

District I  
P.O. Box 1980, Hobbs

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

RECEIVED  
JUL 22 1993

OIL CON. DIV.  
DIST. 3

**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 D #640

Location: Unit A Sec 11 T 26 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: 45 Degrees ☒ East ☒ North ☐ South ☐  
of ☐ West ☐

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

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

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

RANKING SCORE (TOTAL POINTS): 0

Breach D #640

Date Remediation Started: 9/5/97

Date Completed: 9/5/97

Remediation Method: Excavation ☒ Approx. Cubic Yard 240

(Check all appropriate sections)

Landfarmed ☒ Amount Landfarmed (cubic yds) 240

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 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.

\*\*\* Conducted vertical extent drilling to 40'. Lab analysis of bottom hole sample showed results to be below regulatory guidelines.

Ground Water Encountered: No ☒ Yes ☐ Depth

Final Pit Closure Sampling:

Sample Location 40' drilling during vertical extent determination.

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

Sample depth 40'

Sample date 11/17/97 Sample time 1:00:00 PM

Sample Results

Benzene (ppm) < 0.0010

Total BTEX (ppm) 0.0070

Field headspace (ppm)

TPH (ppm) < 5.00 Method 8015

Vertical Extent (ft) 40' Risk Analysis 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 29, 1998

SIGNATURE

Maureen Gannon

PRINTED NAME AND TITLE Maureen Gannon Project Manager

by Kathy Jackson

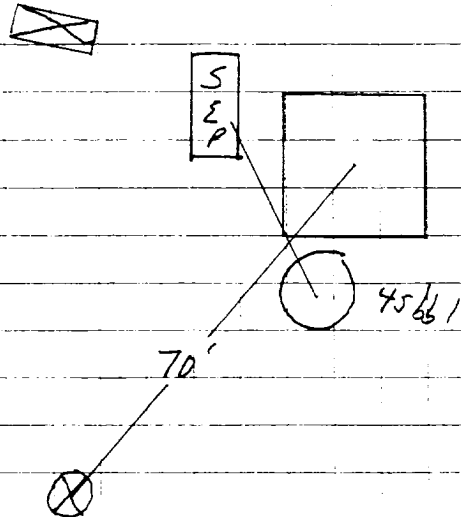
Breach D#640

9/5/97

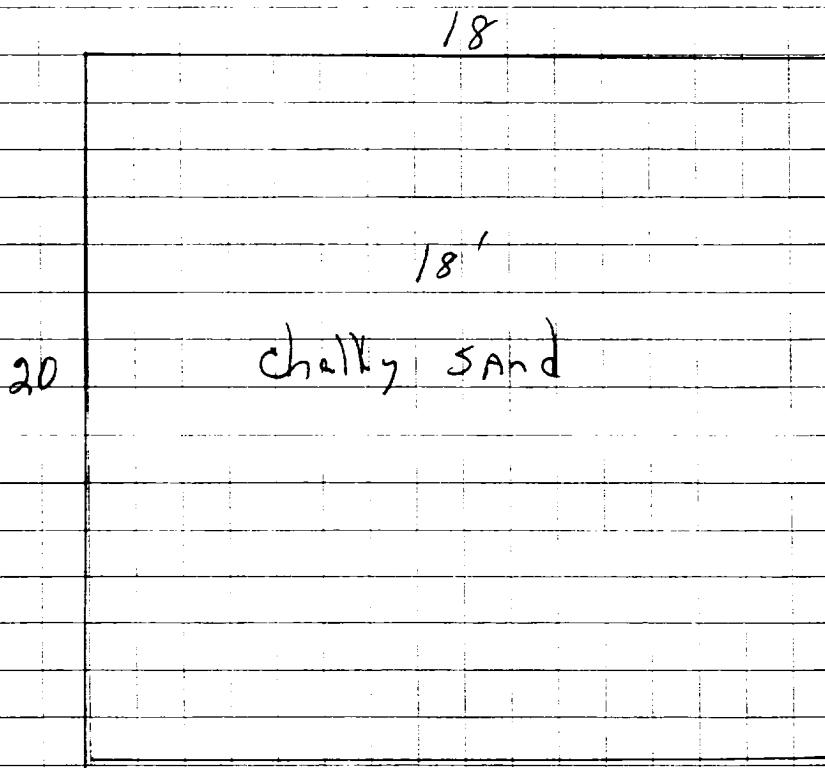
Can/Kins Oil

Sec. 11, 26N, 6W, 1A

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: *10-Sep-97*  
COC No.: *5997*  
Sample No.: *16081*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech D #640*

Project Location: *9709051000; Bottom @ 18'*

Sampled by: *GC* Date: *5-Sep-97* Time: *10:00*

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>	<i>332</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>190</i>	<i>5.1</i>	<i>15%</i>

#### *Matrix Spike*

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

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

Approved by: *[Signature]*

Date: *9/10/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- 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: *10-Sep-97*  
COC No.: *5997*  
Sample No.: *16081*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech D #640*  
Project Location: *9709051000; Bottom @ 18'*  
Sampled by: *GC* Date: *5-Sep-97* Time: *10:00*  
Analyzed by: *DC* Date: *9-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	1000	ug/kg
<i>Toluene</i>	10695	ug/kg	1000	ug/kg
<i>Ethylbenzene</i>	5931	ug/kg	1000	ug/kg
<i>m,p-Xylene</i>	63351	ug/kg	1000	ug/kg
<i>o-Xylene</i>	18816	ug/kg	1000	ug/kg
	<i>TOTAL</i>	98792	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: *9/10/97*

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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: *10-Sep-97*  
COC No.: *5997*  
Sample No.: *16082*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech D #640*

Project Location: *9709051015; Walls @ 15'*

Sampled by: *GC* Date: *5-Sep-97* Time: *10:15*

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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- TAILORING A 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: *9-Sep-97*  
COC No.: *5997*  
Sample No.: *16082*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech D #640*

Project Location: *9709051015; Walls @ 15'*

Sampled by: GC Date: *5-Sep-97* Time: *10:15*

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>	ND	ug/kg	2	ug/kg
<i>Ethylbenzene</i>	ND	ug/kg	2	ug/kg
<i>m,p-Xylene</i>	ND	ug/kg	2	ug/kg
<i>o-Xylene</i>	ND	ug/kg	2	ug/kg
<i>TOTAL</i>	ND	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: *9/9/97*

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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: *24-Nov-97*  
COC No.: *7092*  
Sample No.: *16886*  
Job No.: *2-1000*

Project Name: ***PNM Gas Services - Breech D #640***

Project Location: ***9711171300; 40' depth***

Sampled by: GC Date: *17-Nov-97* Time: *13:00*

Analyzed by: DC/HR Date: *20-Nov-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	207	3.4	15%

#### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	93	108	(70-130)	12	20%

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

Approved by: *[Signature]*  
Date: *11/24/97*

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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: *24-Nov-97*  
COC No.: *7092*  
Sample No.: *16886*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Breech D #640*

Project Location: *9711171300; 40' depth*

Sampled by: GC Date: *17-Nov-97* Time: *13:00*

Analyzed by: DC Date: *18-Nov-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>	1	ug/kg	1	ug/kg
<i>Ethylbenzene</i>	2	ug/kg	1	ug/kg
<i>m,p-Xylene</i>	3	ug/kg	1	ug/kg
<i>o-Xylene</i>	1	ug/kg	1	ug/kg
	<i>TOTAL</i>	7		

ND - Not Detected at Limit of Quantitation

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

Approved by: *[Signature]*  
Date: *11/24/97*

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↑  
N

4-24-97 @0900

Breach #640

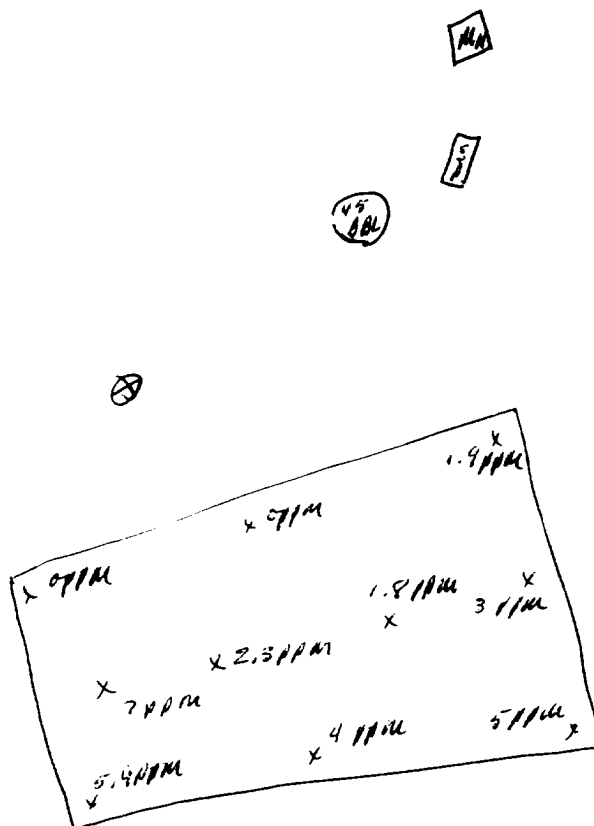
Caulkins

(A) 11-26N-6W

Rio Arriba

Sample # 4704240900

Land Farm Fuel had spec 4 ppm



2" - 12"

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: *30-Sep-97*  
COC No.: *5674*  
Sample No.: *16312*  
Job No.: *2-1000*

Project Name: ***PNM Gas Services - Breech #640 Landfarm***

Project Location: ***9709240900; Composite***

Sampled by: *RH* Date: *24-Sep-97* Time: *9:00*

Analyzed by: *HR/DC* Date: *29-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	182	9.4	15%

#### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	89	98	(70-130)	9	20%

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

Approved by:

Date:

*[Signature]*  
*9/30/97*

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