

*Denny E. Faust*  
DEPUTY OIL & GAS INSPECTOR

JUN 23 1998

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

*Approved*  
**PIT REMEDIATION AND CLOSURE REPORT**

Operator: PNM Gas Services (*Amoco*) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: *Jicarilla Contract 147-2*

Location: Unit: *K* Sec. *5* T. *25* N R. *5* W County *Rio Arriba*

Pit Type: Separator ☐ Dehydrator ☒ Other ☐

Land Type: *Jicarilla Apache*

Pit Location: Pit dimensions: length *28'* width *28'* depth *5'*

(Attach diagram) Reference: wellhead ☒ other ☐

Footage from reference: *144'*

Direction from reference: *30* Degrees ☐ East ☐ North ☐  
☐ West ☒ South ☐

**Depth to Ground Water:**

(Vertical distance from contaminants to seasonal high water elevation of ground water)

Less than 50 feet	(20 points)	<input checked="" type="checkbox"/>
50 feet to 99 feet	(10 points)	<input type="checkbox"/>
Greater than 100 feet	(0 points)	<input type="checkbox"/>

**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)	<input checked="" type="checkbox"/>
No	(0 points)	<input type="checkbox"/>

**Distance to Surface Water:**

(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)

Less than 200 feet	(20 points)	<input checked="" type="checkbox"/>
200 feet to 1,000 feet	(10 points)	<input type="checkbox"/>
Greater than 1,000 feet	(0 points)	<input type="checkbox"/>

**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)	<input checked="" type="checkbox"/>
Greater than 100 feet	(0 points)	<input type="checkbox"/>

**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)	<input checked="" type="checkbox"/>
Greater than 100 feet	(0 points)	<input type="checkbox"/>

**RANKING SCORE (TOTAL POINTS):** *0*

Date Remediation Started: 9/23/97 Date Completed: 11/19/97

Remediation Method: Excavation X Approx. Cubic Yards 145

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds): 145

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 100 ppm 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 4'

Sample date 9/23/97 Sample time 1537

Sample Results

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

Total BTEX (ppm) 2.003 Toluene (ppb) \_\_\_\_\_

Field headspace (ppm) 84.1 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 9/30/97 PRINTED NAME Ronald A. Dedrick

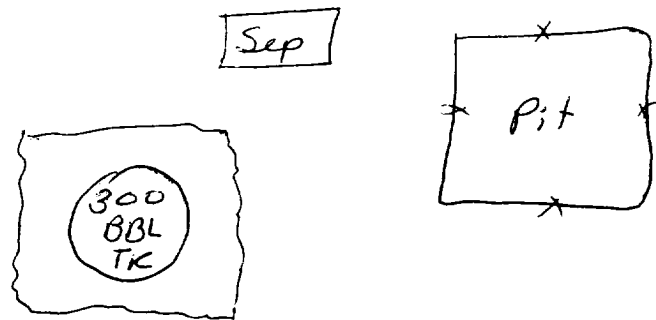
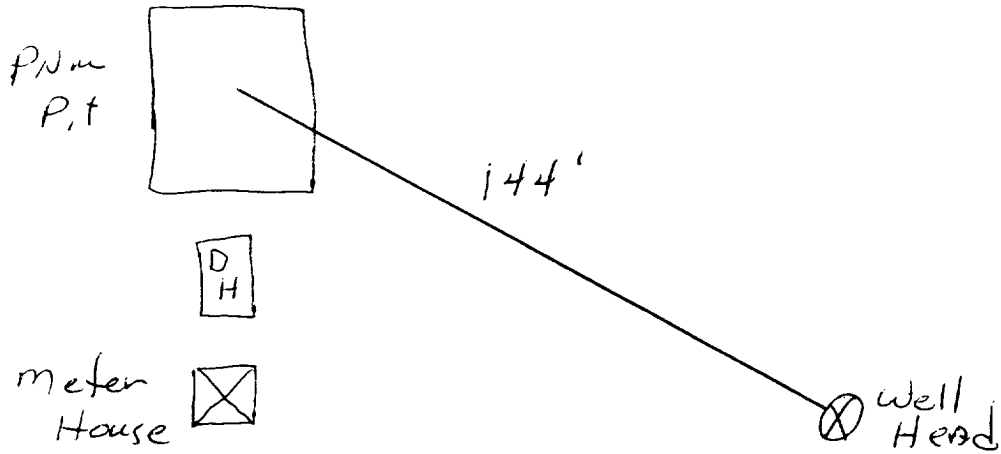
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II

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

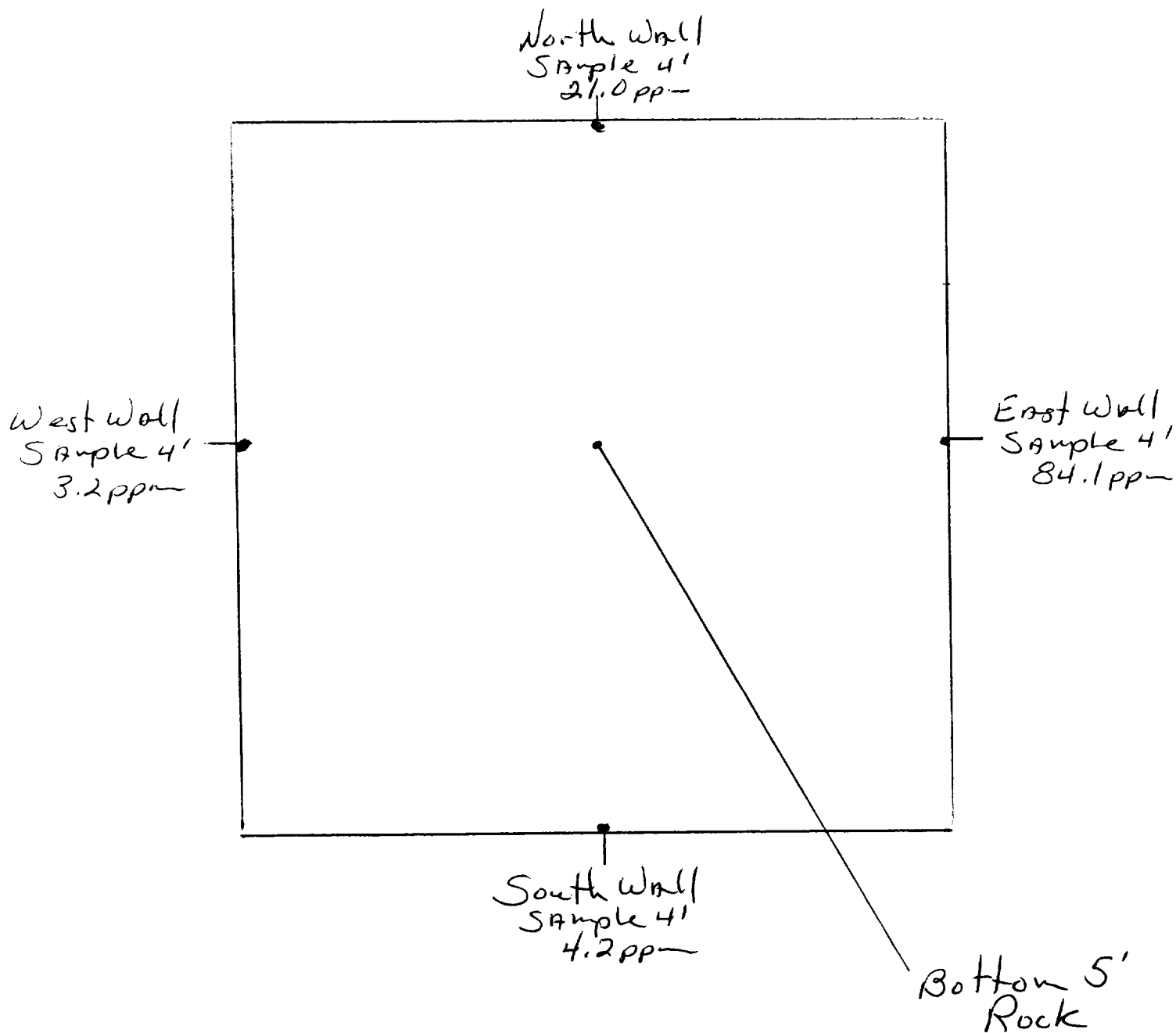
SIGNED: Karl C. Mamm DATE: 9-30-97

Jicarilla Contract 147-2  
Sec. 5 T25N R5W Unit K  
Amoco



Jicarilla Contract 147-2  
Sec. 5 T25N R5W Unit K  
Amoco

28'x28'x5'



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.: *5593*  
Sample No.: *16332*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla Contract 147-2*

Project Location: *9709231537; 4pt. Composite*

Sampled by: *TN* Date: *23-Sep-97* Time: *15:37*

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: *9/30/97*

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*TECHNICAL 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: *30-Sep-97*  
COC No.: *5593*  
Sample No.: *16332*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla Contract 147-2*

Project Location: *9709231537; 4pt. Composite*

Sampled by: *TN* Date: *23-Sep-97* Time: *15:37*

Analyzed by: *DC* Date: *28-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	1	ug/kg
<i>Toluene</i>	ND	ug/kg	1	ug/kg
<i>Ethylbenzene</i>	1	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: *[Signature]*  
Date: *9/30/97*

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- FARMINGTON BLENDING INDUSTRY WITH THE LATEST TECHNOLOGY -

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AND OIL-GAS  
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: PNM Gas Services (Amoco) Telephone: 324-3764  
Address: 603 W. Elm Street Farmington, NM 87401  
Facility or Well Name: Jicarilla Contract 147-2  
Location: Unit: K Sec. 5 T. 25 N R. 5 W County Rio Arriba  
Land Type: Jicarilla Apache

Date Remediation Started: 9/23/97 Date Completed: 11/13/97  
Remediation Method: Landfarmed X Approx. cubic yards 145  
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: 11/12/97 Time 1150  
Sampling Results:  
Field Headspace (ppm) 28.9  
TPH (ppm) 47 Method 8015  
Other

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

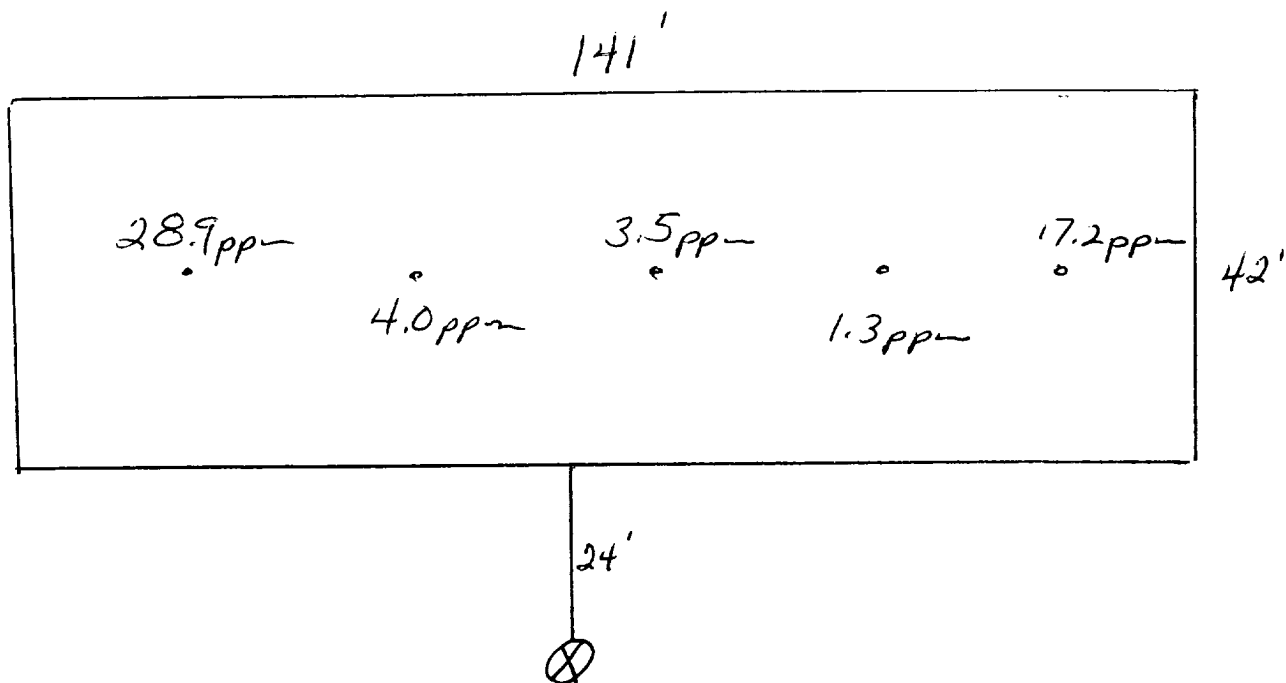
DATE 11/16/97 PRINTED NAME Ronald A. Dedrick  
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II

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) was as Backfill  
SIGNED: [Signature] DATE: 11-17-97

Jicarilla Contact 147-2  
Sec. 5 T25N R5W Unit K  
Amoco

Landform





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.: *5637*  
Sample No.: *16862*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla Contract 147-2 Landfarm*  
Project Location: *971121150; 5pt. Composite*  
Sampled by: *RB* Date: *12-Nov-97* Time: *11:50*  
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>47</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*

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