

*Denny E. Foust*

DEPUTY OIL & GAS INSPECTOR

JICARILLA APACHE TRIBE

FEB 08 1999

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 ( BROG ) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: ARIZONA JICARILLA A-5A

Location: Unit: K Sec. 13 T. 25 N R. 4 W County Rio Arriba

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

Land Type: Jicarilla Apache

Pit Location: Pit dimensions: length 20' width 20' depth 3'

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

Footage from reference: 54' 120'

Direction from reference: 45 Degrees East North \_\_\_\_\_  
of  
X West X South

**Depth to Ground Water:**

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

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Less than 50 feet (20 points)  
50 feet to 99 feet (10 points)  
Greater than 100 feet (0 points) 0

**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) 0

OIL CON. DIV.  
DIST. 3

**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) 0

**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) 0

**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) 0

RANKING SCORE (TOTAL POINTS):

0

Date Remediation Started: 11/17/98 Date Completed: 12/28/98

Remediation Method: Excavation X Approx. Cubic Yards 3125  
Landfarmed X Amount Landfarmed (cubic yds): 3125 ~~1110~~ RAD 11/19/99  
Other \_\_\_\_\_

(Check all appropriate sections)

Remediation Location: Onsite X 1110 cu yds Offsite 2015 cu yds TNT LANDFARM  
(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 headspace reading. Pit bottom is sandstone. 3 PT Composite of Pit bottom. Final excavation dimensions: 73' X 68' X 17'.

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

Final Pit Closure Sampling:

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

Sample Location North, East, South, west side walls and Pit bottom

Sample depth 17'

Sample date 11/30/98 Sample time 7043 1044(KT)

Sample Results

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

Total BTEX (ppm) 811 Toluene (ppb) \_\_\_\_\_

Field headspace (ppm) 938 Ethylbenzene (ppb) \_\_\_\_\_

TPH 45 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 \_\_\_\_\_

PRINTED NAME Roy Burnham

SIGNATURE Roy Burnham

AND TITLE Environmental Technician II

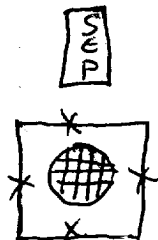
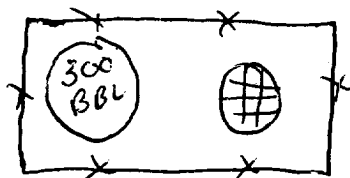
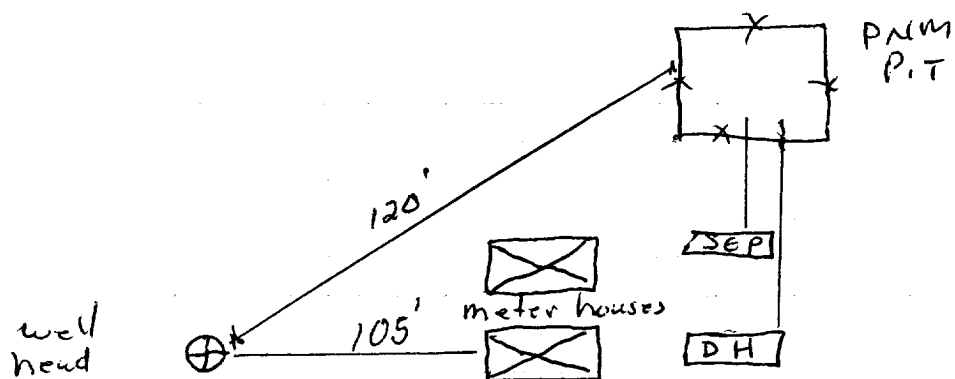
AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

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

SIGNED: K. C. Mendenhall DATE: 12-21-98

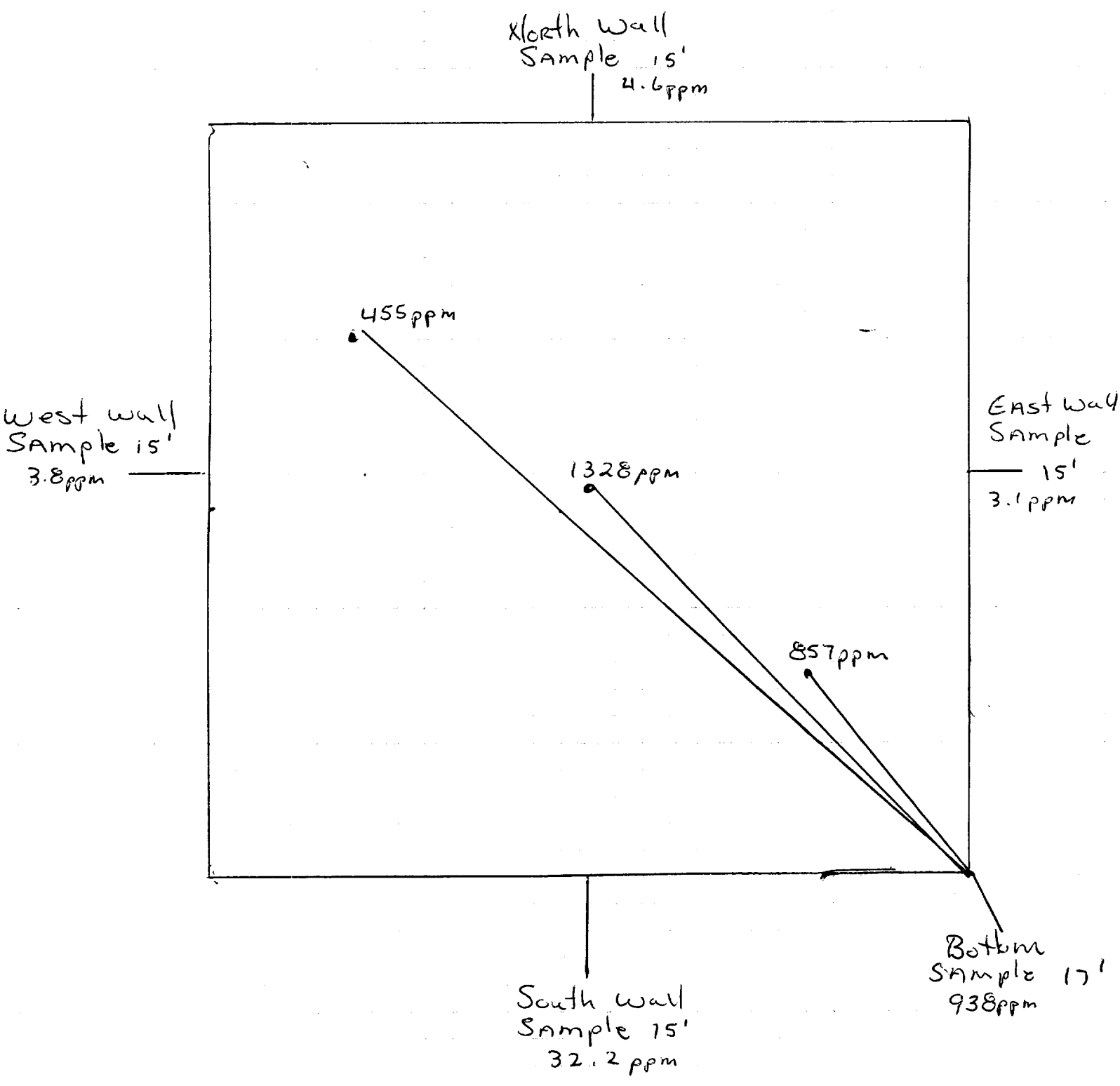
ARIZONA TICARILLA A-5A  
Sec-13 T-25N R-4W u.k.  
BROG

# Site Drawing



ARIZONA TICARILLA A-5A  
SEC 13 T-25N R-4W UL K  
BROG

# EXCAVATION DRAWING



OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 15-Dec-98

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**CLIENT:** PNM - Public Service Company of NM

**Project:** Jicarilla Pit Remediation

**Lab Order:** 9812002

## **CASE NARRATIVE**

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Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.



## ANALYTICAL REPORT

Date: 15-Dec-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Arizona Jicarilla A-5A
<b>Work Order:</b>	9812002	<b>Client Sample ID:</b>	9811301044; 3pt. Comp. Bottom
<b>Lab ID:</b>	9812002-02A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Jicarilla Pit Remediation	<b>Collection Date:</b>	11/30/98 10:44:00 AM
		<b>COC Record:</b>	7198

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>						
	<b>SW8015</b>					Analyst: HR
T/R Hydrocarbons: C10-C28	45	25		mg/Kg	1	12/10/98
<b>BTEX</b>						
	<b>SW8020A</b>					Analyst: HR
Benzene	ND	5		µg/Kg	5	12/3/98
Toluene	ND	10		µg/Kg	5	12/3/98
Ethylbenzene	58	5		µg/Kg	5	12/3/98
m,p-Xylene	670	10		µg/Kg	5	12/3/98
o-Xylene	83	5		µg/Kg	5	12/3/98

811  
 .811 ppm

**Qualifiers:**

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 15-Dec-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Arizona Jicarilla A-5A
<b>Work Order:</b>	9812002	<b>Client Sample ID:</b>	9811301043; 4pt. Comp. Walls
<b>Lab ID:</b>	9812002-01A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Jicarilla Pit Remediation	<b>Collection Date:</b>	11/30/98 10:43:00 AM
		<b>COC Record:</b>	7198

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015</b>				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	12/4/98

<b>Qualifiers:</b>	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate

1 of 1

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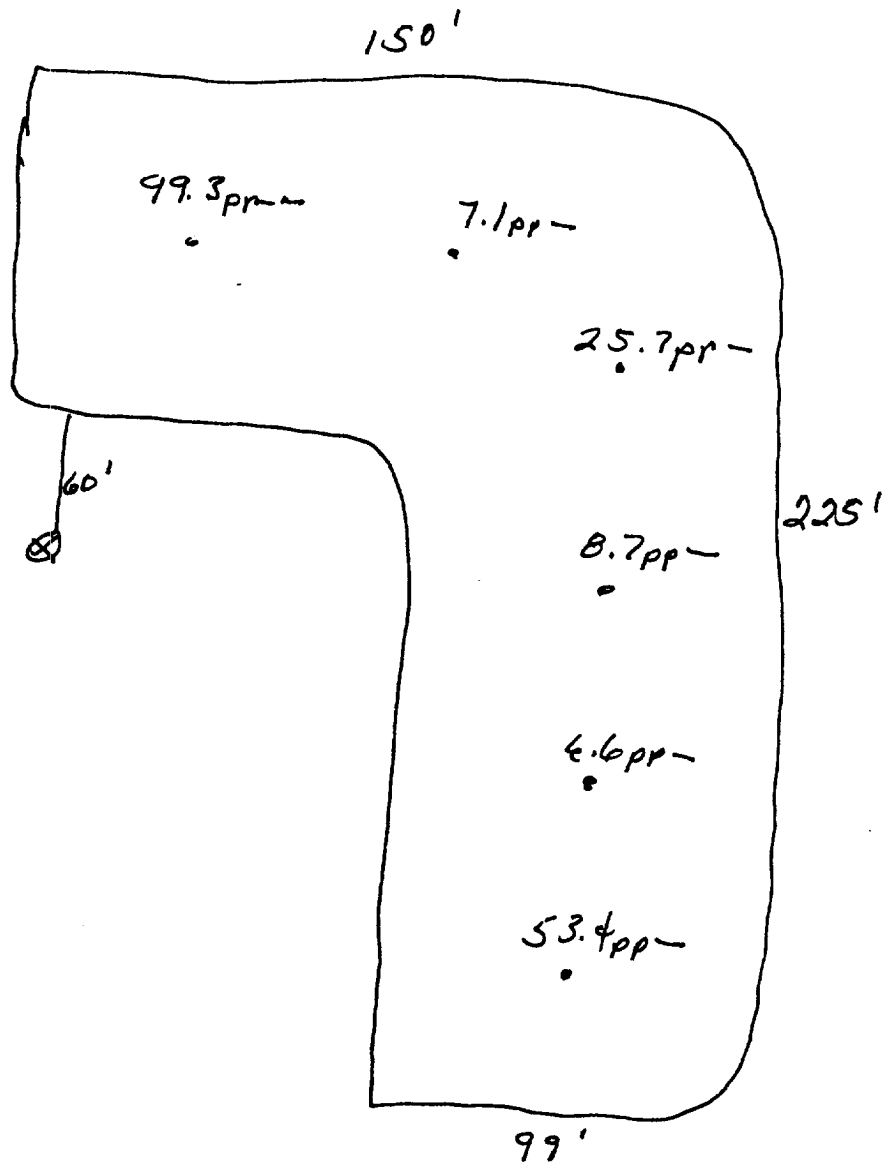
ON-SITE SOIL REMEDIATION REPORT

<b>Operator:</b> PNM Gas Services ( <u>BROG</u> ) <b>Telephone:</b> <u>324-3764</u>																			
<b>Address:</b> <u>603 W. Elm Street Farmington, NM 87401</u>																			
<b>Facility or Well Name:</b> <u>ARIZONA JICARILLA A-5A</u>																			
<b>Location:</b> Unit: <u>K</u> Sec. <u>13</u> T. <u>25</u> N R. <u>4</u> W County <u>Rio Arriba</u>																			
<b>Land Type:</b> <u>Jicarilla Apache</u>																			
<b>Date Remediation Started:</b> <u>11/17/98</u> <b>Date Completed:</b> <u>12/18/98</u>																			
<b>Remediation Method:</b> Landfarmed <u>X</u> <b>Approx. cubic yards</b> <u><del>1132</del> 1110 RAD</u>																			
Composted <u>    </u>																			
Other <u>    </u>																			
<table><tr><td>Depth to Ground Water:</td><td>(pts.)</td><td><u>Ø</u></td></tr><tr><td>Distance to an Ephemeral Stream:</td><td>(pts.)</td><td><u>Ø</u></td></tr><tr><td>Distance to Nearest Lake, Playa, or Watering Pond:</td><td>(pts.)</td><td><u>Ø</u></td></tr><tr><td>Wellhead Protection Area:</td><td>(pts.)</td><td><u>Ø</u></td></tr><tr><td>Distance to Surface Water:</td><td>(pts.)</td><td><u>Ø</u></td></tr><tr><td>Ranking Score (Total Points):</td><td></td><td><u>Ø</u></td></tr></table>	Depth to Ground Water:	(pts.)	<u>Ø</u>	Distance to an Ephemeral Stream:	(pts.)	<u>Ø</u>	Distance to Nearest Lake, Playa, or Watering Pond:	(pts.)	<u>Ø</u>	Wellhead Protection Area:	(pts.)	<u>Ø</u>	Distance to Surface Water:	(pts.)	<u>Ø</u>	Ranking Score (Total Points):		<u>Ø</u>	<b>Final Closure Sampling:</b>  Sampling Date: <u>12/19/98</u> Time <u>0840</u> Sampling Results: Field Headspace (ppm) <u>99.3</u> TPH (ppm) <u>2/0</u> Method <u>8015</u> Other <u>    </u>
Depth to Ground Water:	(pts.)	<u>Ø</u>																	
Distance to an Ephemeral Stream:	(pts.)	<u>Ø</u>																	
Distance to Nearest Lake, Playa, or Watering Pond:	(pts.)	<u>Ø</u>																	
Wellhead Protection Area:	(pts.)	<u>Ø</u>																	
Distance to Surface Water:	(pts.)	<u>Ø</u>																	
Ranking Score (Total Points):		<u>Ø</u>																	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF																			
DATE <u>12/28/98</u> PRINTED NAME <u>Roy Burnham</u>																			
SIGNATURE <u>Roy Burnham</u> AND TITLE <u>Environmental Technician II</u>																			
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE																			
APPROVED: YES <u>X</u> NO <u>    </u> (REASON) <u>    </u>																			
SIGNED: <u>Ker C Marshall</u> DATE: <u>12-28-98</u>																			



Sec. 13 T25N R4W Unit K  
BROG

Land farm Drawing



OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 21-Dec-98

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**CLIENT:** PNM - Public Service Company of NM  
**Project:** Jicarilla Pit Remediation  
**Lab Order:** 9812026

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## **CASE NARRATIVE**

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 21-Dec-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Arizona Jicarilla A-5A LF
<b>Work Order:</b>	9812026	<b>Client Sample ID:</b>	9812100840; 6pt. Composite
<b>Lab ID:</b>	9812026-07A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Jicarilla Pit Remediation	<b>Collection Date:</b>	12/10/98 8:40:00 AM
		<b>COC Record:</b>	7447

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015</b>				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	12/18/98

**Qualifiers:**

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