

*Kenny S. Faust*  
DEPUTY OIL & GAS INSPECTOR

FEB 08 1999

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

*Risk  
BTEX*

*Approval*

**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 #13*

Location: Unit: *L* Sec. *7* T. *25N* R. *5W* County *Rio Arriba*

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type: *Jicarilla Apache*

Pit Location: Pit dimensions: length *21'* width *21'* depth *3'*

(Attach diagram) Reference: wellhead ☒ other ☐

Footage from reference: *42'*

Direction from reference: *10°* Degrees ☒ East North ☒  
West of South

**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)

**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):

RECEIVED  
FEB - 1 1999  
OIL CON. DIV.  
DIST. 3

*0*

*0*

*0*

*0*

*0*

*0*

Date Remediation Started: 7-16-98 Date Completed: 9/3/98

Remediation Method: Excavation ☒ Approx. Cubic Yards 80

(Check all appropriate sections) Landfarmed ☒ Amount Landfarmed (cubic yds): 80

Other \_\_\_\_\_

Remediation Location: Onsite ☒ Offsite \_\_\_\_\_

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

General Description of Remedial Action:

Excavated pit 17' x 18' x 7' At 7' depth hard sandstone layer. Removed contaminated soil from all 4 walls as to get a below 100 ppm head space reading.  
Final

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

Final Pit Closure Sampling: Sample Location Walls @ 4' 980716 1330  
Bottom @ 7' 980716 1335

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

Sample depth 4' & 7'

Sample date 7/16/98 Sample time 1330 & 1335

Sample Results

Soil: Benzene (ppm) .50 ND (MS) Water: Benzene (ppb) \_\_\_\_\_

Total BTEX (ppm) 54.4 Toluene (ppb) \_\_\_\_\_

Field headspace (ppm) 1468 Ethylbenzene (ppb) \_\_\_\_\_

TPH 150 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 8/3/98 PRINTED NAME Garry Cook  
Roy Burnham

SIGNATURE Garry Cook 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.

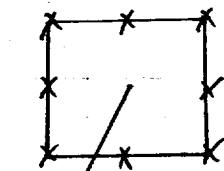
APPROVED: YES ☒ NO \_\_\_\_\_ (REASON): R.A. Attached

SIGNED: Kurt Mamm DATE: 9-3-98

Axi Apache J #13  
Continental Oil Co  
Sec. 7, 25N, 5W, L

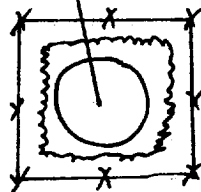
7/16/98

start of excavation:



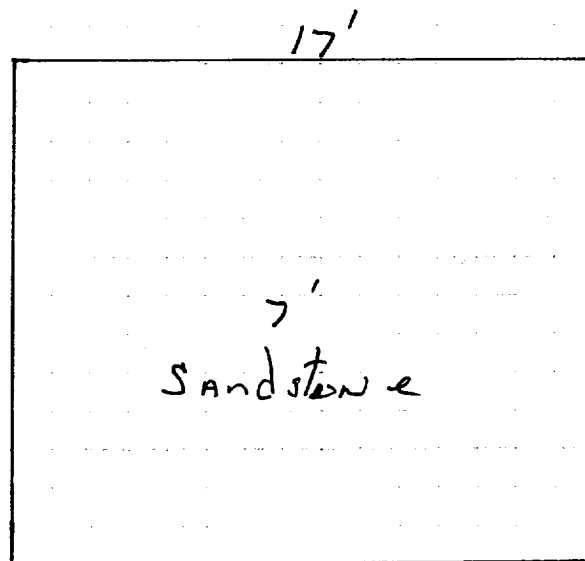
42'  
well head

All production equip.  
removed



Stock tank  
blowdown from  
well head

End of excavation:



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:** 9807047

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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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# ANALYTICAL REPORT

Date: 28-Jul-98

**Client:** PNM - Public Service Company of NM  
**Work Order:** 9807047  
**Lab ID:** 9807047-02A **Matrix:** SOIL  
**Project:** PNM Pit Remediation

**Client Sample Info:** Axi Apache J #13  
**Client Sample ID:** 9807161335; Bottom @ 7ft.  
**Collection Date:** 7/16/98 1:35:00 PM  
**COC Record:** 7322

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015</b>				Analyst: HR
T/R Hydrocarbons: C10-C28	150	25		mg/Kg	1	7/27/98
<b>BTEX</b>		<b>SW8020A</b>				Analyst: DC
Benzene	ND	.500		µg/Kg	500	7/22/98
Toluene	2200	1000		µg/Kg	500	7/22/98
Ethylbenzene	8100	500		µg/Kg	500	7/22/98
m,p-Xylene	36000	1000		µg/Kg	500	7/22/98
o-Xylene	8300	500		µg/Kg	500	7/22/98

54600  
54.600 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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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 #13
<b>Work Order:</b>	9807047	<b>Client Sample ID:</b>	9807161330; Walls @ 4ft.
<b>Lab ID:</b>	9807047-01A	<b>Matrix:</b>	SOIL
<b>Project:</b>	PNM Pit Remediation	<b>Collection Date:</b>	7/14/98 1:30:00 PM
		<b>COC Record:</b>	7322

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:**

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**Environmental Services**


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Well Name:	Axi Apache J #13
Well Legals:	Unit L, 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 #13 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 134 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 80 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. Sandstone was encountered at 7 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 #13 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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RESOURCE DEPT  
AND OIL GAS  
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: PNM Gas Services (Continental) Telephone: 324-3764	
Address: 603 W. Elm Street Farmington, NM 87401	
Facility or Well Name: Axi Apache J # 13	
Location: Unit: L Sec. 7 T. 25 N R. 5 W County Rio Arriba	
Land Type: Jicarilla Apache	
Date Remediation Started: 7/16/98 Date Completed: 8/21/98	
Remediation Method: Landfarmed <input checked="" type="checkbox"/> Approx. cubic yards 80	
Composted <input type="checkbox"/>	
Other <input type="checkbox"/>	
Depth to Ground Water: (pts.) 0	Final Closure Sampling: Sampling Date: 8/17/98 Time 1027 Sampling Results: Field Headspace (ppm) 1.4 TPH (ppm) N/D Method 8015 Other
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	
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 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 <input checked="" type="checkbox"/> NO <input type="checkbox"/> (REASON) use as Backfill	
SIGNED: Ken C. M... DATE: 9-3-98	

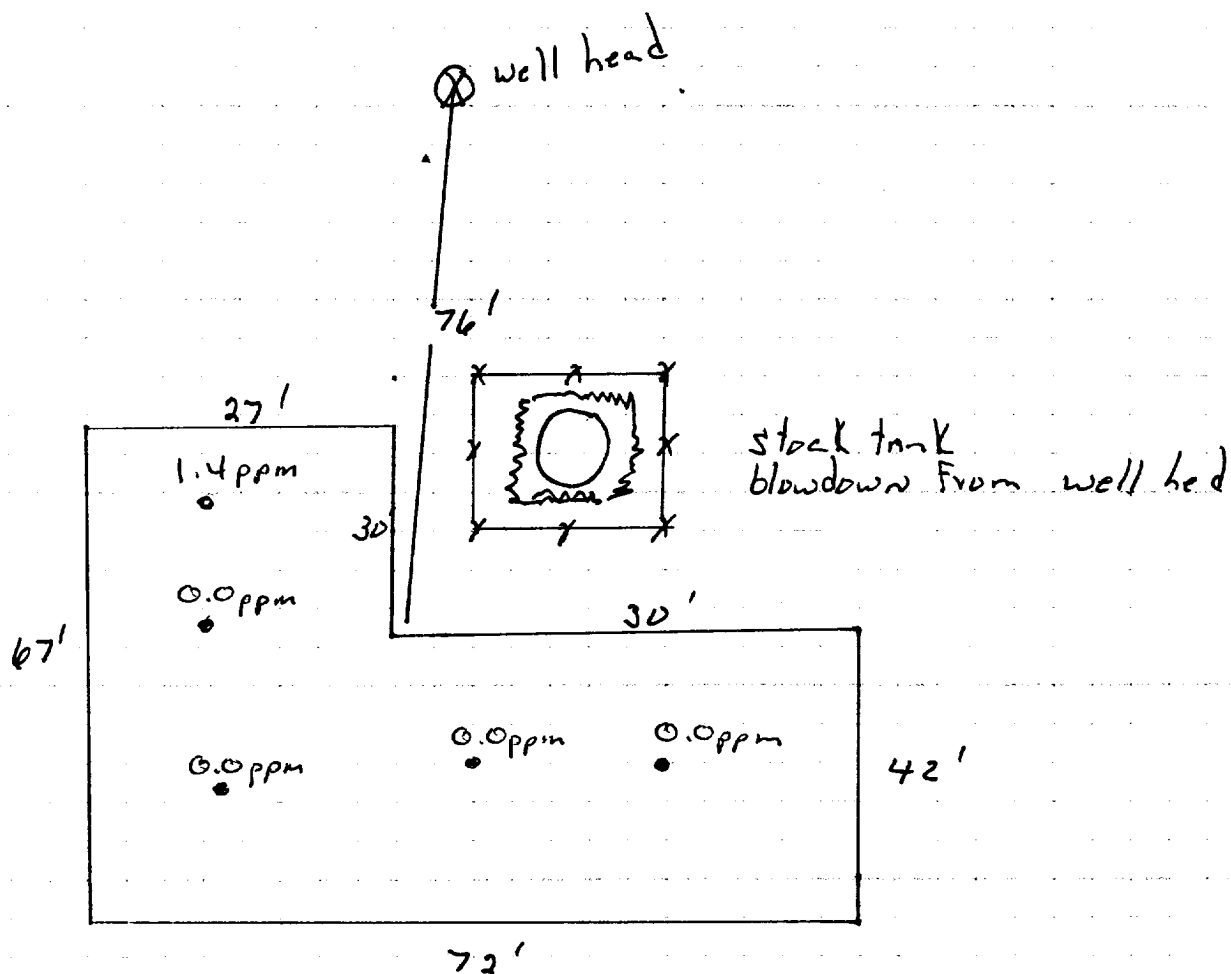


Ax: Apache J #13  
Continental Oil Co.  
Sec. 7, 25N, 5W, L

7/16/98

Land Farmed: on location

↑  
N



OFF: (505) 325-5667



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-13 LF
<b>Work Order:</b>	9808036	<b>Client Sample ID:</b>	9808171027; 5pt. Comp.
<b>Lab ID:</b>	9808036-15A	<b>Matrix:</b>	SOIL
<b>Project:</b>	PNM Pit Remediation	<b>Collection Date:</b>	8/17/98 10:27:00 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	8/21/98

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