

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

OIL CONSERVATION DIVISION

2040 South Pacheco Street  
Santa Fe, New Mexico 87505

JUL 18 1997

PIT REMEDIATION AND CLOSURE REPORT

*Approved*

Operator: PNM Gas Services (Questar) Telephone: 324-3764  
Address: 603 W. Elm Street Farmington, NM 87401  
Facility or Well Name: Federal A #3E  
Location: Unit: P Sec. 26 T. 30 N R. 13 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: 104'  
Direction from reference: 46 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)

RECEIVED  
APR 24 1997

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)  
OIL CON. DIV.  
DIST. 3

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)

RANKING SCORE (TOTAL POINTS): 0

**Date Remediation Started:** 11/25/96 **Date Completed:** 11/25/96

**Remediation Method:** Excavation X **Approx. Cubic Yard** 192  
 (Check all appropriate sections) Landfarmed X **Amount Landfarmed (cubic yds)** 162  
 Other \_\_\_\_\_

**Remediation Location:** Onsite X Offsite \_\_\_\_\_  
 (i.e., landfarmed onsite, name and location of offsite facility)

**Backfill Material Location:** \_\_\_\_\_

**General Description of Remedial Action:**  
 Excavated contaminated soil to pit size of 21'X19'X13' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil was aerated by plowing until soil met regulatory levels.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Ground Water Encountered:** No ✓ Yes \_\_\_\_\_ Depth \_\_\_\_\_

**Final Pit Closure Sampling:**

(if multiple samples, attach sample result and diagram of sample locations and depths.)

**Sample Location** 5 pt composite-4 side walls and center of pit bottom

**Sample depth** 13'

**Sample date** 11/25/96 **Sample time** 2:20:00 PM

**Sample Results**

Benzene (ppm) 0.2114

Total BTEX (ppm) 12.0641

Field headspace (ppm) \_\_\_\_\_

TPH 59.30 **Method** 8015A

Vertical Extent (ft) \_\_\_\_\_ **Risk Assessment form attached** Yes \_\_\_\_\_ No ✓

**Ground Water Sample:** Yes \_\_\_\_\_ No ✓ (If yes, see attached Groundwater Site Summary Report)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

DATE April 28, 1997

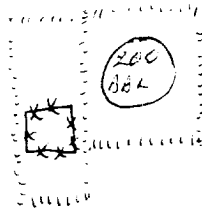
SIGNATURE

*Denver Bearden*

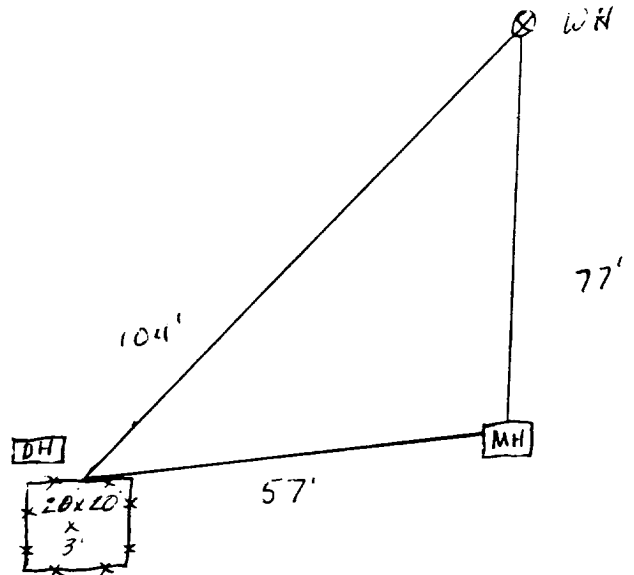
PRINTED NAME Denver Bearden  
 AND TITLE Administrator III

Federal A # 3E  
 46° 00' 5"  
 104' from wellhead

↑  
 N



SEP



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-Nov-96*  
COC No.: *5141*  
Sample No. *13045*  
Job No. *2-1000*

Project Name: ***PNM Gas Services - Federal A #3E***  
Project Location: ***9611251420; Pit Excavation Composite Sample***  
Sampled by: *RH* Date: *25-Nov-96* Time: *14:20*  
Analyzed by: *DC/HR* Date: *27-Nov-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>
<b><i>Diesel Range Organics (C10 - C28)</i></b>	<i>59.3</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

***Quality Assurance Report***

DRO QC No.: *0512-QC*

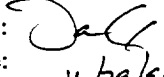
***Calibration Check***

<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>
<b><i>Diesel Range (C10 - C28)</i></b>	<i>&lt;5.0</i>	<i>ppm</i>	<i>100</i>	<i>103</i>	<i>3.3</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>
<b><i>Diesel Range (C10-C28)</i></b>	<i>109</i>	<i>107</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: *11/29/96*

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: *27-Nov-96*  
COC No.: *5141*  
Sample No. *13045*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Federal A #3E*  
Project Location: *9611251420; Pit Excavation Composite Sample*  
Sampled by: *RH* Date: *25-Nov-96* Time: *14:20*  
Analyzed by: *DC* Date: *27-Nov-96*  
Sample Matrix: *Soil*

#### Laboratory Analysis

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
Benzene	211.4	ug/kg	0.2	ug/kg
Toluene	653.3	ug/kg	0.2	ug/kg
Ethylbenzene	1108.7	ug/kg	0.2	ug/kg
m,p-Xylene	8450.0	ug/kg	0.2	ug/kg
o-Xylene	1640.7	ug/kg	0.2	ug/kg
TOTAL		12064.1	ug/kg	

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

Approved by:   
Date: *11/28/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

1-6-97

Federal A#3E

Questar

Sec. 26, 30N-13W

Landfarm: On location

composite sample # 9701061220

soil vapor headspace PID = 33.3 ppm

⊗

2"-12" depth

4.1	7.8	2.2
3.8	6.1	2.9

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: *8-Jan-97*  
COC No.: *5860*  
Sample No. *13323*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Federal A #3E Landfarm*  
Project Location: *9701061220; 6pt. Composite, 2"-12" depth*  
Sampled by: GC Date: *6-Jan-97* Time: *12:20*  
Analyzed by: HR Date: *6-Jan-97*  
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>12.4</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

### *Quality Assurance Report*

DRO QC No.: *0512-QC*

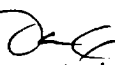
#### *Calibration Check*

<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>101</i>	<i>1.4</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>98</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: *1/8/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -