

**DEPUTY OIL & GAS INSPECTOR**

**ENVIRONMENTAL PROTECTION OFFICE**

SUBMIT 1 COPY TO  
NATURAL  
RESOURCE DEPT  
AND OIL-GAS  
ADMINISTRATION

OCT 28 1997

**P.O. BOX 507  
DULCE, NEW MEXICO 87528**

# PIT REMEDIATION AND CLOSURE REPORT

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

**Address:** 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Jicarilla G-5

**Location:** Unit: L Sec. 12 T 26 N R. 5 W County Rio Arriba


**Pit Type:** Separator \_\_\_\_\_ Dehydrator X Other \_\_\_\_\_

**Land Type:** Jicarilla Apache

**Pit Location:** Pit dimensions: length 31' width 26 depth 4

(Attach diagram) Reference: wellhead X other \_\_\_\_\_

Footage from reference: 666

Direction from reference: 20 Degrees      East North       
 West  South     

**Depth to Ground Water:**

(Vertical distance from contaminants to seasonal high water elevation or 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) :**

10

Date Remediation Started: 5/12/97 Date Completed: 7/9/97

Remediation Method: Excavation X Approx. Cubic Yards 119

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds): 119

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  
As to get a below 100ppm head space reading. Bottom  
of pit was solid 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 results and diagram of sample locations and depths.)

Sample depth 4'

Sample date 5/12/97 Sample time 1209

Sample Results

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

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

Field headspace (ppm) 96.3 Ethylbenzene (ppb) \_\_\_\_\_

TPH ND 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 5/22/97 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): \_\_\_\_\_

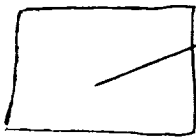
SIGNED: Ken C. Manna DATE: 5-29-97

JICAN11A G U  
Sec. 12 T26N R5W Unit L  
BROG

meter Houses



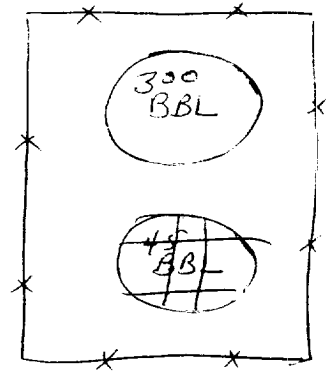
DH



PNM pit



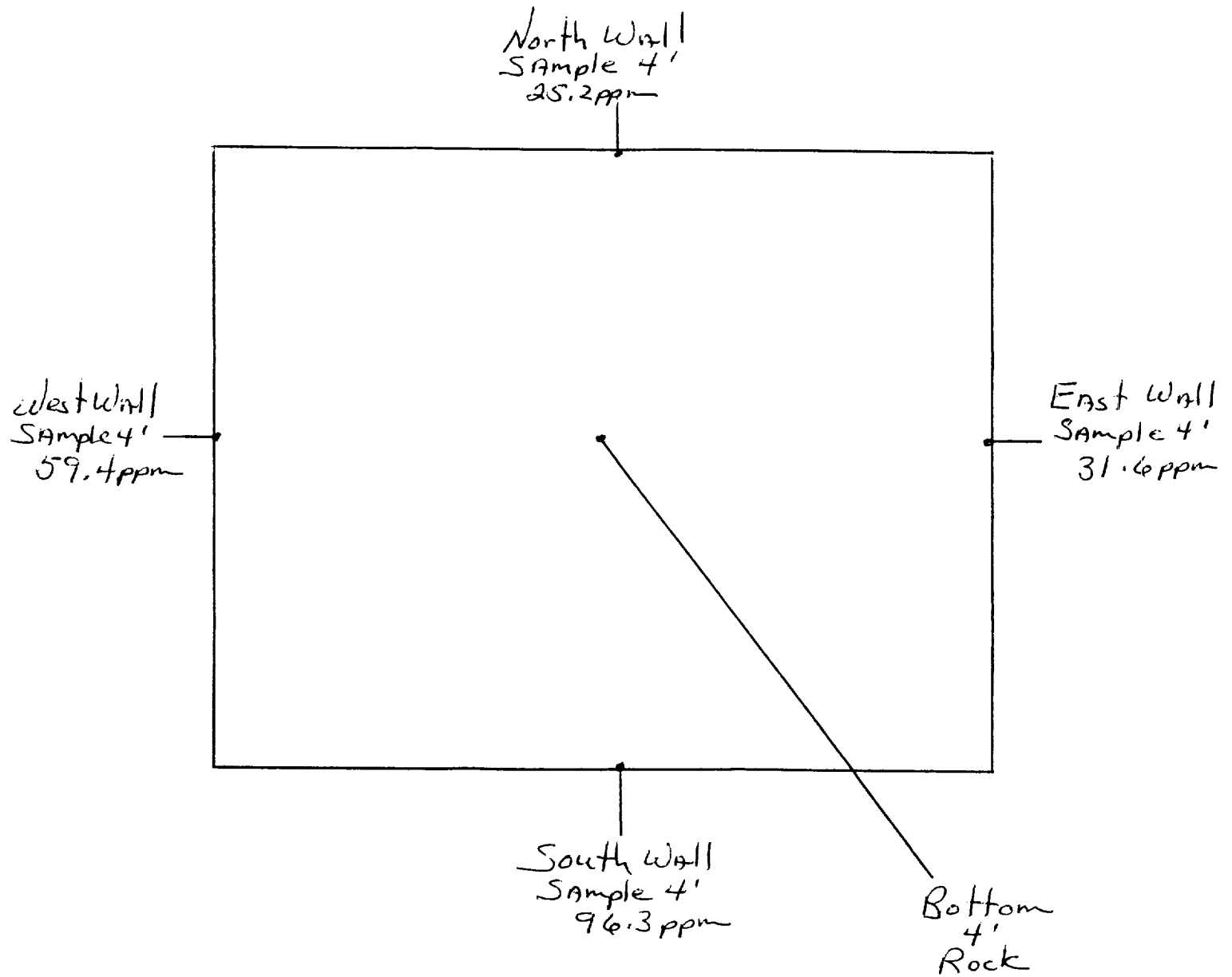
well  
Head



S  
C  
P

JICAR1114 G-3  
Sec. 12 T26N R5W Unit L  
BROG

31' x 26' x 4'



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-May-97*  
COC No.: *5462*  
Sample No.: *14633*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla G-5 Run 12-21*  
Project Location: *9705121209; 4pt. Composite*  
Sampled by: *SA* Date: *12-May-97* Time: *12:09*  
Analyzed by: *HR/DC* Date: *19-May-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	5.0	mg/kg

ND - Not Detected at Limit of Quantitation

### Quality Assurance Report

DRO QC No.: *0519-STD*

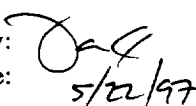
#### Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	ND	ppm	100	112	11.2	15%

#### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	100	100	(70-130)	0	20%

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

Approved by:   
Date: *5/22/97*

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: *22-May-97*  
COC No.: *5462*  
Sample No.: *14633*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla G-5 Run 12-21*  
Project Location: *9705121209; 4pt. Composite*  
Sampled by: *SA* Date: *12-May-97* Time: *12:09*  
Analyzed by: *DC* Date: *21-May-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	1.0	ug/kg
<i>Toluene</i>	ND	ug/kg	1.0	ug/kg
<i>Ethylbenzene</i>	ND	ug/kg	1.0	ug/kg
<i>m,p-Xylene</i>	ND	ug/kg	1.0	ug/kg
<i>o-Xylene</i>	ND	ug/kg	1.0	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: *5/22/97*

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JICARILLA APACHE TRIBE  
ENVIRONMENTAL  
PROTECTION OFFICE  
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DULCE, NEW MEXICO 87528

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ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: PNM Gas Services ( BROG ) Telephone: 324-3764  
Address: 603 W. Elm Street Farmington, NM 87401  
Facility or Well Name: Jicarilla G-5  
Location: Unit: L Sec. 12 T. 26 N R. 5 W County Rio Arriba  
Land Type: Jicarilla Apache

Date Remediation Started: 5/12/97 Date Completed: 6/12/97  
Remediation Method: Landfarmed X Approx. cubic yards 119  
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.) 10  
Ranking Score (Total Points): 10

Final Closure Sampling:

Sampling Date: 6/12/97 Time 0824  
Sampling Results:  
Field Headspace (ppm) 46.0  
TPH (ppm) 28 Method 8015  
Other —

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

DATE 6/20/97 PRINTED NAME Ronald A. Dedrick  
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II

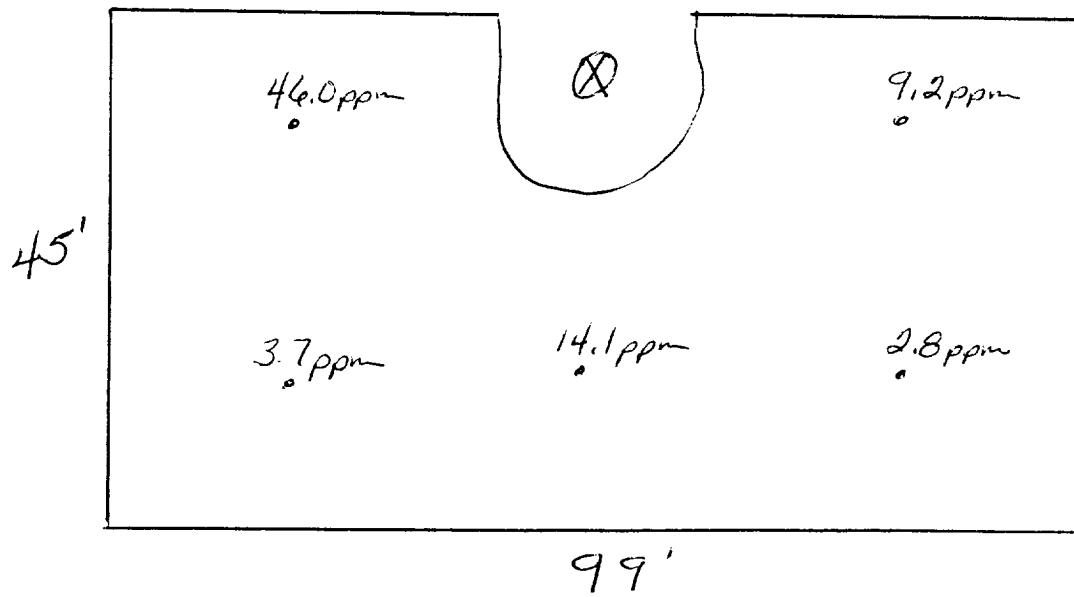
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE  
JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE

APPROVED: YES X NO — (REASON) —

SIGNED: Kenn C. Nunn DATE: 6-23-97

Sec. 12 T26N R5W Unit L  
BROG

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: *17-Jun-97*  
COC No.: *5487*  
Sample No.: *14930*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla G-5 Landfarm*  
Project Location: *9706120826; 5pt. Composite*  
Sampled by: *RB* Date: *12-Jun-97* Time: *8:26*  
Analyzed by: *DC/HR* Date: *13-Jun-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>	28	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	209	4.4	15%

#### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	90	93	(70-130)	3	20%

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

Approved by: *[Signature]*

Date: *6/17/97*

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