

DEPUTY OIL & GAS INSPECTOR

ENVIRONMENTAL PROTECTION OFFICE

ADMINISTRATION

P.O. BOX 507
DULCE, NEW MEXICO 87528

PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (Cenoco) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Tigerville B-8A

Location: Unit: 7 Sec. 25 T. 26. N R. 4 W County Rio Arriba

Pit Type: Separator Dehydrator ~~X~~ ~~X~~ Other

Land Type: Jicarilla Apache

Pit Location: Pit dimensions: length 32 width 32 depth 10

(Attach diagram) Reference: wellhead ☒ other ☐

Footage from reference: 129'

Direction from reference: *Straight* Degrees East North *X*

(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)

(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)

(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)

(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)

(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: 8/18/97 Date Completed: 9/30/97

Remediation Method: Excavation X Approx. Cubic Yards 379

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds): 379

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 wall
as to get it below 100ppm head space reading.
Bottom is rock.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit Closure Sampling:

Sample Location North, East, South and West side walls

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

Sample depth 9'

Sample date 8/18/97 Sample time 1425

Sample Results

Soil: Benzene (ppm) 0.002 Water: Benzene (ppb) _____

Total BTEX (ppm) 0.143 Toluene (ppb) _____

Field headspace (ppm) 87.5 Ethylbenzene (ppb) _____

TPH 7 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 8/28/97

PRINTED NAME Ronald A. Dedrick

SIGNATURE Ronald A. Dedrick

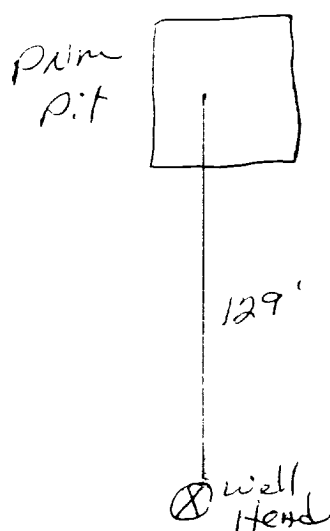
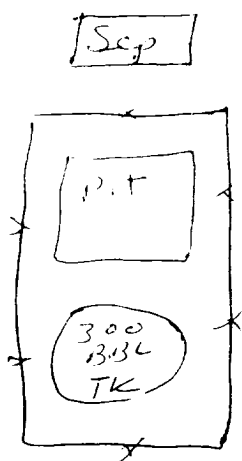
AND TITLE Environmental Technician II

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): spray + close

SIGNED: Lee C. Mammillo DATE: 9-3-97

Jicarilla B-8H
Sec. 25 T26N R4W Unit D
Conoco



DIT

DIT

meter house

Jicarilla 13-8H
Sec. 25 T26N R4W Unit D
Conoco

32'x32'x10'

North Wall
Sample 9'
0.7ppm

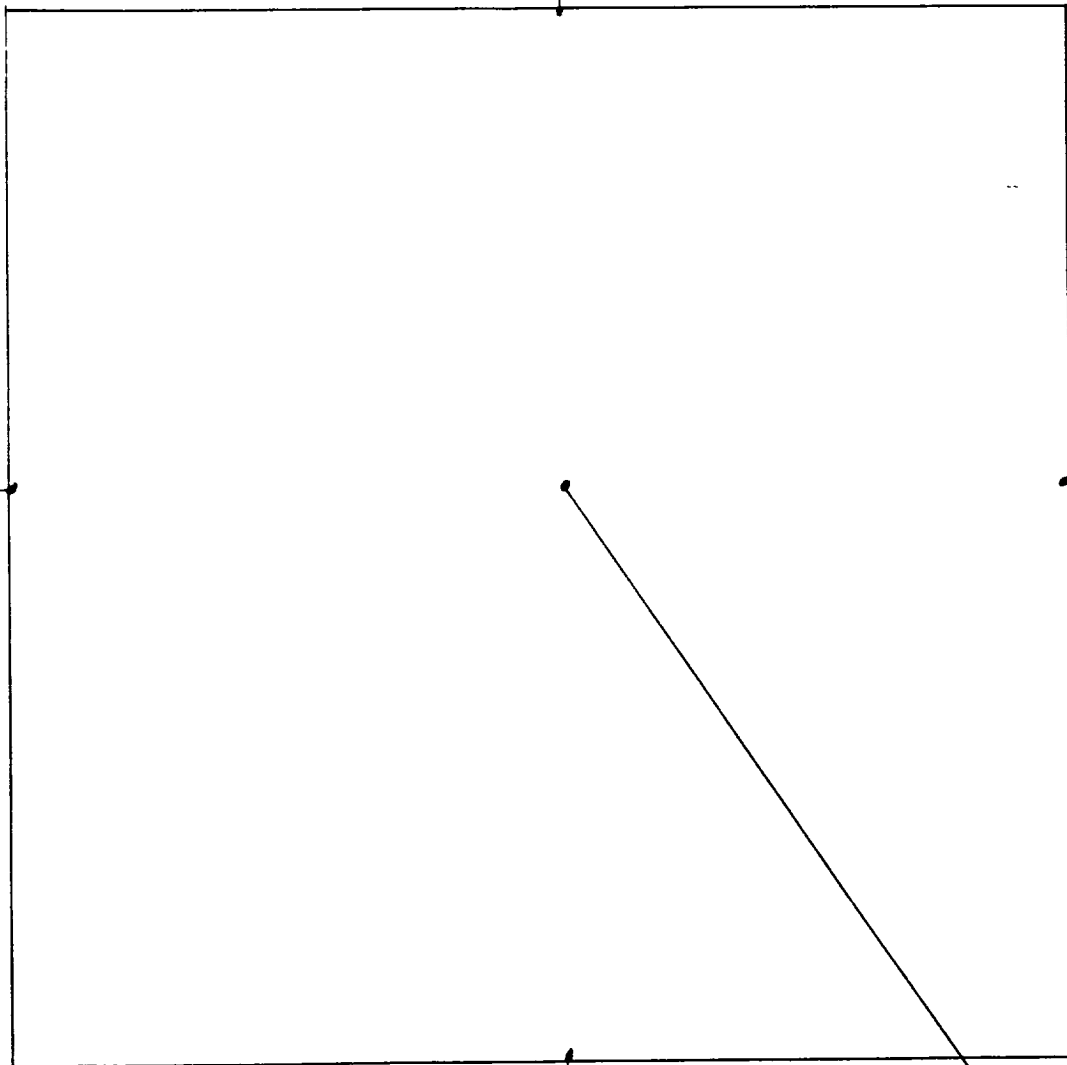
West Wall
Sample 9'
0.7ppm

East Wall
Sample 9'
9.0ppm

South Wall
Sample 9'
87.5ppm

Bottom 10'
Rock

5' Sample - 981 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: *28-Aug-97*
COC No.: *5541*
Sample No.: *15870*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla B-8A*
Project Location: *9708181425; 4pt. Composite*
Sampled by: *TN* Date: *18-Aug-97* Time: *14:25*
Analyzed by: *HR/DC* Date: *27-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>7</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>198</i>	<i>1.0</i>	<i>15%</i>

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>85</i>	<i>84</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: *8/28/97*

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- TRADING IN THE BLENDING INDUSTRY WITH THE LARGEST E&P -

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: *28-Aug-97*
COC No.: *5541*
Sample No.: *15870*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla B-8A*

Project Location: *9708181425; 4pt. Composite*

Sampled by: *TN* Date: *18-Aug-97* Time: *14:25*

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

Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	<i>2</i>	<i>ug/kg</i>	<i>1</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>4</i>	<i>ug/kg</i>	<i>1</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>14</i>	<i>ug/kg</i>	<i>1</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>114</i>	<i>ug/kg</i>	<i>1</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>8</i>	<i>ug/kg</i>	<i>1</i>	<i>ug/kg</i>
<i>TOTAL</i>	<i>143</i>	<i>ug/kg</i>		

ND - Not Detected at Limit of Quantitation

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

Approved by: *[Signature]*
Date: *8/28/97*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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 (Conoco) Telephone: 324-3764
Address: 603 W. Elm Street Farmington, NM 87401
Facility or Well Name: Jicarilla B-EA
Location: Unit: D Sec. 25 T. 26 N R. 4 W County Rio Arriba
Land Type: Jicarilla Apache

Date Remediation Started: 8/18/97 Date Completed: 9/5/97
Remediation Method: Landfirmed X Approx. cubic yards 379
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: 8/28/97 Time 0817
Sampling Results:
Field Headspace (ppm) 97.4
TPH (ppm) 77 Method 8015
Other

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

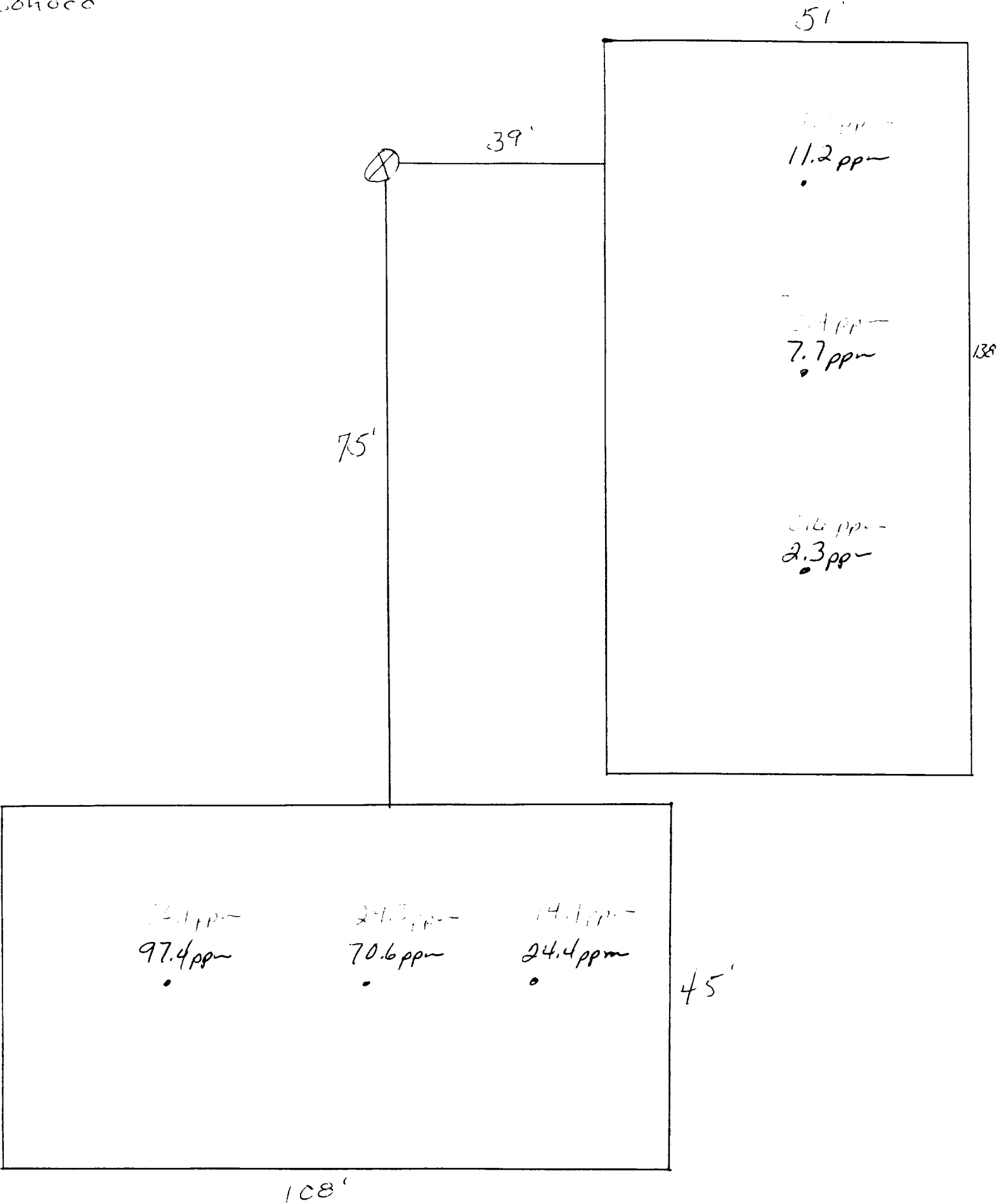
DATE 9/11/97 PRINTED NAME Ronald A. Dedrick
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II

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

APPROVED: YES X NO (REASON) use as Backfill
SIGNED: Ken C. Mamm DATE: 9-18-97

JICARILLA 15-017
Sec. 25 T26N R4W Unit D
Conoco

Land farm



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.: *5578*
Sample No.: *16050*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla B-8A Landfarm*
Project Location: *9709040930; 6pt. Composite*
Sampled by: *RB* Date: *4-Sep-97* Time: *9:30*
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>77</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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- 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-Sep-97*
COC No.: *5583*
Sample No.: *15967*
Job No.: *2-1000*

Project Name: ***PNM Gas Services - Jicarilla B-8A Landfarm***

Project Location: ***9708280817; 6pt. Composite***

Sampled by: *RB* Date: *28-Aug-97* Time: *8:17*

Analyzed by: *HR/DC* Date: *2-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>	114	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	176	12.8	15%

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	84	80	(70-130)	6	20%

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

Approved by: *[Signature]*
Date: *9/2/97*

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