

*Denny E. Faust*  
District I  
P.O. Box 1980, Hobbs, NM  
**DEPUTY OIL & GAS INSPECTOR**  
District II  
P.O. Drawer DD, Artesia, NM 88221  
District III  
**JUN 23 1998**  
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

OIL CONSERVATION DIVISION

2040 South Pacheco Street  
Santa Fe, New Mexico 87505

*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 F #48

Location: Unit P Sec 35 T 27 N R 6 W County Rio Arriba

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: 70'

Direction from reference: 15 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

**RECEIVED**  
FEB - 3 1998  
**OIL CON. DIV.**  
**DIST. 3**

Date Remediation Started: 9/25/97

Date Completed: 9/25/97

## Remediation Method:

Excavation X

Approx. Cubic Yard 267

(Check all appropriate sections)

Landfarmed X

Amount Landfarmed (cubic yds) 267

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 20' X 20' 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

Bottom of excavation.

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

Sample depth

18'

Sample date

9/25/97

Sample time

2:00:00 PM

## Sample Results

Benzene (ppm) &lt; 0.5000

Total BTEX (ppm) 43.6430

Field headspace (ppm)

TPH (ppm)

334.00

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 January 27, 1998

SIGNATURE

PRINTED NAME  
AND TITLEDenver Bearden  
Administrator III

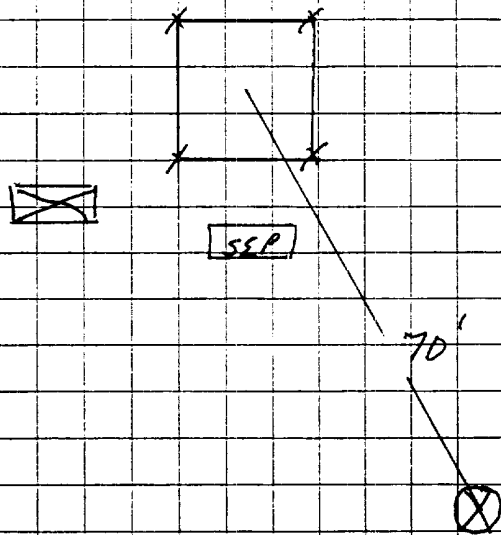
Breach F# 48

9/25/97

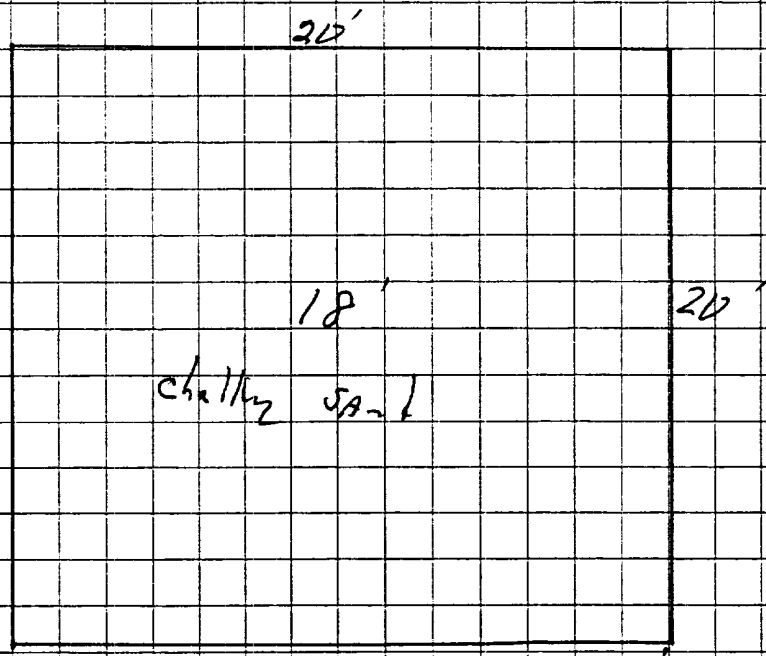
Caulkins Dil

Sec. 35, 27th 64th, P

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: *2-Oct-97*  
COC No.: *5809*  
Sample No.: *16327*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech F #48*  
Project Location: *9709251400; Bottom @ 18'*  
Sampled by: *GC* Date: *25-Sep-97* Time: *14:00*  
Analyzed by: *HR/DC* Date: *1-Oct-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>334</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>202</i>	<i>1.2</i>	<i>15%</i>

#### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>102</i>	<i>92</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: *10/2/97*

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: *29-Sep-97*  
COC No.: *5809*  
Sample No.: *16327*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech F #48*  
Project Location: *9709251400; Bottom @ 18'*  
Sampled by: *GC*  
Analyzed by: *DC*  
Sample Matrix: *Soil*

Date: *25-Sep-97* Time: *14:00*  
Date: *26-Sep-97*

#### Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/kg	500	ug/kg
<i>Toluene</i>	5005	ug/kg	500	ug/kg
<i>Ethylbenzene</i>	3113	ug/kg	500	ug/kg
<i>m,p-Xylene</i>	25501	ug/kg	500	ug/kg
<i>o-Xylene</i>	10025	ug/kg	500	ug/kg
TOTAL		43643	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: *9/29/97*

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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: *2-Oct-97*  
COC No.: *5809*  
Sample No.: *16328*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech F #48*

Project Location: *9709251415; Walls @ 15'*

Sampled by: *GC* Date: *25-Sep-97* Time: *14:15*

Analyzed by: *HR/DC* Date: *1-Oct-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	202	1.2	15%

#### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	102	92	(70-130)	10	20%

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

Approved by: *[Signature]*

Date: *10/2/97*

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### ANALYTICAL REPORT

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

Date: *29-Sep-97*  
COC No.: *5809*  
Sample No.: *16328*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech F #48*

Project Location: *9709251415; Walls @ 15'*

Sampled by: *GC* Date: *25-Sep-97* Time: *14:15*

Analyzed by: *DC* Date: *26-Sep-97*

Sample Matrix: *Soil*

#### Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	1	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>		3		ug/kg

ND - Not Detected at Limit of Quantitation

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

Approved by:

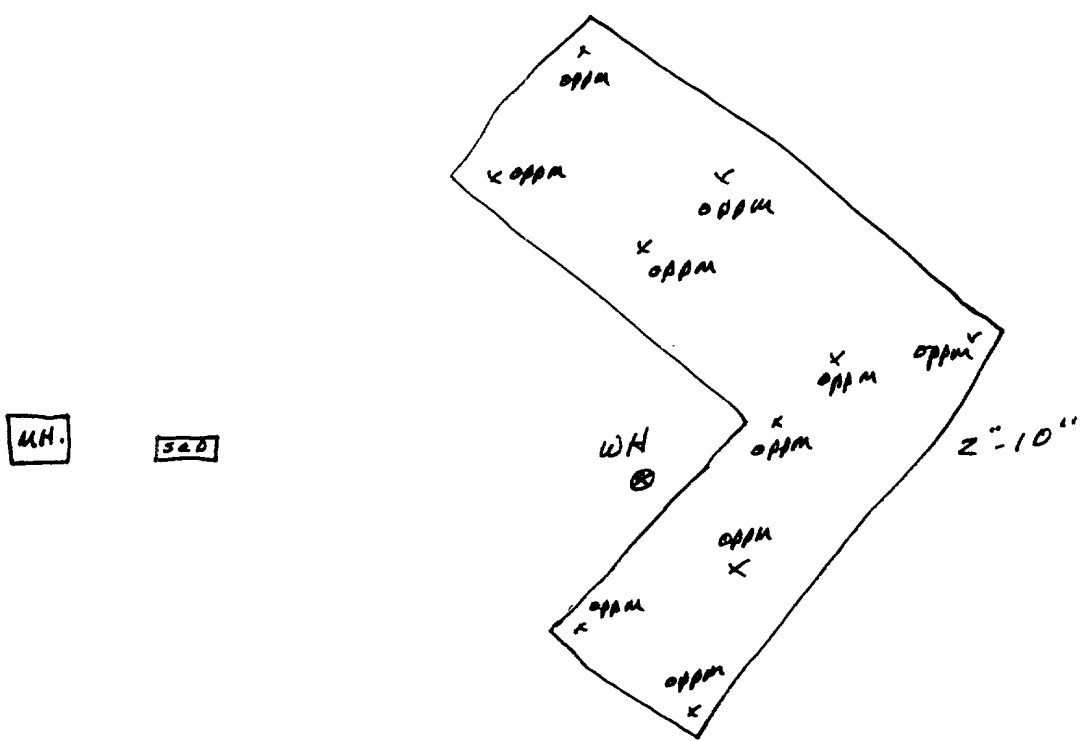
Date:

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

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

↑  
N

10-13-97 @ 1145  
Breach F #48  
Caulkins  
(P) 35-27N-6W  
RiO Arriba  
Sample # 9710131145  
Landfarm field head space: 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: *17-Oct-97*  
COC No.: *5677*  
Sample No.: *16585*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech F #48 Landfarm*

Project Location: *9710131145; Composite*

Sampled by: *RH* Date: *13-Oct-97* Time: *11:45*

Analyzed by: *DC/HR* Date: *14-Oct-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	185	8.0	15%

#### Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	87	87	(70-130)	0	20%

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

Approved by: *[Signature]*  
Date: *10/17/97*

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