

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

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

OIL CONSERVATION DIVISION

2040 South Pacheco Street  
Santa Fe, New Mexico 87505

**PIT REMEDIATION AND CLOSURE REPORT**

*Approved*

**Operator:** PNM Gas Services ( Meridian ) **Telephone:** 324-3764

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

**Facility or Well Name:** Zachry #4

**Location:** Unit: P Sec. 34 T. 29 N R. 10 W County San Juan

**Pit Type:** Separator ☐ Dehydrator ☒ Other ☐

**Land Type:** BLM ☒ State ☐ Fee ☐ Other ☐

**Pit Location:** Pit dimensions: length 20 width 20 depth 3

(Attach diagram) Reference: wellhead ☒ other ☐

Footage from reference: 96'

Direction from reference: 45 Degrees ☒ East ☐ West of North ☐ South ☒

**Depth to Ground Water:**

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

(Vertical distance from contaminants to seasonal high water elevation of ground water)

**Wellhead Protection Area:**

Yes	(20 points)	
No	( 0 points)	<u>0</u>

(Less than 200 feet from a private domestic water source, or, less than 1,000 feet from all other water sources)

**Distance to Surface Water:**

Less than 200 feet	(20 points)	
200 feet to 1,000 feet	(10 points)	
Greater than 1,000 feet	( 0 points)	<u>10</u>

(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)

**RANKING SCORE (TOTAL POINTS):** 30

<b>Date Remediation Started:</b> <u>8/26/96</u>		<b>Date Completed:</b> <u>8/27/96</u>	
<b>Remediation Method:</b>  (Check all appropriate sections)	Excavation	<u>X</u>	Approx. Cubic Yard <u>160</u>
	Landfarmed	<u>X</u>	Amount Landfarmed (cubic yds) <u>160</u>
	Other _____		
<b>Remediation Location:</b> Onsite _____		Offsite <u>Zachry #34 (34-29N-10W)</u>	
(i.e., landfarmed onsite, name and location of offsite facility)			
<b>Backfill Material Location:</b> _____			
<b>General Description of Remedial Action:</b>			
Excavated contaminated soil to pit size of 18'x15'x16' and landfarmed soil offsite within a bermed area at a depth of 6" to 12". Soil was aerated by plowing/disking until soil met regulatory levels.			
_____			
_____			
_____			
_____			
_____			
<b>Ground Water Encountered:</b> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Depth _____			

<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>16' @ bottom</u>		
	<b>Sample date</b>	<u>8/26/96</u>	<b>Sample time</b>	<u>12:00:00 PM</u>
	<b>Sample Results</b>			
	Benzene (ppm)	<u>&lt;</u>	<u>0.0002</u>	
	Total BTEX (ppm)	<u>0.1252</u>		
	Field headspace (ppm)	_____		
	TPH	<u>&lt;</u>	<u>5.0</u>	Method <u>8015A</u>
Vertical Extent (ft)	_____	Risk Assessment form attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
<b>Ground Water Sample:</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

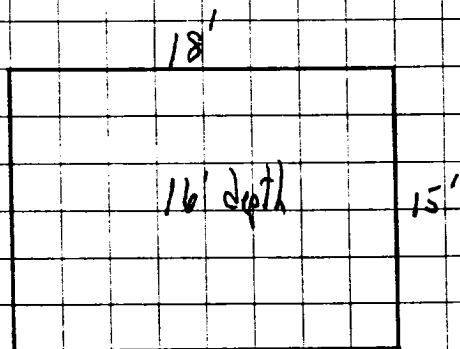
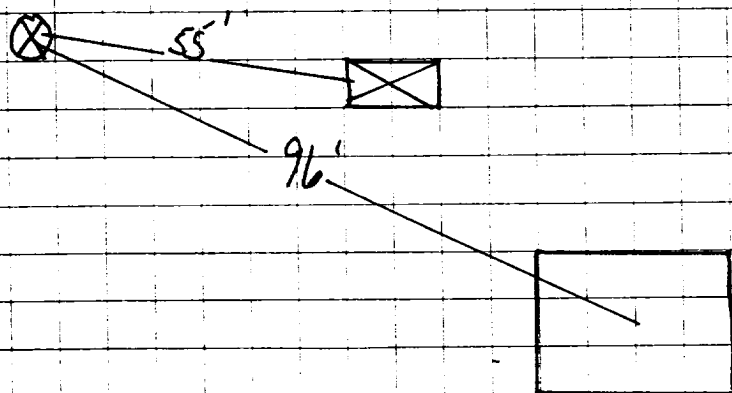
Denver Bearden  
Administrator III

Zachry #4

Meridian Oil

Sec. 34, 29N, 10W, P

8-26-96



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: *28-Aug-96*  
COC No.: *4977*  
Sample No. *11893*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Zachery #4*  
Project Location: *9608261200; 5pt. Composite, 4 Walls @ 14' and Bottom @ 16'*  
Sampled by: *GC* Date: *26-Aug-96* Time: *12:00*  
Analyzed by: *DC/BV* Date: *27-Aug-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>104</i>	<i>3.8</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>108</i>	<i>103</i>	<i>(70-130)</i>	<i>4</i>	<i>20%</i>

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

Approved by: *Ja4*  
Date: *8/28/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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: *28-Aug-96*  
COC No.: *4977*  
Sample No.: *11893*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Zachery #4*  
Project Location: *9608261200; 5pt. Composite, 4 Walls @ 14' and Bottom @ 16'*  
Sampled by: *GC* Date: *26-Aug-96* Time: *12:00*  
Analyzed by: *DC* Date: *27-Aug-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>8.7</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>14.2</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>94.9</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>7.4</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
	<i>TOTAL</i>	<i>125.2</i>		<i>ug/kg</i>

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

Approved by: *[Signature]*  
Date: *8/28/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Zachery #4

10-22-96

Meridian Oil

Sec. 34, 29N, 10W

Land Farm : Zachery #34

Meridian Oil

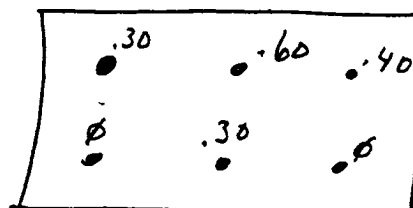
Sec. 34, 29N, 10W

Composite sample # 9610221015

6pt. comp

Soil vapor headspace PID reading = 3.9 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: **23-Oct-96**  
COC No.: **5065**  
Sample No. **12661**  
Job No. **2-1000**

Project Name: **PNM Gas Services - Zachery #4 Landfarm: Zachery #34**  
Project Location: **9610221015; 6pt. Composite, 2"-12" depth**  
Sampled by: **GC** Date: **22-Oct-96** Time: **10:15**  
Analyzed by: **DC/HR** Date: **23-Oct-96**  
Sample Matrix: **Soil**

***Laboratory Analysis***

<b>Parameter</b>	<b>Result</b>	<b>Unit of Measure</b>	<b>Detection Limit</b>	<b>Unit of Measure</b>
<b>Diesel Range Organics (C10 - C28)</b>	<b>&lt;5.0</b>	<b>mg/kg</b>	<b>5.0</b>	<b>mg/kg</b>

***Quality Assurance Report***

**DRO QC No.: 0489-QC**


***Calibration Check***

<b>Parameter</b>	<b>Method Blank</b>	<b>Unit of Measure</b>	<b>True Value</b>	<b>Analyzed Value</b>	<b>% Diff</b>	<b>Limit</b>
<b>Diesel Range (C10 - C28)</b>	<b>&lt;5.0</b>	<b>ppm</b>	<b>100</b>	<b>96</b>	<b>3.6</b>	<b>15%</b>

***Matrix Spike***

<b>Parameter</b>	<b>1 - Percent Recovered</b>	<b>2 - Percent Recovered</b>	<b>Limit</b>	<b>%RSD</b>	<b>Limit</b>
<b>Diesel Range (C10-C28)</b>	<b>95</b>	<b>97</b>	<b>(70-130)</b>	<b>1</b>	<b>20%</b>

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

Approved by:   
Date: **10/23/96**