

JICARILLA APACHE TRIBE  
ENVIRONMENTAL PROTECTION OFFICE  
P.O. BOX 507  
DULCE, NEW MEXICO 87528

SUBMIT 1 COPY TO  
NATURAL  
RESOURCE DEPT  
AND OIL GAS  
ADMINISTRATION

PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (Chateau) Telephone: 324-3764  
Address: 603 W. Elm Street Farmington, NM 87401  
Facility or Well Name: McIntyre 1  
Location: Unit: F Sec. 11 T. 26 N R. 4 W County Rio Arriba  
Pit Type: Separator Dehydrator ☒ ☒ Other  
Land Type: Jicarilla Apache

Pit Location: Pit dimensions: length 40' width 40' depth 27'  
(Attach diagram) Reference: wellhead ☒ other  
Footage from reference: 105'  
Direction from reference: Straight 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)

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)

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)

Distance to Ephemeral Stream (dry wash):

(Horizontal distance to all downgradient streams having a width of at least 10 feet)

Less than or equal to 100 feet (10 points)  
Greater than 100 feet (0 points)

Distance to Nearest Lake, Playa, or Watering Pond:

(Horizontal distance to all downgradient lakes, playas, and livestock or wildlife water ponds)

Less than or equal to 100 feet (10 points)  
Greater than 100 feet (0 points)

RANKING SCORE (TOTAL POINTS):

Date Remediation Started: 8/11/97 Date Completed: 11/18/97

Remediation Method: Excavation X Approx. Cubic Yards 1600

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds): 1600

Other \_\_\_\_\_

Remediation Location: Onsite X Offsite \_\_\_\_\_

(i.e., landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action:

Removed contaminated soil from all four side walls and bottom of pit AS to get a below 100 ppm head space reading.

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

Final Pit Closure Sampling:

Sample Location North, East, South, West side walls and pit bottom.

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

Sample depth 27'

Sample date 8/12/97 Sample time 0918

Sample Results

Soil: Benzene (ppm) \_\_\_\_\_ Water: Benzene (ppb) \_\_\_\_\_

Total BTEX (ppm) \_\_\_\_\_ Toluene (ppb) \_\_\_\_\_

Field headspace (ppm) 36.3 Ethylbenzene (ppb) \_\_\_\_\_

TPH 14 ppm Method 8015 Total Xylenes (ppb) \_\_\_\_\_

Ground Water Sample: Yes \_\_\_\_\_ No X (If yes, attach sample results)

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

DATE 8/20/97 PRINTED NAME Ronald A. Dedrick

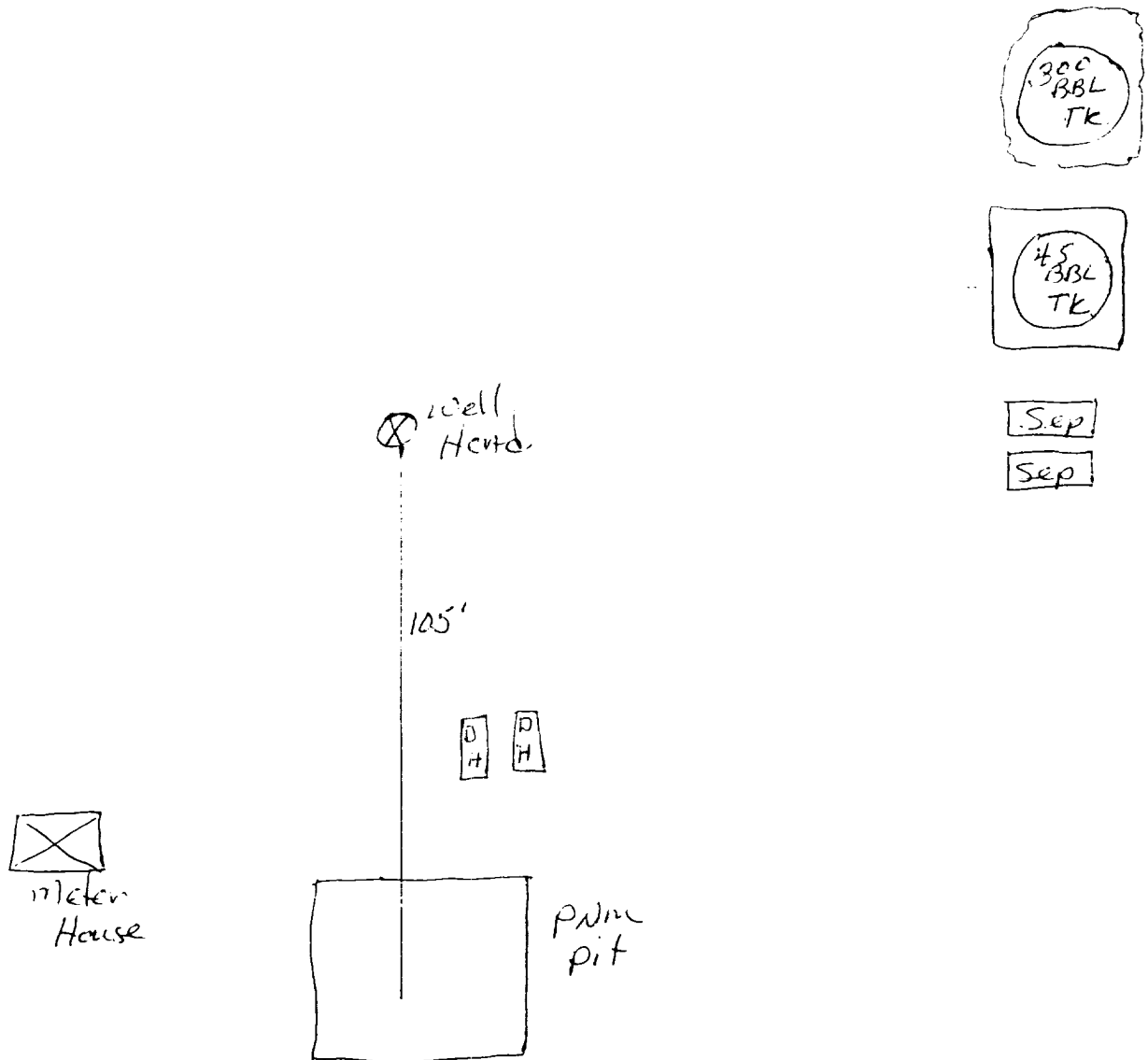
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO \_\_\_\_\_ (REASON): \_\_\_\_\_

SIGNED: Kerr C. Merrill DATE: 8-20-97

M<sup>c</sup>Intyre 2  
Sec. 11 T26N R4W Unit F  
Chateau



M<sup>c</sup>Intyre 1  
Sec 11 T26N R4W Unit F  
Chateau

40'x40'x27'

North Wall  
Sample 16'  
28.9 ppm

West Wall  
Sample 25'  
4.1 ppm

East Wall  
Sample 25'  
10.0 ppm

South Wall  
Sample 26'  
4.6 ppm

Bottom  
Sample 27'  
36.3 ppm

5' Sample - 788 ppm  
10' Sample - 693 ppm  
15' Sample - 309 ppm  
20' Sample - 257 ppm  
25' Sample - 107 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: *18-Aug-97*  
COC No.: *5538*  
Sample No.: *15781*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - McIntyre 1*  
Project Location: *9708120918; 5pt. Composite*  
Sampled by: *MT*  
Analyzed by: *HR/DC*  
Sample Matrix: *Soil*

Date: *12-Aug-97* Time: *9:18*  
Date: *15-Aug-97*

#### Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	<i>14</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.: 0548-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>194</i>	<i>2.9</i>	<i>15%</i>

#### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>83</i>	<i>85</i>	<i>(70-130)</i>	<i>2</i>	<i>20%</i>

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

Approved by: *[Signature]*  
Date: *8/18/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

#1

JICARILLA APACHE TRIBE  
ENVIRONMENTAL  
PROTECTION OFFICE  
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DULCE, NEW MEXICO 87528

SUBMIT 1 COPY TO  
NATURAL  
RESOURCE DEPT  
AND OIL GAS  
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: PNM Gas Services (Chateau) Telephone: 324-3764	
Address: 603 W. Elm Street Farmington, NM 87401	
Facility or Well Name: McIntyre 1	
Location: Unit: F Sec. 11 T. 26 N R. 4 W County Rio Arriba	
Land Type: Jicarilla Apache	
Date Remediation Started: 8/11/97 Date Completed: 9/19/97	
Remediation Method: Landfamed <input checked="" type="checkbox"/> Approx. cubic yards 800	
Composted <input type="checkbox"/>	
Other <input type="checkbox"/>	
Depth to Ground Water: (pts.) 0	Final Closure Sampling: Sampling Date: 9/16/97 Time 1155 Sampling Results: Field Headspace (ppm) 31.5 TPH (ppm) 21 Method 8015 Other
Distance to an Ephemeral Stream: (pts.) 0	
Distance to Nearest Lake, Playa, or Watering Pond: (pts.) 0	
Wellhead Protection Area: (pts.) 0	
Distance to Surface Water: (pts.) 0	
Ranking Score (Total Points): 0	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
DATE 9/25/97 PRINTED NAME Ronald A. Dedrick	
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II	
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE	
APPROVED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> (REASON) use as Backfill	
SIGNED: Kevin C. Mamm DATE: 9-30-97	

M<sup>c</sup>.Intyre 1  
Sec 11 T26N R4W Unit F  
Chateau

Land farm

54'

31.5 ppm

97.4 ppm


21.3 ppm

87.1 ppm

7.1 ppm

14.1 ppm

67.4 ppm

10'  well  
Head

27.1 ppm

74.6 ppm

93.6 ppm

16.8 ppm

14.1 ppm

76.1 ppm

165'

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: *23-Sep-97*  
COC No.: *5599*  
Sample No.: *16259*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - McIntyre 1 Landfarm*

Project Location: *9709181155; 5pt. Composite*

Sampled by: *RB* Date: *18-Sep-97* Time: *11:55*

Analyzed by: *HR* Date: *19-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>21</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>176</i>	<i>12.7</i>	<i>15%</i>

#### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>80</i>	<i>86</i>	<i>(70-130)</i>	<i>8</i>	<i>20%</i>

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

Approved by: *[Signature]*  
Date: *9/23/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- OFFERING TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



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AND OIL GAS  
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

<b>Operator:</b> PNM Gas Services (Chateau) <b>Telephone:</b> 324-3764	
<b>Address:</b> 603 W. Elm Street Farmington, NM 87401	
<b>Facility or Well Name:</b> McIntyre 1	
<b>Location:</b>	<b>Unit:</b> F <b>Sec.</b> 11 <b>T.</b> 26 N <b>R.</b> 4 W <b>County</b> Rio Arriba
<b>Land Type:</b> Jicarilla Apache	
<b>Date Remediation Started:</b> 8/11/97	<b>Date Completed:</b> _____
<b>Remediation Method:</b> Landfarmed <input checked="" type="checkbox"/> Composted _____ Other _____	<b>Approx. cubic yards</b> _____
<b>Depth to Ground Water:</b> (pts.) <u>0</u>	<b>Final Closure Sampling:</b> Sampling Date: 8/27/97 Time 1222 Sampling Results: 74.0 Field Headspace (ppm) 97.4 TPH (ppm) _____ Method 805 Other _____
<b>Distance to an Ephemeral Stream:</b> (pts.) <u>0</u>	
<b>Distance to Nearest Lake, Playa, or Watering Pond:</b> (pts.) <u>0</u>	
<b>Wellhead Protection Area:</b> (pts.) <u>0</u>	
<b>Distance to Surface Water:</b> (pts.) <u>0</u>	
<b>Ranking Score (Total Points):</b> <u>0</u>	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
<b>DATE</b> _____	<b>PRINTED NAME</b> Ronald A. Dedrick
<b>SIGNATURE</b> _____	<b>AND TITLE</b> Environmental Technician II
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE	
<b>APPROVED:</b> YES _____ NO _____ (REASON) _____	
<b>SIGNED:</b> _____ <b>DATE:</b> _____	

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.: *5547*  
Sample No.: *16040*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - McIntyre 1 Landfarm*  
Project Location: *9709041222; 5pt. Composite*  
Sampled by: *RB* Date: *4-Sep-97* Time: *12:22*  
Analyzed by: *DC/HR* Date: *5-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>272</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>214</i>	<i>6.9</i>	<i>15%</i>

#### Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>78</i>	<i>85</i>	<i>(70-130)</i>	<i>8</i>	<i>20%</i>

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

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

P.O. BOX 2606 • FARMINGTON, NM 87499

*- TECHNIQUE 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-Sep-97*  
COC No.: *5581*  
Sample No.: *15958*  
Job No.: *2-1000*

Project Name: ***PNM Gas Services - McIntyre #1 Landfarm***

Project Location: ***9708270907; 5pt. Composite***

Sampled by: *RB* Date: *27-Aug-97* Time: *9:07*

Analyzed by: *HR/DC* Date: *29-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>	<i>224</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.: 0548-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>197</i>	<i>1.5</i>	<i>15%</i>

### ***Matrix Spike***

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>80</i>	<i>81</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: *[Signature]*  
Date: *9/2/97*

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

*- FIGHTING POLLUTION AND PROTECTING THE ENVIRONMENT -*

# 2

JICARILLA APACHE TRIBE  
ENVIRONMENTAL  
PROTECTION OFFICE  
P.O. BOX 507  
DULCE, NEW MEXICO 87528

SUBMIT 1 COPY TO  
NATURAL  
RESOURCE DEPT  
AND OIL GAS  
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: PNM Gas Services (Chateau) Telephone: 324-3764  
Address: 603 W. Elm Street Farmington, NM 87401  
Facility or Well Name: McIntyre 1  
Location: Unit: F Sec. 11 T. 26 N R. 4 W County Rio Arriba  
Land Type: Jicarilla Apache

Date Remediation Started: 8/11/97 Date Completed: 11/13/97  
Remediation Method: Landfarmed ☒ Approx. cubic yards 800  
Composted ☐  
Other ☐

Depth to Ground Water: (pts.) 0  
Distance to an Ephemeral Stream: (pts.) 0  
Distance to Nearest Lake, Playa,  
or Watering Pond: (pts.) 0  
Wellhead Protection Area: (pts.) 0  
Distance to Surface Water: (pts.) 0  
Ranking Score (Total Points): 0

Final Closure Sampling:

Sampling Date: 11/11/97 Time 1111  
Sampling Results:  
Field Headspace (ppm) 61.6  
TPH (ppm) 22 Method 8015  
Other

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

DATE 11/14/97 PRINTED NAME Ronald A. Dedrick  
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II

AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE  
JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE

APPROVED: YES ☒ NO ☐ (REASON) we are backfill

SIGNED: Kate C. M... DATE: 11-17-97

McIntyre 1  
Sec. 11 T24N R4W Unit F  
Chateau

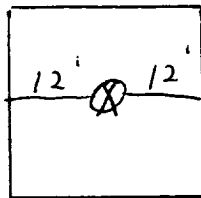
Landfarm

72'

24.2 ppm

37.9 ppm

61.6 ppm



22.7 ppm

19.8 ppm

165'

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: *13-Nov-97*  
COC No.: *5636*  
Sample No.: *16859*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - McIntyre #1 Landfarm*  
Project Location: *9711111111; 5pt. Composite*  
Sampled by: *RB* Date: *11-Nov-97* Time: *11:11*  
Analyzed by: *DC/HR* Date: *13-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>	<i>22</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>204</i>	<i>1.9</i>	<i>15%</i>

#### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>91</i>	<i>90</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: *[Signature]*  
Date: *11/13/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -