

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

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

FEB 28 1997

PIT REMEDIATION AND CLOSURE REPORT

RECEIVED
OCT 31 1995
OIL CON. DIV.
PAGE 2

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

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Mansfield #1

Location: Unit: P Sec. 19 T. 30 N R. 9 W County San Juan

Pit Type: Separator ☐ Dehydrator ☒ Other ☐

Land Type: BLM ☒ State ☐ Fee ☐ Other ☐

Pit Location: Pit dimensions: length 24 ' width 24 ' depth 4 '

(Attach diagram) **Reference:** wellhead ☒ other ☐

Footage from reference: 65'

Direction from reference: 30 Degrees ☐ East ☒ North ☒
of ☒ West ☐ South ☐

Depth to Ground Water:
(Vertical distance from contaminants to seasonal high water elevation of ground water)
Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 points) 0

Wellhead Protection Area:
(Less than 200 feet from a private domestic water source, or, less than 1,000 feet from all other water sources)
Yes (20 points)
No (0 points) 0

Distance to Surface Water:
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)
Less than 200 feet (20 points)
200 feet to 1,000 feet (10 points)
Greater than 1,000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

| | | | |
|--|-------------|---------------------------------------|--|
| Date Remediation Started: <u>7/8/96</u> | | Date Completed: <u>7/11/96</u> | |
| Remediation Method: (Check all appropriate sections) | Excavation | <u>X</u> | Approx. Cubic Yard <u>207</u> |
| | Landfarmed | <u>X</u> | Amount Landfarmed (cubic yds) <u>197</u> |
| | Other _____ | | |
| Remediation Location: (i.e., landfarmed onsite, name and location of offsite facility) | Onsite | <u>X</u> | Offsite _____ |
| | _____ | | |
| Backfill Material Location: _____ | | | |
| General Description of Remedial Action: | | | |
| <u>Excavated contaminated soil to pit size of 22'x20'x14' 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> | | | |
| _____ | | | |
| _____ | | | |
| _____ | | | |
| _____ | | | |
| _____ | | | |
| Ground Water Encountered: No <u><input checked="" type="checkbox"/></u> Yes _____ Depth _____ | | | |

| | | | | |
|---|---|--|---|--------------------|
| Final Pit Closure Sampling: (if multiple samples, attach sample result and diagram of sample locations and depths.) | Sample Location | <u>5 pt. composite-4 side walls and center of pit bottom</u> | | |
| | Sample depth | <u>14'</u> | | |
| | Sample date | <u>7/9/96</u> | Sample time | <u>11:00:00 AM</u> |
| | Sample Results | | | |
| | Benzene (ppm) | <u>0.0153</u> | | |
| | Total BTEX (ppm) | <u>1.3798</u> | | |
| | Field headspace (ppm) | _____ | | |
| | TPH | <u>< 5.00</u> | Method | <u>8015A</u> |
| Vertical Extent (ft) | _____ | Risk Assessment form attached | Yes _____ No <u><input checked="" type="checkbox"/></u> | |
| Ground Water Sample: | Yes _____ 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 October 25, 1996

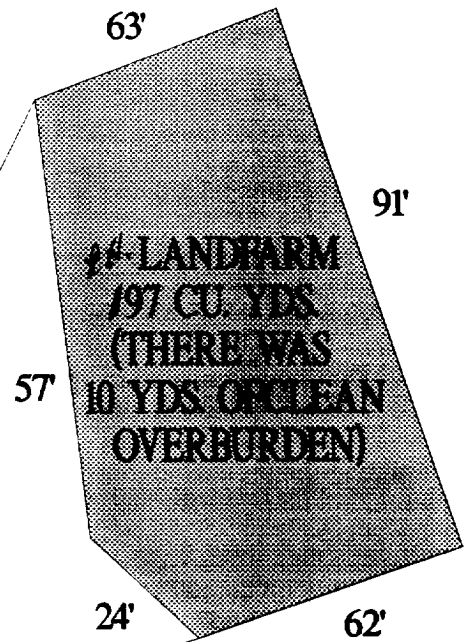
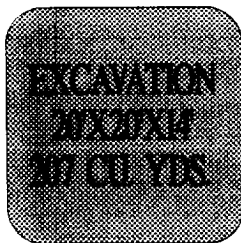
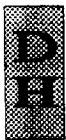
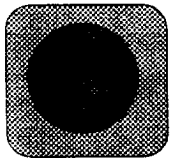
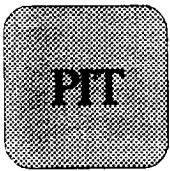
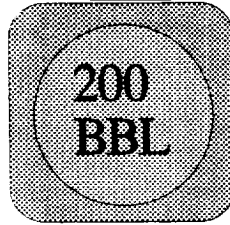
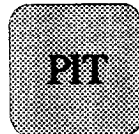
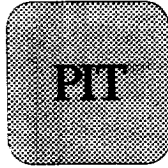
SIGNATURE Maureen Gannon

PRINTED NAME Maureen Gannon

AND TITLE Environmental Engineer

MANSFIELD #1 EXCAVATION

07/10/96



65'

84'

67'

24'

62'

57'

91'

63'

WH

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: *12-Jul-96*
COC No.: *4728*
Sample No. *11478*
Job No. *2-1000*

Project Name: *PNM Gas Services - Mansfield #1*
Project Location: *9607091100; Pit Excavation Composite Sample*
Sampled by: *RH* Date: *9-Jul-96* Time: *11:00*
Analyzed by: *DC* Date: *12-Jul-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><5.0</i> | <i>mg/kg</i> | <i>5.0</i> | <i>mg/kg</i> |

Quality Assurance Report

DRO QC No.: 0475-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><5.0</i> | <i>ppm</i> | <i>2,000</i> | <i>1,832</i> | <i>8.4</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>114</i> | <i>104</i> | <i>(70-130)</i> | <i>7</i> | <i>20%</i> |

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

Approved by: *[Signature]*
Date: *7/12/96*

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: *12-Jul-96*
COC No.: *4728*
Sample No. *11478*
Job No. *2-1000*

Project Name: *PNM Gas Services - Mansfield #1*
Project Location: *9607091100; Pit Excavation Composite Sample*
Sampled by: *RH* Date: *9-Jul-96* Time: *11:00*
Analyzed by: *DC* Date: *12-Jul-96*
Sample Matrix: *Soil*

Aromatic Volatile Organics

| Component | Result | Units of Measure | Detection Limit | Units of Measure |
|---------------------|--------------|------------------|-----------------|------------------|
| <i>Benzene</i> | <i>15.3</i> | <i>ug/kg</i> | <i>0.2</i> | <i>ug/kg</i> |
| <i>Toluene</i> | <i>192.5</i> | <i>ug/kg</i> | <i>0.2</i> | <i>ug/kg</i> |
| <i>Ethylbenzene</i> | <i>73.6</i> | <i>ug/kg</i> | <i>0.2</i> | <i>ug/kg</i> |
| <i>m,p-Xylene</i> | <i>777.5</i> | <i>ug/kg</i> | <i>0.2</i> | <i>ug/kg</i> |
| <i>o-Xylene</i> | <i>320.9</i> | <i>ug/kg</i> | <i>0.2</i> | <i>ug/kg</i> |
| | <i>TOTAL</i> | <i>1379.8</i> | | <i>ug/kg</i> |

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

Approved by: *[Signature]*
Date: *7/12/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Mansfield #1

9-3-96

Amoco

Sec. 19, 30N-8W

Landfarmed On-location = 207 yds

Composite Sample # 9609031455 bpt comp.

Soil Vapor Head space = 21.3 ppm (PID)

| | |
|-----|-----|
| 3.6 | 3.4 |
| 3.1 | 4.2 |
| 2.9 | 3.1 |

24-12" 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: *5-Sep-96*
COC No.: *4986*
Sample No. *11977*
Job No. *2-1000*

Project Name: *PNM Gas Services - Mansfield #1 Landfarm*
Project Location: *9609031455; 6pt. Composite, 2"-12" depth*
Sampled by: *GC* Date: *3-Sep-96* Time: *14:55*
Analyzed by: *DC* Date: *5-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>13.4</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>< 5.0</i> | <i>ppm</i> | <i>100</i> | <i>101</i> | <i>0.7</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 Chromatography

Approved by: *JaC*
Date: *9/6/96*