

Denny E. Faust  
DEPUTY OIL & GAS INSPECTOR

JICARILLA APACHE TRIBE

ENVIRONMENTAL PROTECTION OFFICE

FEB 08 1999

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 ( WFS ) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Axi Apache m-3 Drip

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

Pit Type: Separator Dehydrator Other Drip

Land Type: Jicarilla Apache

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

(Attach diagram) Reference: wellhead X other

Footage from reference: 245'

Direction from reference: 60° Degrees East North  
X West of South X

**Depth to Ground Water:**

(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) 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

**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: 11-20-98 Date Completed: 12/28/98 RAD  
11/23/98

Remediation Method: Excavation X Approx. Cubic Yards 550

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds): 550

Other \_\_\_\_\_

Remediation Location: Onsite \_\_\_\_\_ Offsite Axi Apache M-7

(i.e., landfarmed onsite, name and location of offsite facility)

Sec. 13, 25N, 4W, A

**General Description of Remedial Action:**

Removed contaminated soil from all 4 side walls to a  
below 100 ppm headspace reading.  
Bottom at 26' Rock 3 point sample  
Excavated pit 22' X 26' X 26'

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 wall, East wall, South wall, West wall

Bottom 3 point composite

Sample depth 26'

Sample date 11/23/98 Sample time 1000

**Sample Results**

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

Total BTEX (ppm) 18.2 Toluene (ppb) \_\_\_\_\_

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

TPH 320 ppm Method TPH-8010 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 11/23/98

PRINTED NAME Gary Cook

SIGNATURE Gary Cook

AND TITLE Environmental Technician III

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): \_\_\_\_\_

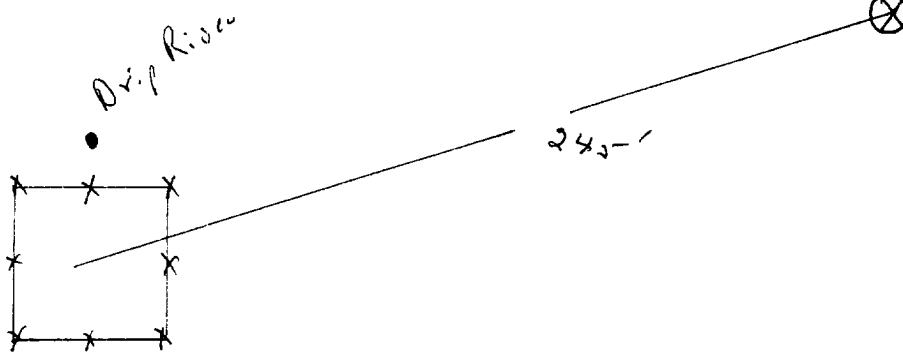
SIGNED: Kent Mammill DATE: 12-15-98

Axi Apache M-3 Drip  
WFS  
Sec. 13, 25N, 4W, A

11/20/98

site diagram:

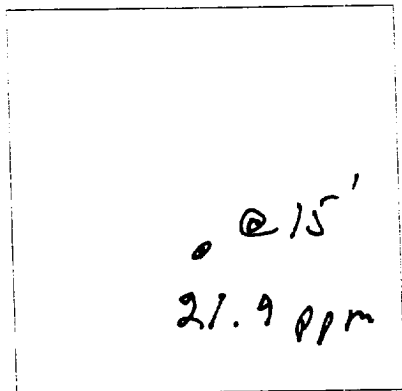
↑  
N



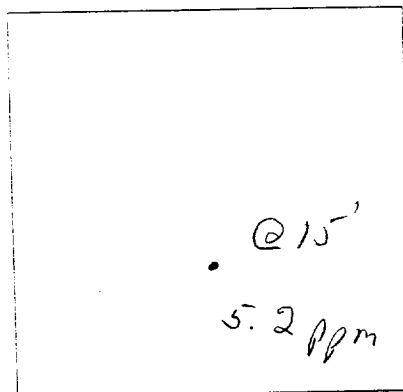
Not to scale

Axi Apache m-3 Dip  
WFS  
Sec 13, 25N, 4W, A

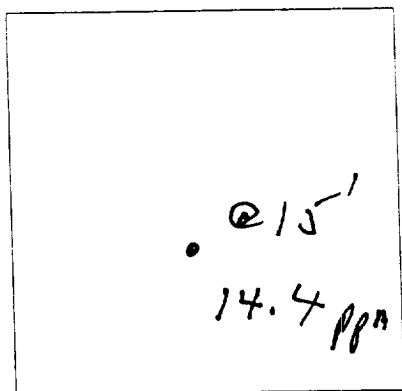
## North Wall



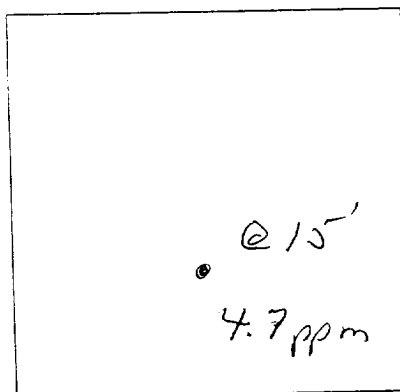
## South Wall



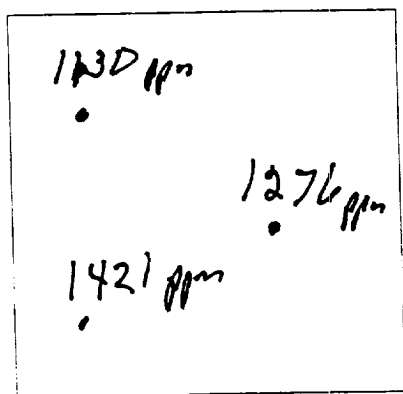
## East Wall



## West Wall



## Bottom



@ 26'  
ROCK

3 pt. comp.  
head space reading = 1516 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 08-Dec-98

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

**Project:** Jicarilla Pit Remediation

**Lab Order:** 9811074

## **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.

OFF: (505) 325-5667



LAB: (505) 325-1556

**ANALYTICAL REPORT****Date:** 08-Dec-98

|                    |                                    |                            |                            |
|--------------------|------------------------------------|----------------------------|----------------------------|
| <b>Client:</b>     | PNM - Public Service Company of NM | <b>Client Sample Info:</b> | Axi Apache M-3 Drip        |
| <b>Work Order:</b> | 9811074                            | <b>Client Sample ID:</b>   | 9811231000; Bottom @ 26 ft |
| <b>Lab ID:</b>     | 9811074-01A                        | <b>Matrix:</b>             | SOIL                       |
| <b>Project:</b>    | Jicarilla Pit Remediation          | <b>Collection Date:</b>    | 11/23/98 10:00:00 AM       |
|                    |                                    | <b>COC Record:</b>         | 7196                       |

| Parameter                    | Result | PQL            | Qual | Units | DF  | Date Analyzed |
|------------------------------|--------|----------------|------|-------|-----|---------------|
| <b>DIESEL RANGE ORGANICS</b> |        | <b>SW8015</b>  |      |       |     | Analyst: HR   |
| T/R Hydrocarbons: C10-C28    | 320    | 25             |      | mg/Kg | 1   | 12/3/98       |
| <b>BTEX</b>                  |        | <b>SW8020A</b> |      |       |     | Analyst: HR   |
| Benzene                      | ND     | 200            |      | µg/Kg | 200 | 11/25/98      |
| Toluene                      | 1200   | 400            |      | µg/Kg | 200 | 11/25/98      |
| Ethylbenzene                 | 1500   | 200            |      | µg/Kg | 200 | 11/25/98      |
| m,p-Xylene                   | 12000  | 400            |      | µg/Kg | 200 | 11/25/98      |
| o-Xylene                     | 3500   | 200            |      | µg/Kg | 200 | 11/25/98      |

18200  
18.200 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

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 08-Dec-98

|                    |                                    |                            |                           |
|--------------------|------------------------------------|----------------------------|---------------------------|
| <b>Client:</b>     | PNM - Public Service Company of NM | <b>Client Sample Info:</b> | Axi Apache M-3 Drip       |
| <b>Work Order:</b> | 9811074                            | <b>Client Sample ID:</b>   | 9811231005; Walls @ 15 ft |
| <b>Lab ID:</b>     | 9811074-02A                        | <b>Matrix:</b>             | SOIL                      |
| <b>Project:</b>    | Jicarilla Pit Remediation          | <b>Collection Date:</b>    | 11/23/98 10:05:00 AM      |
|                    |                                    | <b>COC Record:</b>         | 7196                      |

| Parameter                    | Result | PQL           | Qual | Units | DF | Date Analyzed |
|------------------------------|--------|---------------|------|-------|----|---------------|
| <b>DIESEL RANGE ORGANICS</b> |        | <b>SW8015</b> |      |       |    | Analyst: HR   |
| T/R Hydrocarbons: C10-C28    | 31     | 25            |      | mg/Kg | 1  | 12/4/98       |

**Qualifiers:**

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ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

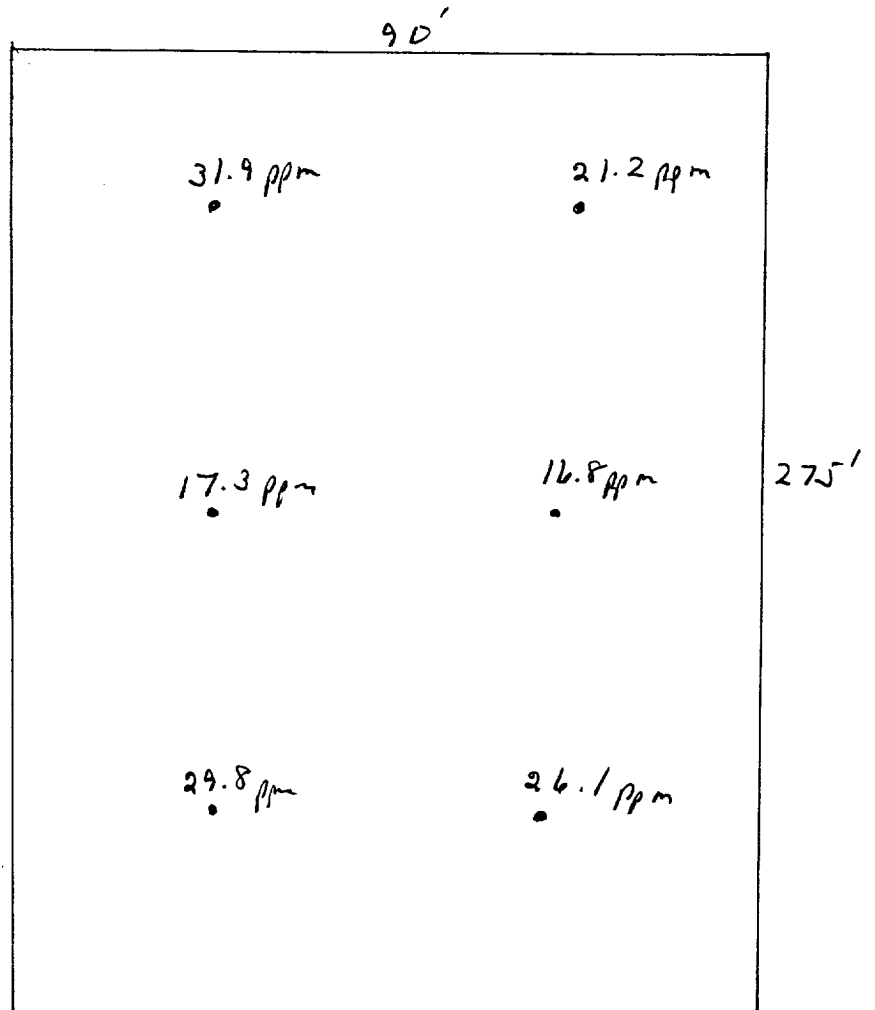
|  |  |
|--|--|
| <b>Operator:</b> PNM Gas Services ( <u>WFS</u> ) <b>Telephone:</b> <u>324-3764</u>   |  |
| <b>Address:</b> <u>603 W. Elm Street Farmington, NM 87401</u>  |  |
| <b>Facility or Well Name:</b> <u>Axi Apache m-3 Drip</u>   |  |
| <b>Location:</b>   | <b>Unit:</b> <u>A</u> <b>Sec.</b> <u>13</u> <b>T.</b> <u>25 N</u> <b>R.</b> <u>4 W</u> <b>County</b> <u>Rio Arriba</u>   |
| <b>Land Type:</b> <u>Jicarilla Apache</u>  |  |
| <b>Date Remediation Started:</b> <u>11/20/98</u> <b>Date Completed:</b> <u>12-18-98</u>  |  |
| <b>Remediation Method:</b> Landfarmed <u>X</u> <b>Approx. cubic yards</b> <u>550</u>   |  |
| Composted _____  |  |
| Other _____  |  |
| <b>Depth to Ground Water:</b> (pts.) <u>0</u>  | <b>Final Closure Sampling:</b><br><br><b>Sampling Date:</b> <u>12/10/98</u> <b>Time</b> <u>0803</u><br><b>Sampling Results:</b><br><b>Field Headspace (ppm)</b> <u>53.6 ppm</u><br><b>TPH (ppm)</b> <u>320</u> <b>Method</b> <u>TPH-8015</u><br><b>Other</b> _____ |
| <b>Distance to an Ephemeral Stream:</b> (pts.) <u>0</u>  |  |
| <b>Distance to Nearest Lake, Playa, or Watering Pond:</b> (pts.) <u>0</u>  |  |
| <b>Wellhead Protection Area:</b> (pts.) <u>0</u>   |  |
| <b>Distance to Surface Water:</b> (pts.) <u>0</u>  |  |
| <b>Ranking Score (Total Points):</b> <u>0</u>  |  |
| I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF  |  |
| <b>DATE</b> <u>12/22/98</u>  | <b>PRINTED NAME</b> <u>Gary Cook</u>   |
| <b>SIGNATURE</b> <u>Gary Cook</u>  | <b>AND TITLE</b> <u>Environmental Technician III</u>   |
| AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE |  |
| <b>APPROVED:</b> YES <u>X</u> NO _____ <b>(REASON)</b> <u>NO BACKBILL</u>  |  |
| <b>SIGNED:</b> <u>Ker C Mammell</u>  | <b>DATE:</b> <u>12-28-98</u>   |

Axi Apache M-3 Ovip  
wf 5  
Sec. 13, 25N, 4W, A

11-23-98



On location: Axi Apache M-7  
Sec. 13, 25N, 4W, A  
550 ya-rds



not to scale

2"-12" depth

Soil vapor head space = 53.6 ppm

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

## **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.

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> | Axi Apache M-3 Drip LF     |
| <b>Work Order:</b> | 9812026                            | <b>Client Sample ID:</b>   | 9812100803; 6pt. Composite |
| <b>Lab ID:</b>     | 9812026-05A                        | <b>Matrix:</b>             | SOIL                       |
| <b>Project:</b>    | Jicarilla Pit Remediation          | <b>Collection Date:</b>    | 12/10/98 8:03:00 AM        |
|                    |                                    | <b>COC Record:</b>         | 7447                       |

| Parameter                    | Result | PQL           | Qual | Units | DF | Date Analyzed      |
|------------------------------|--------|---------------|------|-------|----|--------------------|
| <b>DIESEL RANGE ORGANICS</b> |        | <b>SW8015</b> |      |       |    | Analyst: <b>HR</b> |
| T/R Hydrocarbons: C10-C28    | 320    | 25            |      | mg/Kg | 1  | 12/18/98           |

backfill pit with soil from borrow pit

**Qualifiers:**

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