

District I **DEPUTY OIL & GAS INSPECTOR**  
P.O. Box 1980, Hobbs, NM

District II  
P.O. Drawer DD, Artesia, NM 88228 **MAR 28 1997**

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**

<b>Operator:</b> PNM Gas Services ( Meridian )		<b>Telephone:</b> 324-3764	
<b>Address:</b> 603 W. Elm Street Farmington, NM 87401			
<b>Facility or Well Name:</b> Zachry #16			
<b>Location:</b>	Unit: H	Sec. 33	T. 29 N R. 10 W County San Juan
<b>Pit Type:</b>	Separator <input type="checkbox"/>	Dehydrator <input type="checkbox"/>	Other No PNM Equipment on site
<b>Land Type:</b>	BLM <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Fee <input type="checkbox"/> Other
<b>Pit Location:</b>	Pit dimensions: length 18 width 18 depth 3		
(Attach diagram)	Reference: wellhead <input checked="" type="checkbox"/> other		
	Footage from reference: 109'		
	Direction from reference: 10 Degrees <input type="checkbox"/> East North <input type="checkbox"/> of <input checked="" type="checkbox"/> West South <input checked="" type="checkbox"/>		
<b>Depth to Ground Water:</b>	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points)		0
(Vertical distance from contaminants to seasonal high water elevation of ground water)			
<b>Wellhead Protection Area:</b>	Yes (20 points) No (0 points)		0
(Less than 200 feet from a private domestic water source, or; less than 1,000 feet from all other water sources)			
<b>Distance to Surface Water:</b>	Less than 200 feet (20 points) 200 feet to 1,000 feet (10 points) Greater than 1,000 feet (0 points)		0
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)			
<b>RANKING SCORE (TOTAL POINTS):</b>			0

<b>Date Remediation Started:</b>		<u>8/27/96</u>		<b>Date Completed:</b>		<u>8/28/96</u>	
<b>Remediation Method:</b>  (Check all appropriate sections)	Excavation	<u>X</u>	Approx. Cubic Yard		<u>44</u>		
	Landfarmed	<u>X</u>	Amount Landfarmed (cubic yds)		<u>44</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>							
Removed contaminated soil to pit size of 14'x17'x5' 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>							
<b>Ground Water Encountered:</b> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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>5'</u>					
	<b>Sample date</b>	<u>8/27/96</u>		<b>Sample time</b>	<u>1:45:00 PM</u>		
	<b>Sample Results</b>						
	Benzene (ppm)		<u>0.0211</u>				
Total BTEX (ppm)		<u>2.8094</u>					
Field headspace (ppm)		<u></u>					
TPH		<u>&lt;</u>	<u>5.0</u>	<b>Method</b>	<u>8015A</u>		
Vertical Extent (ft)		<u></u>		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

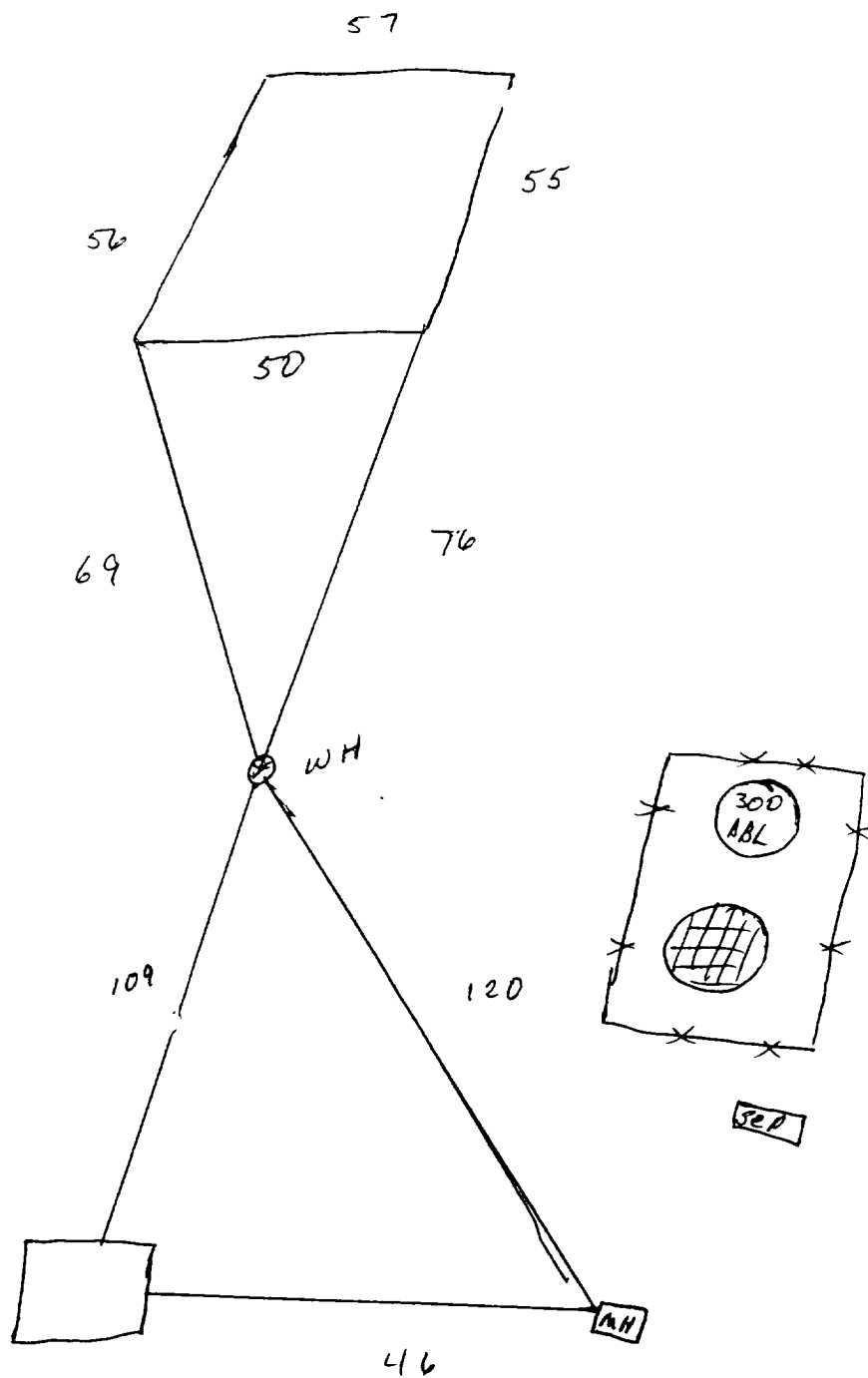
*Denver Bearden*

PRINTED NAME  
AND TITLE

Denver Bearden  
Administrator III

Zachary #16

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: *29-Aug-96*  
COC No.: *4953*  
Sample No. *11908*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Zachry #16*  
Project Location: *9608271345; Pit Excavation Composite Sample*  
Sampled by: *RH* Date: *27-Aug-96* Time: *13:45*  
Analyzed by: *DC/HR* Date: *29-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>108</i>	<i>7.9</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>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: *DCG*  
Date: *8/29/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-3667



LAB: (505) 325-1556

**AROMATIC VOLATILE ORGANICS**

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

Date: *29-Aug-96*  
COC No.: *4953*  
Sample No.: *11908*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Zachry #16*  
Project Location: *9608271345; Pit Excavation Composite Sample*  
Sampled by: *RH* Date: *27-Aug-96* Time: *13:45*  
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>21.1</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>123.7</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>120.5</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>2063.9</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>480.3</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
	<i>TOTAL</i>	<i>2809.4</i>		<i>ug/kg</i>

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

Approved by: *[Signature]*  
Date: *8/29/96*

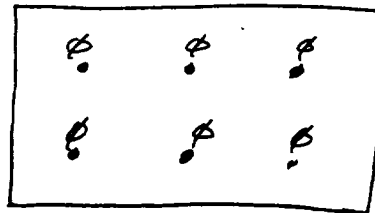
Zachery #16  
Meridian Oil  
Sec. 33, 29N, 10W

10-22-96

Land Farm: on location

Composite sample # 9610221050 6 pt.

Soil vapor headspace PID reading: 1.8 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.: *5063*  
Sample No. *12659*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Zachery #16 Landfarm*  
Project Location: *9610221050; 6pt. Composite, 2"-12" depth*  
Sampled by: *GC* Date: *22-Oct-96* Time: *10:50*  
Analyzed by: *DC/HR* Date: *23-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>96</i>	<i>3.6</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>95</i>	<i>97</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: *[Signature]*  
Date: *10/23/96*

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