than 200 feet from a private domestic water source, or, less than 1,000 feet from all other water sources)		( 0 points)	
Yes		0	
No			
Distance to Surface Water:		(20 points)	
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)		(10 points)	
Less than 200 feet		( 0 points)	
200 feet to 1,000 feet		0	
Greater than 1,000 feet			
RANKING SCORE (TOTAL POINTS):		0	

<b>Date Remediation Started:</b>		<u>9/3/96</u>		<b>Date Completed:</b>		<u>9/5/96</u>	
<b>Remediation Method:</b>  (Check all appropriate sections)	Excavation	<u>X</u>	Approx. Cubic Yard		<u>179</u>		
	Landfarmed	<u>X</u>	Amount Landfarmed (cubic yds)		<u>179</u>		
	Other	<u></u>					
<b>Remediation Location:</b>		Onsite	<u>X</u>	Offsite	<u></u>		
(i.e., landfarmed onsite, name and location of offsite facility)							
<b>Backfill Material Location:</b> <u></u>							
<b>General Description of Remedial Action:</b>							
<u>Excavated contaminated soil to pit size of 19'x17'x15' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil was aerated by plowing/disking until soil met regulatory levels.</u>							
<u></u>							
<u></u>							
<u></u>							
<u></u>							
<u></u>							
<b>Ground Water Encountered:</b> No <u><input checked="" type="checkbox"/></u> Yes <u></u> Depth <u></u>							

<b>Final Pit Closure Sampling:</b>  (if multiple samples, attach sample result and diagram of sample locations and depths.)	<b>Sample Location</b>		<u>5 pt composite-4 side walls and center of pit bottom</u>	
	<b>Sample depth</b>		<u>15'</u>	
	<b>Sample date</b>		<u>9/3/96</u>	<b>Sample time</b> <u>10:40:00 AM</u>
	<b>Sample Results</b>			
	Benzene (ppm)		<u>&lt; 0.0002</u>	
	Total BTEX (ppm)		<u>6.5963</u>	
	Field headspace (ppm)		<u></u>	
	TPH	<u>24.5</u>	Method	<u>8015A</u>
Vertical Extent (ft) <u></u>		Risk Assessment form attached Yes <u></u> No <u><input checked="" type="checkbox"/></u>		
<b>Ground Water Sample:</b>		Yes <u></u>	No <u><input checked="" type="checkbox"/></u>	(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 January 22, 1997

SIGNATURE

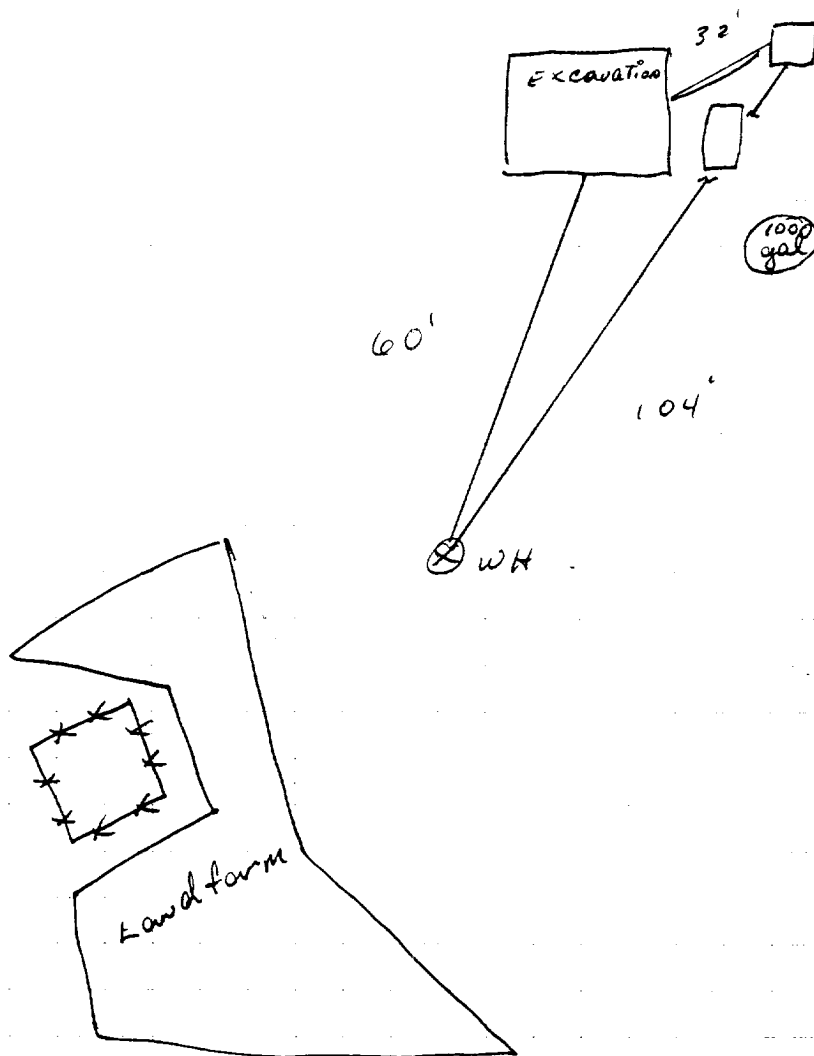
*Denver Bearden*

PRINTED NAME  
AND TITLE

Denver Bearden  
Administrator III

Coin #13

↑  
N



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: *10-Sep-96*  
 COC No.: *4744*  
 Sample No. *12034*  
 Job No. *2-1000*

Project Name: ***PNM Gas Services - Cain #13***  
 Project Location: ***9609031040; Pit Excavation Composite Sample***  
 Sampled by: GC Date: *3-Sep-96* Time: *10:40*  
 Analyzed by: DC Date: *9-Sep-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>24.5</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

***Quality Assurance Report***DRO QC No.: *0489-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>100</i>	<i>109</i>	<i>9.0</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>98</i>	<i>114</i>	<i>(70-130)</i>	<i>11</i>	<i>20%</i>

**Method** - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas ChromatographyApproved by: *JG*Date: *9/10/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

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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: *10-Sep-96*  
COC No.: *4744*  
Sample No. *12034*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Cain #13*  
Project Location: *9609031040; Pit Excavation Composite Sample*  
Sampled by: *GC* Date: *3-Sep-96* Time: *10:40*  
Analyzed by: *DC* Date: *9-Sep-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>Benzene</i>	<i>&lt;0.2</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>55.2</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>464.1</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>4426.7</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>1650.3</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
	<i>TOTAL</i>	<i>6596.3</i>		<i>ug/kg</i>

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

Approved by: *[Signature]*  
Date: *9/10/96*

Cain #13

10-1-96

Meridian Oil

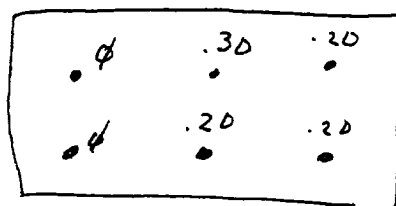
Sec. 16, 28N, 10W

Land Farm: On location

Composite sample # 9610011230

6 pt. comp.

Soil vapor head space PID reading = 5.9 ppm



2"-12" depth

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: *3-Oct-96*  
COC No.: *5078*  
Sample No. *12402*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Cain #13 Landfarm*  
Project Location: *9610011230; 6pt. Composite, 2"-12" depth*  
Sampled by: *GC* Date: *1-Oct-96* Time: *12:30*  
Analyzed by: *DC/HR* Date: *3-Oct-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.: 0489-QC*

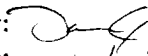
#### *Calibration Check*

<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>100</i>	<i>110</i>	<i>9.9</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>99</i>	<i>100</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:   
Date: *10/3/96*

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