

*Denny E. Frost*

District I  
P.O. Box 1000  
**DEPUTY OIL & GAS INSPECTOR**

District II  
P.O. Drawer DD, Artesia, NM 88201  
**FEB 26 1998**

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

*Approved*

**PIT REMEDIATION AND CLOSURE REPORT**

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

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

**Facility or Well Name:** Breach C #189

**Location:** Unit L Sec 12 T 26 N R 6 W County Rio Arriba

**Pit Type:** Separator    Dehydrator    Other No equipment

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

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

(Attach diagram) Reference: wellhead ☒ other   

Footage from reference: 147'

Direction from reference: 85 Degrees    East    North   

   West of    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)	<u>0</u>

**Wellhead Protection Area:**

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

**RECEIVED**  
NOV - 3 1997

OIL CON. DIV.  
DIST. 3

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

**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)	<u>0</u>

**RANKING SCORE (TOTAL POINTS):** 0

Breach C #189

Date Remediation Started: 9/3/97 Date Completed: 9/3/97

Remediation Method: Excavation X Approx. Cubic Yard 240  
(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds) 240  
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 a pit size of 20' X 18' X 18' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil was aerated by disking/plowing until soil met regulatory levels.

Ground Water Encountered: No ☒ Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit Closure Sampling: Sample Location 5 pt. composite - 4 side walls and center of pit bottom.

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

Sample depth 15' walls and 18' bottom.

Sample date 9/3/97 Sample time 1:30:00 PM

Sample Results

Benzene (ppm) < 0.0020

Total BTEX (ppm) 0.0180

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

TPH (ppm) < 5.00 Method 8015A

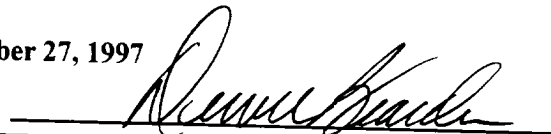
Vertical Extent (ft) \_\_\_\_\_ Risk Assessment form attached Yes \_\_\_\_\_ No \_\_\_\_\_

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 October 27, 1997

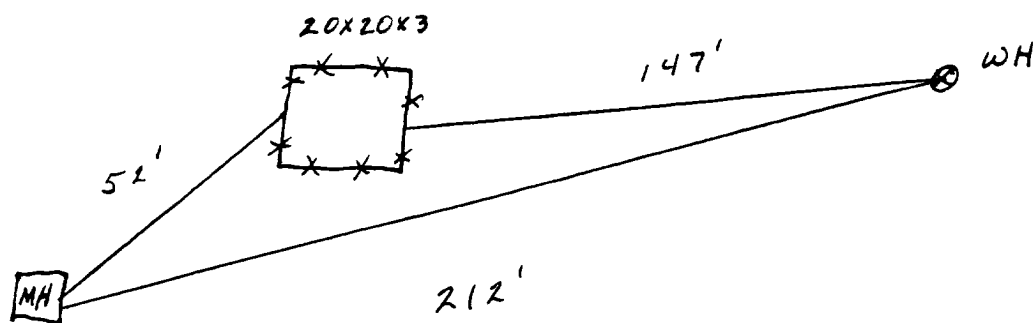
SIGNATURE



PRINTED NAME AND TITLE **Denver Bearden  
Administrator III**

9-3-97 @ 1000  
Beech C #184  
Caulkins  
(L) 12-26N-6W  
Rio Arriba  
85° W of S  
147' from W.H.

↑  
N



OFF: (505) 325-5667



LAB: (505) 325-1556

### ANALYTICAL REPORT

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

Date: *10-Sep-97*  
COC No.: *5995*  
Sample No.: *16034*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech C #189*  
Project Location: *9709031330; Composite, 4 Walls @ 15' and Bottom @ 18'*  
Sampled by: *GC* Date: *3-Sep-97* Time: *13:30*  
Analyzed by: *DC/HR* Date: *9-Sep-97*  
Sample Matrix: *Soil*

#### Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	ND	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

#### Quality Assurance Report

DRO QC No.: 0555-STD

#### Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	ND	ppm	200	190	5.1	15%

#### Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	82	77	(70-130)	6	20%

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

Approved by: *[Signature]*  
Date: *9/10/97*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

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

Date: *8-Sep-97*  
COC No.: *5995*  
Sample No.: *16034*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech C #189*  
Project Location: *9709031330; Composite, 4 Walls @ 15' and Bottom @ 18'*  
Sampled by: *GC* Date: *3-Sep-97* Time: *13:30*  
Analyzed by: *DC* Date: *8-Sep-97*  
Sample Matrix: *Soil*

### Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/kg	2	ug/kg
<i>Toluene</i>	2	ug/kg	2	ug/kg
<i>Ethylbenzene</i>	3	ug/kg	2	ug/kg
<i>m,p-Xylene</i>	10	ug/kg	2	ug/kg
<i>o-Xylene</i>	4	ug/kg	2	ug/kg
	<i>TOTAL</i>	18	ug/kg	

ND - Not Detected at Limit of Quantitation

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

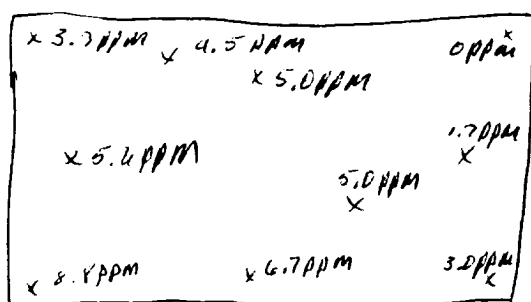
Approved by: *DC*  
Date: *9/8/97*

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↑  
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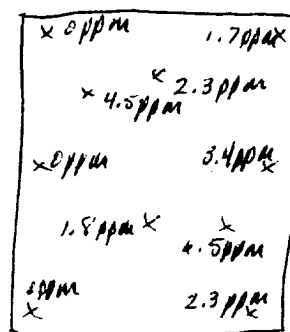
9-11-97 - @8445  
 Breck C #89  
 Caulkins  
 (W) 12-26N-6W  
 Rio Arriba  
 Sample # 9709110945  
 Land farm field head space - 7.8 ppm



2' - 12"

MH

0 WH



2' - 10"

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LAB: (505) 325-1556

### ANALYTICAL REPORT

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

Date: *16-Sep-97*  
COC No.: *5671*  
Sample No.: *16131*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech C #189 Landfarm*  
Project Location: *9709110945; Composite*  
Sampled by: *RH* Date: *11-Sep-97* Time: *9:45*  
Analyzed by: *DC/HR* Date: *15-Sep-97*  
Sample Matrix: *Soil*

#### Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	ND	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

#### Quality Assurance Report

DRO QC No.: 0555-STD

#### Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	ND	ppm	200	197	1.5	15%

#### Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	100	94	(70-130)	6	20%

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

Approved by: *[Signature]*  
Date: *9/14/97*

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OFF: (505) 325-5667



LAB: (505) 325-1556

### ANALYTICAL REPORT

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

Date: 16-Sep-97  
COC No.: 5671  
Sample No.: 16132  
Job No.: 2-1000

Project Name: ***PNM Gas Services - Breech RH C #189 Landfarm***  
Project Location: ***9709110950; Composite***  
Sampled by: RH Date: 11-Sep-97 Time: 9:50  
Analyzed by: DC/HR Date: 15-Sep-97  
Sample Matrix: *Soil*

#### Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	ND	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

#### Quality Assurance Report

DRO QC No.: 0555-STD

#### Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	ND	ppm	200	197	1.5	15%

#### Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	100	94	(70-130)	6	20%

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

Approved by: *[Signature]*  
Date: *9/16/97*

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