

*Denny E. Frost*  
DEPUTY OIL & GAS INSPECTOR

District I  
P.O. Drawer DD, Aztec, NM 87410

District II  
P.O. Drawer DD, Aztec, NM 87410  
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 A #181

Location: Unit L Sec 10 T 26 N R 6 W County Rio Arriba

Pit Type: Separator ☒ Dehydrator ☐ Other Drip

Land Type: BLM ☒ State ☐ Fee ☐ Other ☐

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

(Attach diagram) Reference: wellhead ☒ other ☐

Footage from reference: 30'

Direction from reference: 5 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: **RECEIVED**  
NOV - 3 1997 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)

**OIL CON. DIV.**  
**DIST. 3**

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):** 0

Breach A #181

Date Remediation Started: 8/14/97

Date Completed: 8/14/97

Remediation Method:

Excavation ☒

Approx. Cubic Yard 215

(Check all appropriate sections)

Landfarmed ☒

Amount Landfarmed (cubic yds) 215

Other

Remediation Location:

Onsite ☒

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 19' X 17' X 18' 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:

Sample Location

Pit bottom.

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

Sample depth

18'

Sample date

8/14/97

Sample time

2:30:00 PM

Sample Results

Benzene (ppm) < 0.0020

Total BTEX (ppm) 0.0570

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

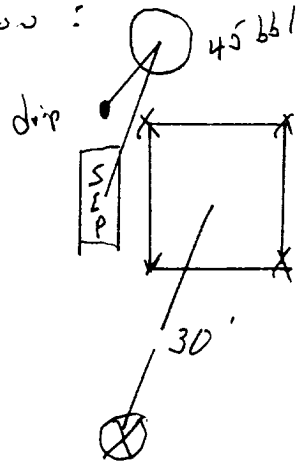
Breech A # 181

8-14-97

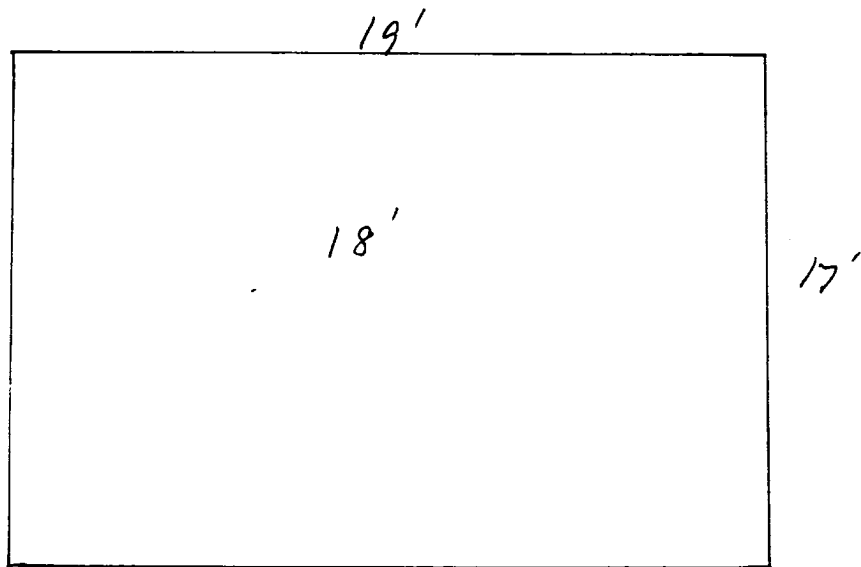
Caulkins D:1

Sec. 10, 26 N, 6 W, L

start of excavation :



End of excavation :



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: *22-Aug-97*  
COC No.: *5963*  
Sample No.: *15806*  
Job No.: *2-1000*

Project Name: ***PNM Gas Services - Breech A #181***  
Project Location: ***9708141430; Bottom @ 18'***  
Sampled by: GC  
Analyzed by: HR/DC  
Sample Matrix: *Soil*

Date: *14-Aug-97* Time: *14:30*  
Date: *21-Aug-97*

### ***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.: 0548-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	201	0.6	15%

### ***Matrix Spike***

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	85	89	(70-130)	4	20%

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

Approved by: *[Signature]*  
Date: *8/22/97*

**P.O. BOX 2606 • FARMINGTON, NM 87499**

*- 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: *21-Aug-97*  
COC No.: *5963*  
Sample No.: *15806*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech A #181*  
Project Location: *9708141430; Bottom @ 18'*  
Sampled by: *GC* Date: *14-Aug-97* Time: *14:30*  
Analyzed by: *HR* Date: *20-Aug-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>	10	ug/kg	2	ug/kg
<i>Ethylbenzene</i>	7	ug/kg	2	ug/kg
<i>m,p-Xylene</i>	33	ug/kg	2	ug/kg
<i>o-Xylene</i>	7	ug/kg	2	ug/kg
	<i>TOTAL</i>	57	ug/kg	

ND - Not Detected at Limit of Quantitation

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

Approved by: *[Signature]*  
Date: *8/21/97*

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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: *22-Aug-97*  
COC No.: *5963*  
Sample No.: *15807*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech A #181*  
Project Location: *9708141500; Walls @ 15'*  
Sampled by: *GC* Date: *14-Aug-97* Time: *15:00*  
Analyzed by: *HR/DC* Date: *21-Aug-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.: 0548-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	201	0.6	15%

#### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	85	89	(70-130)	4	20%

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

Approved by: *[Signature]*  
Date: *8/22/97*

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OFF: (505) 325-5667



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### ANALYTICAL REPORT

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

Date: *22-Aug-97*  
COC No.: *5963*  
Sample No.: *15807*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech A #181*  
Project Location: *9708141500; Walls @ 15'*  
Sampled by: *GC* Date: *14-Aug-97* Time: *15:00*  
Analyzed by: *DC* Date: *21-Aug-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>	ND	ug/kg	2	ug/kg
<i>m,p-Xylene</i>	3	ug/kg	2	ug/kg
<i>o-Xylene</i>	ND	ug/kg	2	ug/kg
	<i>TOTAL</i>	5		ug/kg

ND - Not Detected at Limit of Quantitation

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

Approved by: *[Signature]*  
Date: *8/22/97*

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↑  
N

9-2-47 - @ 1115

Breach A #181

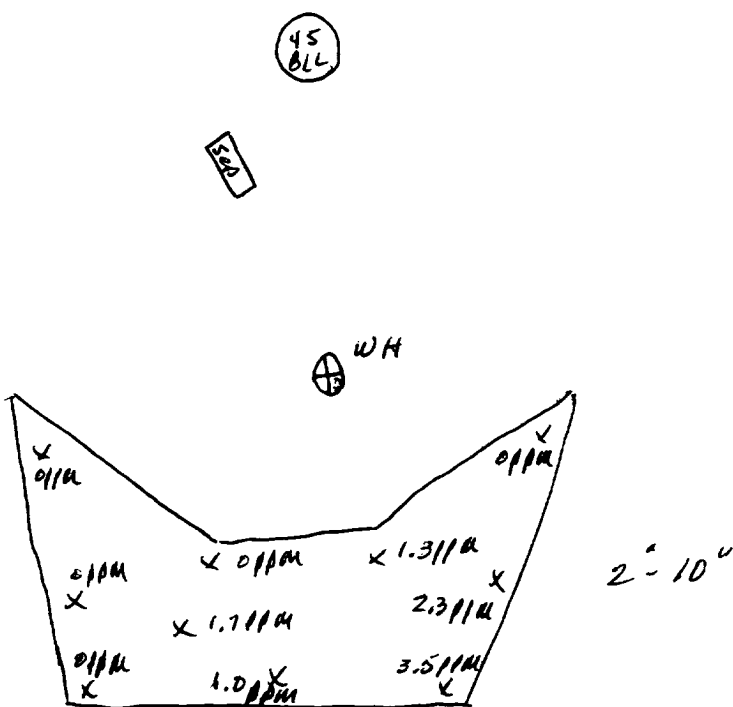
Caulkins

(L) 10-26N-6W

Rio Arriba

Sample # 9704021115

Landform field headspace - 0 ppm





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: *9-Sep-97*  
COC No.: *5657*  
Sample No.: *16025*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech A #181 Landfarm*

Project Location: *9709021115; Composite Sample*

Sampled by: *RH* Date: *2-Sep-97* Time: *11:15*

Analyzed by: *DC/HR* Date: *8-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>	<i>188</i>	<i>mg/kg</i>	<i>5</i>	<i>mg/kg</i>

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>	<i>ND</i>	<i>ppm</i>	<i>200</i>	<i>206</i>	<i>2.7</i>	<i>15%</i>

#### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>95</i>	<i>85</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: *[Signature]*  
Date: *9/9/97*

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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: *8-Sep-97*  
COC No.: *5657*  
Sample No.: *16025*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech A #181 Landfarm*

Project Location: *9709021115; Composite Sample*

Sampled by: *RH* Date: *2-Sep-97* Time: *11:15*

Analyzed by: *DC* Date: *5-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	1	ug/kg
<i>Toluene</i>	ND	ug/kg	1	ug/kg
<i>Ethylbenzene</i>	ND	ug/kg	1	ug/kg
<i>m,p-Xylene</i>	2	ug/kg	1	ug/kg
<i>o-Xylene</i>	ND	ug/kg	1	ug/kg
	<i>TOTAL</i>	2		

ND - Not Detected at Limit of Quantitation

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

Approved by: *[Signature]*

Date: *9/8/97*

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