

Denny S. Faust  
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

RISK  
BTEX

Approved

**PIT REMEDIATION AND CLOSURE REPORT**

Operator: PNM Gas Services (Conoco)		Telephone: 324-3764	
Address: 603 W. Elm Street Farmington, NM 87401			
Facility or Well Name: Axi Apache J-6			
Location:	Unit: P	Sec. 7	T. 25 N R. 5 W County Rio Arriba
Pit Type:	Separator <input checked="" type="checkbox"/>	Dehydrator	Other
Land Type:	Jicarilla Apache		
Pit Location:	Pit dimensions: length 18' width 18' depth 2'		
(Attach diagram)	Reference: wellhead <input checked="" type="checkbox"/> other		
	Footage from reference: 21'		
	Direction from reference: Due Degrees <input checked="" type="checkbox"/> East North of West South		
Depth to Ground Water:	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points)		
(Vertical distance from contaminants to seasonal high water elevation of ground water)			
Wellhead Protection Area:	Yes (20 points) No (0 points)		
(Less than 200 feet from a private domestic water source, or, less than 1,000 feet from all other water sources)			
Distance to Surface Water:	Less than 200 feet (20 points) 200 feet to 1,000 feet (10 points) Greater than 1,000 feet (0 points)		
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)			
Distance to Ephemeral Stream (dry wash):	Less than or equal to 100 feet (10 points) Greater than 100 feet (0 points)		
(Horizontal distance to all downgradient streams having a width of at least 10 feet)			
Distance to Nearest Lake, Playa, or Watering Pond:	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)			
RANKING SCORE (TOTAL POINTS):			

Date Remediation Started:

7/16/98

Date Completed:

9/9/98

Remediation Method:

Excavation

☒

Approx. Cubic Yards

65

(Check all appropriate sections)

Landfarmed

☒

Amount Landfarmed (cubic yds):

65

Other \_\_\_\_\_

Remediation Location:

Onsite

☒

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 it below 100 ppm head space reading.  
Bottom is rock  
Excavation size: 22' x 21' x 4'

Ground Water Encountered:

No

☒

Yes

Depth \_\_\_\_\_

## Final Pit Closure Sampling:

Sample Location

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

Sample depth

4'

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

Sample date

7/16/98

Sample time

1041

## Sample Results

Soil: Benzene (ppm)

ND

Water: Benzene (ppb)

Total BTEX (ppm)

51.900

Toluene (ppb)

Field headspace (ppm)

518

Ethylbenzene (ppb)

TPH

ND

ppm

Method

8015

Total Xylenes (ppb)

Ground Water Sample:

Yes

☐

No

☒

(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

7/28/98

PRINTED NAME

<sup>RB</sup>  
Ronald A. Dedrick 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

☒

NO

☐

(REASON):

RA Attached

SIGNED:

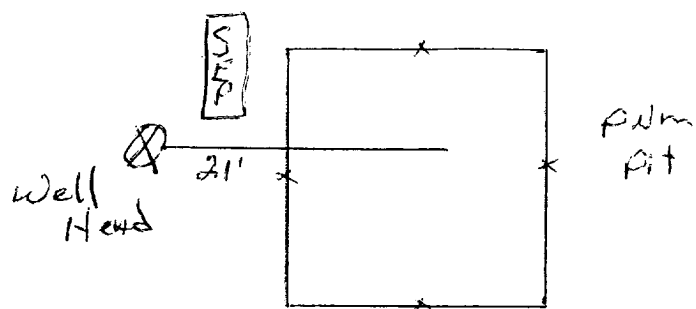
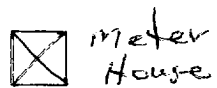
Ken C. Man

DATE:

8-18-98

7X117pache J-6  
Sec 7 T25N R5W Unit A  
20400

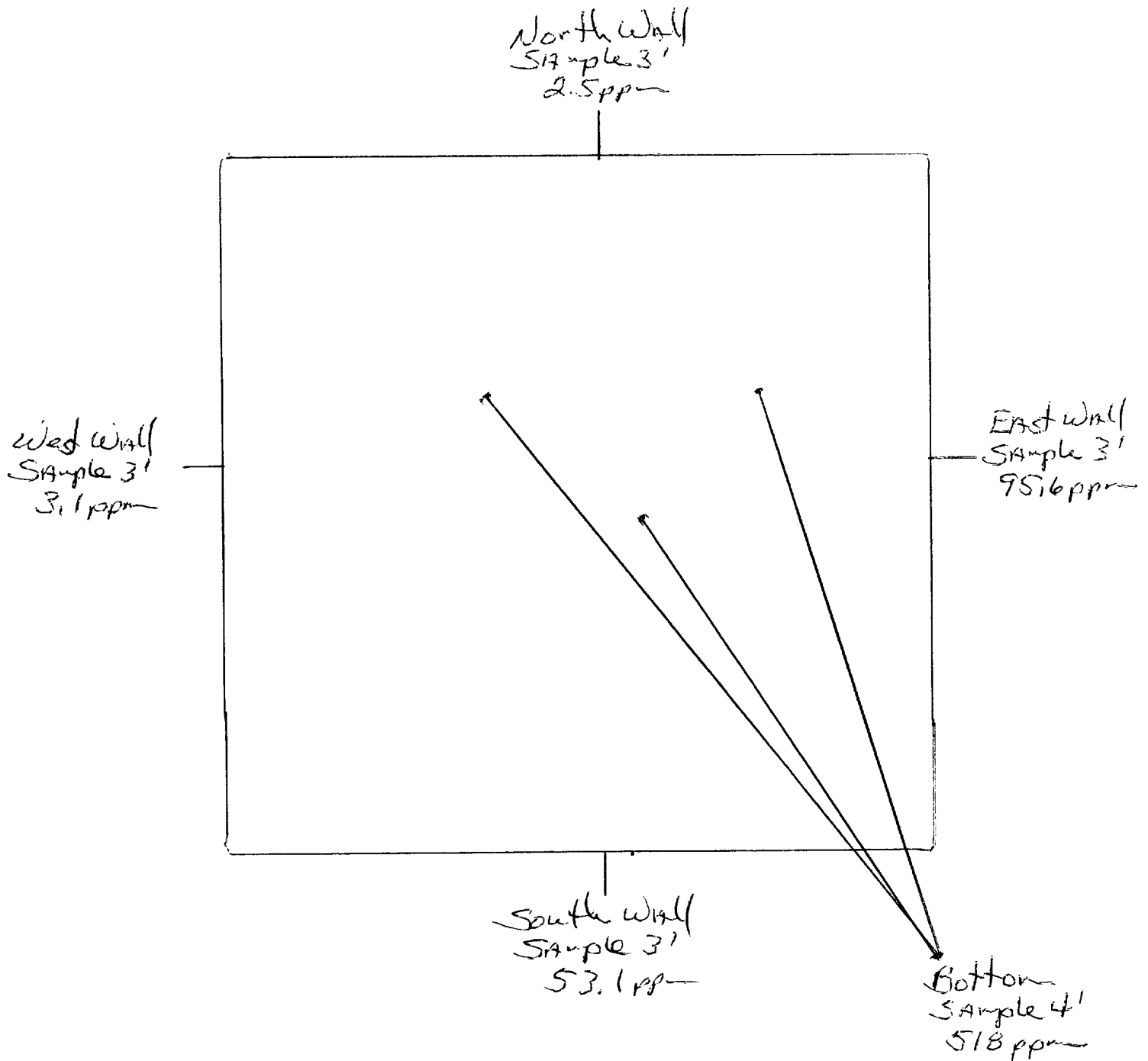
# Site Drawing



71114 patches - 6  
Sec. 7 T25N R5W Unit P  
Duroco

21x21x4

# Excavation Drawing



OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 28-Jul-98

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**CLIENT:** PNM - Public Service Company of NM  
**Project:** PNM Pit Remediation  
**Lab Order:** 9807045

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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: 28-Jul-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Axi Apache J-6
<b>Work Order:</b>	9807045	<b>Client Sample ID:</b>	9807161041; 3pt. Composite <i>bottom</i>
<b>Lab ID:</b>	9807045-06A	<b>Matrix:</b>	SOIL
<b>Project:</b>	PNM Pit Remediation	<b>Collection Date:</b>	7/16/98 10:41:00 AM
		<b>COC Record:</b>	7316

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	7/27/98
<b>BTEX</b>		<b>SW8020A</b>				Analyst: DC
Benzene	ND	500		µg/Kg	500	7/24/98
Toluene	36000	1000		µg/Kg	500	7/24/98
Ethylbenzene	1000	500		µg/Kg	500	7/24/98
m,p-Xylene	12000	1000		µg/Kg	500	7/24/98
o-Xylene	2900	500		µg/Kg	500	7/24/98

*51900*  
*51.900 ppm*

<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

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OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 28-Jul-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Axi Apache J-6
<b>Work Order:</b>	9807045	<b>Client Sample ID:</b>	9807161040; 4pt. Composite -walks
<b>Lab ID:</b>	9807045-05A	<b>Matrix:</b>	SOIL
<b>Project:</b>	PNM Pit Remediation	<b>Collection Date:</b>	7/16/98 10:40:00 AM
		<b>COC Record:</b>	7316

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	7/23/98

**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

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**Environmental Services**

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Well Name:	Axi Apache J #6
Well Legals:	Unit P, Sec 7, T25N, R5W
Pit Type:	Separator
Horizontal Distance to Surface Water:	Greater than 1,000 feet
Groundwater Depth:	Greater than 100 feet

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**RISK ANALYSIS**

PNM requests closure of their former pit on the Axi Apache J #6 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 172 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash (Lapis Canyon). (Reference: Gonzales Mesa, NM series 7.5 minute topographic map.)
2. The site is located outside of the "vulnerable area" as defined under OCC Order No. R-7940-C.
3. PNM excavated 65 cubic yards of soil from the former pit. Subsurface lateral contamination has been remediated (see attached map and analytical results for the side wall profiles). Source removal minimizes the possibility of surface water contamination.
4. Bedrock was encountered at 4 feet below ground surface. Bedrock/sandstone provides a barrier between remaining contamination and groundwater. Vertical migration through bedrock or sandstone to groundwater is unlikely.
5. PNM excavated and performed remediation to the maximum depth and horizontal extent practicable.

PNM believes their former pit on the Axi Apache J #6 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.



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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: Ax: Apache J-6  
Location: Unit: P Sec. 7 T. 25 N R. 5 W County Rio Arriba  
Land Type: Jicarilla Apache

Date Remediation Started: 7/16/98 Date Completed: 8/20/98  
Remediation Method: Landfilled ☒ Approx. cubic yards 65  
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: 8/17/98 Time 0940  
Sampling Results:  
Field Headspace (ppm) 1.6  
TPH (ppm) N/D Method 8015  
Other \_\_\_\_\_

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

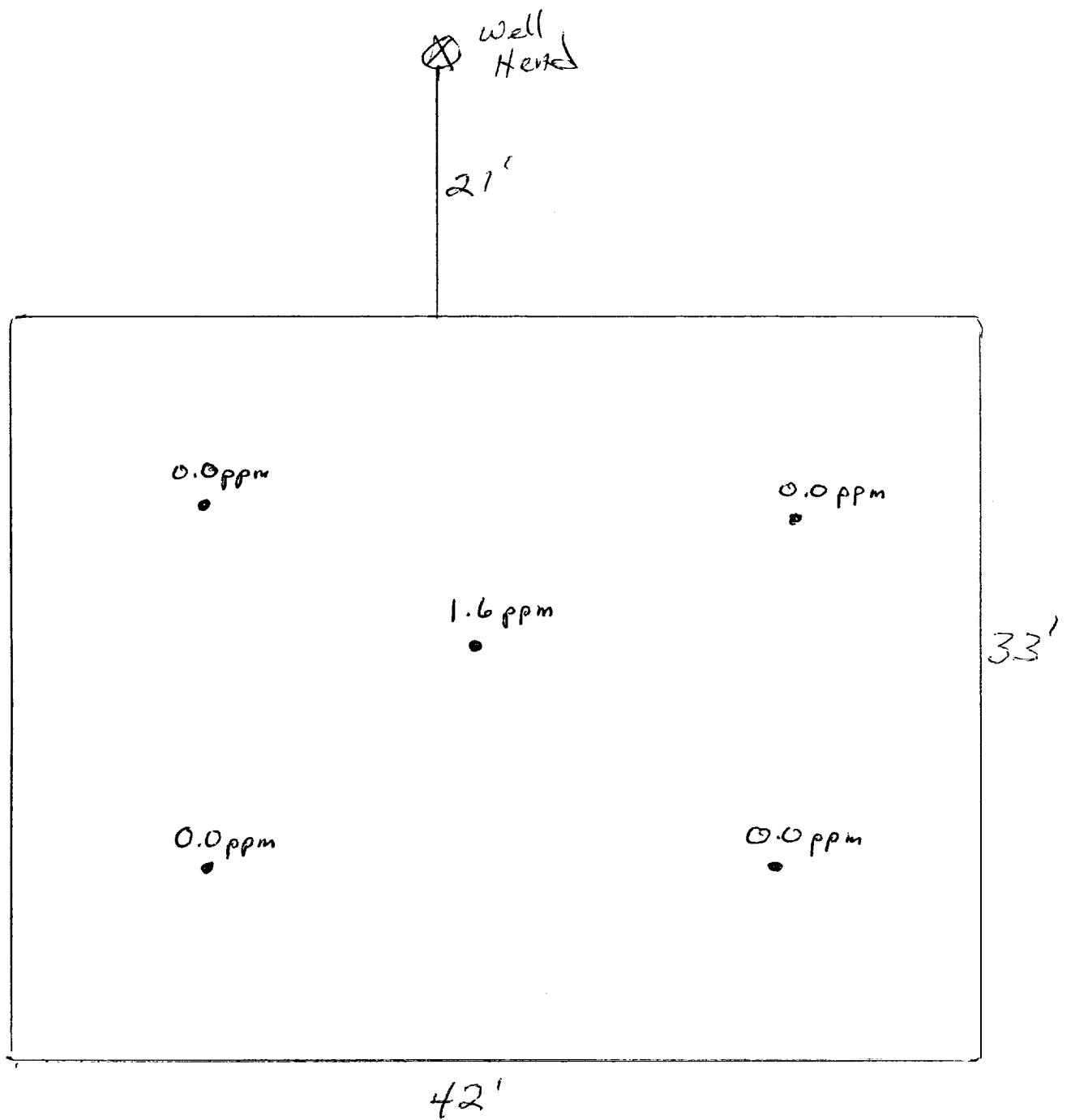
DATE 8/29/98 PRINTED NAME Ronald A. Dedrick Roy Burnham  
SIGNATURE Roy Burnham AND TITLE Environmental Technician II

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) use as Backfill  
SIGNED: Ker C Mamm DATE: 9-9-98

7A114pache U-6  
Sec. 7 T25N R5W Unit P  
200000

# Landform Drawing



OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 26-Aug-98

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**CLIENT:** PNM - Public Service Company of NM  
**Project:** PNM Pit Remediation  
**Lab Order:** 9808036

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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.

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LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 26-Aug-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Axi Apache J-6 LF
<b>Work Order:</b>	9808036	<b>Client Sample ID:</b>	9808170940; 5pt. Comp.
<b>Lab ID:</b>	9808036-12A	<b>Matrix:</b>	SOIL
<b>Project:</b>	PNM Pit Remediation	<b>Collection Date:</b>	8/17/98 9:40:00 AM
		<b>COC Record:</b>	7333/34/35

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	8/20/98

**Qualifiers:**

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