

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**

RECEIVED  
OCT 3 1 1990

OIL CONSERVATION DIVISION  
SANTA FE

Operator: PNM Gas Services (SRC) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: McClanahan #18

Location: Unit: A Sec. 13 T. 28 N R. 10 W County San Juan

Pit Type: Separator        Dehydrator        Other No PNM equipment

Land Type: BLM ☒ State        Fee        Other       

Pit Location: Pit dimensions: length 18 width 18 depth 4

(Attach diagram) Reference: wellhead ☒ other       

Footage from reference: 66'

Direction from reference: 80 Degrees        East        North ☒

       of        ☒ West        South       

**Depth to Ground Water:**

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)

**Wellhead Protection Area:**

Yes (20 points)  
No (0 points) 20

(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) 0

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

**RANKING SCORE (TOTAL POINTS):** 20

<b>Date Remediation Started:</b> <u>8/20/96</u>		<b>Date Completed:</b> <u>8/20/96</u>			
<b>Remediation Method:</b> <small>(Check all appropriate sections)</small>	Excavation	<u>X</u>	Approx. Cubic Yard <u>214</u>		
	Landfarmed	<u>X</u>	Amount Landfarmed (cubic yds) <u>214</u>		
	Other	<u></u>			
<b>Remediation Location:</b> <small>(i.e., landfarmed onsite, name and location of offsite facility)</small>		Onsite <u></u>	Offsite <u>McClanahan #21 (13-28N-10W)</u>		
<b>Backfill Material Location:</b> <u></u>					
<b>General Description of Remedial Action:</b> <u>Excavated contaminated soil to pit size of 19'x19'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.</u> <u></u> <u></u> <u></u> <u></u>					
<b>Ground Water Encountered:</b> No <u>✓</u> Yes <u></u> Depth <u></u>					
<b>Final Pit Closure Sampling:</b> <small>(if multiple samples, attach sample result and diagram of sample locations and depths.)</small>					
Sample Location		<u>5 pt composite-4 side walls and center of pit bottom</u>			
Sample depth		<u>16'</u>			
Sample date		<u>8/20/96</u>	Sample time <u>2:45:00 PM</u>		
<b>Sample Results</b>					
Benzene (ppm)		<u>&lt; 0.0002</u>			
Total BTEX (ppm)		<u>0.0133</u>			
Field headspace (ppm)		<u></u>			
TPH	<u>&lt; 5.00</u>	Method	<u>8015A</u>		
Vertical Extent (ft) <u></u>	Risk Assessment form attached		Yes <u></u> No <u>✓</u>		
<b>Ground Water Sample:</b> Yes <u></u> No <u>✓</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  <table style="width: 100%;"> <tr> <td style="width: 50%;">           DATE <u>October 25, 1996</u>            SIGNATURE <u>Maureen Gannon</u> </td> <td style="width: 50%;">           PRINTED NAME <u>Maureen Gannon</u>            AND TITLE <u>Environmental Engineer</u> </td> </tr> </table>				DATE <u>October 25, 1996</u> SIGNATURE <u>Maureen Gannon</u>	PRINTED NAME <u>Maureen Gannon</u> AND TITLE <u>Environmental Engineer</u>
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McCLANAHAN #18 EXCAVATION

08/20/96



EXCAVATION  
19'X19'X16'  
2139 CU. YDS.

28'



66'

59'



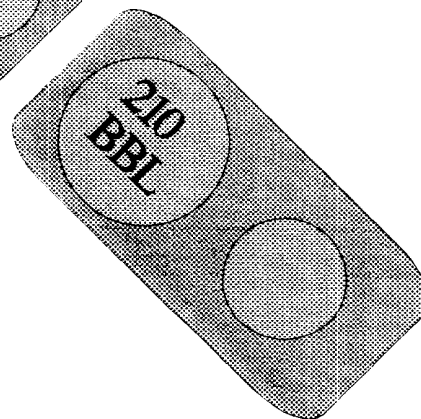
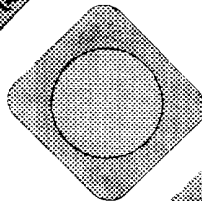
WH

SEP

1000  
GAL

210

210



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: *21-Aug-96*  
 COC No.: *4946*  
 Sample No. *11841*  
 Job No. *2-1000*

Project Name: **PNM Gas Services - McClanahan #18**  
 Project Location: **9608201445; Pit Excavation Composite Sample**  
 Sampled by: *RH* Date: *20-Aug-96* Time: *14:45*  
 Analyzed by: *DC* Date: *21-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>107</i>	<i>7.2</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>88</i>	<i>101</i>	<i>(70-130)</i>	<i>10</i>	<i>20%</i>

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

Approved by: *Jack*Date: *8/21/96*

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: *21-Aug-96*  
COC No.: *4946*  
Sample No.: *11841*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - McClanahan #18*  
Project Location: *9608201445; Pit Excavation Composite Sample*  
Sampled by: *RH* Date: *20-Aug-96* Time: *14:45*  
Analyzed by: *DC* Date: *21-Aug-96*  
Sample Matrix: *Soil*

#### Laboratory Analysis

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
<i>Benzene</i>	<i>&lt;0.2</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>3.3</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>0.7</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>7.4</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>2.0</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>TOTAL</i>	<i>13.3</i>	<i>ug/kg</i>		

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

Approved by: *DC*  
Date: *8/21/96*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

McClanahan #18

9-12-96

Meridian Oil

Sec. 13, 28N, 10W

Land Farm: On location

Composite sample # 9609121315 6pt.

soil vapor head space PID reading = 12.2 ppm

⊗

1.1	.φ	.60
2.3	.90	.φ

2"-12" depth  
sand

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: *16-Sep-96*  
 COC No.: *5036*  
 Sample No. *12139*  
 Job No. *2-1000*

Project Name: ***PNM Gas Services - McClanahan #18 Landfarm***  
 Project Location: ***9609121315; 6pt. Composite, 2"-12" depth***  
 Sampled by: GC Date: *12-Sep-96* Time: *13:15*  
 Analyzed by: HR Date: *14-Sep-96*  
 Sample Matrix: *Soil*

***Laboratory Analysis***

<b><i>Parameter</i></b>	<b><i>Result</i></b>	<b><i>Unit of Measure</i></b>	<b><i>Detection Limit</i></b>	<b><i>Unit of Measure</i></b>
<i>Diesel Range Organics (C10 - C28)</i>	<i>17.1</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

***Quality Assurance Report***DRO QC No.: *0489-QC****Calibration Check***

<b><i>Parameter</i></b>	<b><i>Method Blank</i></b>	<b><i>Unit of Measure</i></b>	<b><i>True Value</i></b>	<b><i>Analyzed Value</i></b>	<b><i>% Diff</i></b>	<b><i>Limit</i></b>
<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***

<b><i>Parameter</i></b>	<b><i>1 - Percent Recovered</i></b>	<b><i>2 - Percent Recovered</i></b>	<b><i>Limit</i></b>	<b><i>%RSD</i></b>	<b><i>Limit</i></b>
<i>Diesel Range (C10-C28)</i>	<i>82</i>	<i>96</i>	<i>(70-130)</i>	<i>11</i>	<i>20%</i>

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

Approved by: *[Signature]*  
 Date: *9/16/96*