

George S. Faust
DEPUTY OIL & GAS INSPECTOR

FEB 08 1993

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
E.P.*

PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (<u>Conoco</u>)		Telephone: <u>324-3764</u>	
Address: <u>603 W. Elm Street Farmington, NM 87401</u>			
Facility or Well Name: <u>Ax, Apache O-3</u>			
Location:	Unit: <u>M</u>	Sec. <u>9</u>	T. <u>25N</u> R. <u>4 W</u> County <u>Rio Arriba</u>
Pit Type:	Separator <u>X</u>	Dehydrator <u> </u>	Other <u> </u>
Land Type:	<u>Jicarilla Apache</u>		
Pit Location:		Pit dimensions: length <u>20'</u> width <u>20'</u> depth <u>3'</u>	
(Attach diagram)	Reference:	wellhead <u>X</u> other <u> </u>	
	Footage from reference:	<u>10' 50 RAD</u>	
	Direction from reference:	<u>10°</u> Degrees <u> </u> East <u> </u> North <u>X</u> <u>X</u> West <u> </u> South <u> </u>	
Depth to Ground Water:		Less than 50 feet (20 points)	
Vertical distance from contaminants to seasonal high water elevation of ground water)		50 feet to 99 feet (10 points)	
		Greater than 100 feet (0 points) <u>Ø</u>	
Wellhead Protection Area:		Yes (20 points)	
(Less than 200 feet from a private domestic water source, or less than 1,000 feet from all other water sources)		No (0 points) <u>Ø</u>	
Distance to Surface Water:		Less than 200 feet (20 points)	
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)		200 feet to 1,000 feet (10 points)	
		Greater than 1,000 feet (0 points) <u>Ø</u>	
Distance to Ephemeral Stream (dry wash):		Less than or equal to 100 feet (10 points)	
(Horizontal distance to all downgradient streams having a width of at least 10 feet)		Greater than 100 feet (0 points) <u>Ø</u>	
Distance to Nearest Lake, Playa, or Watering Pond:		Less than or equal to 100 feet (10 points)	
(Horizontal distance to all downgradient lakes, playas, and livestock or wildlife water ponds)		Greater than 100 feet (0 points) <u>Ø</u>	
RANKING SCORE (TOTAL POINTS):		<u>Ø</u>	

Date Remediation Started: 10/23/98Date Completed: 12/21/98Remediation Method: Excavation XApprox. Cubic Yards 51

(Check all appropriate sections)

Landfarmed XAmount Landfarmed (cubic yds): 51

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 headspace reading. Pit bottom is sandstone.3 pt composite of bottomFinal excavation: 21' X 22' X 3'.

Ground Water Encountered:

No X

Yes _____

Depth _____

Final Pit Closure Sampling:

Sample Location

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

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

Sample depth

3'

Sample date

10/23/98

Sample time

0745/0746

Sample Results

Soil: Benzene (ppm)

N/D

Water: Benzene (ppb) _____

Total BTEX (ppm)

57.6

Toluene (ppb) _____

Field headspace (ppm)

1681

Ethylbenzene (ppb) _____

TPH

760

ppm

Method

EG/5

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

11/2/98

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):

R.A. Attached

SIGNED:

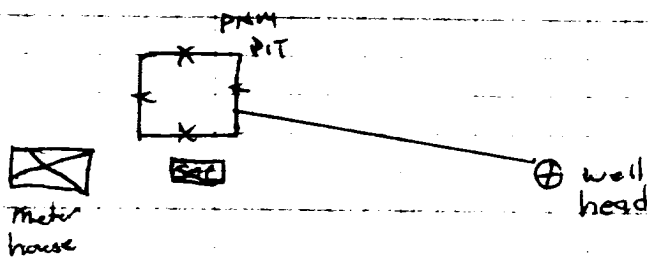
K. C. Mando

DATE:

12-15-98

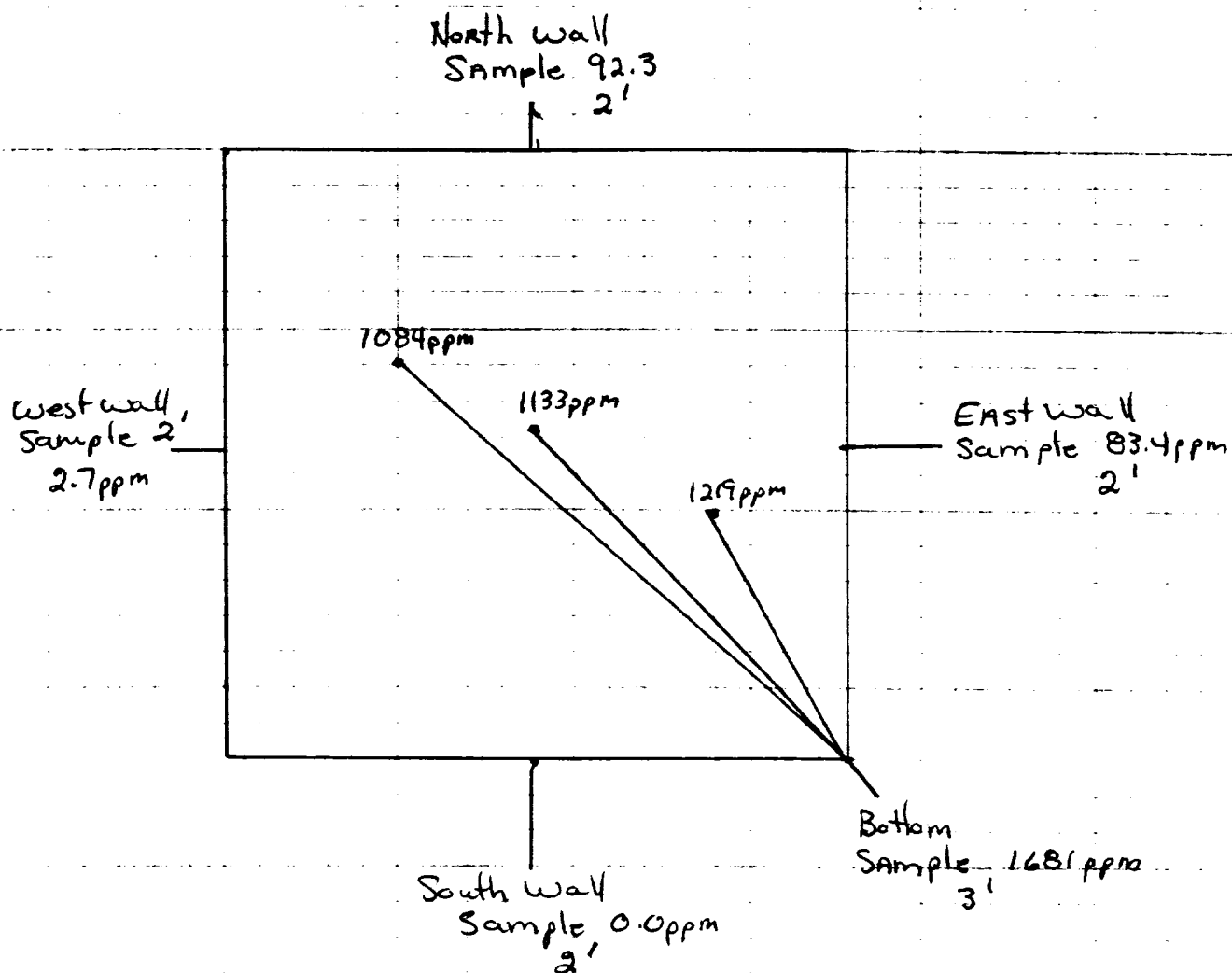
Axi Apache 03
Sec-9 T-25N R-4W 4C-m
Conoco

Site Drawing



At Apache 0-3
Sec-9 T-25N R-4W 46-m
Conoco

EXCAVATION Drawing



OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 10-Nov-98

CLIENT: PNM - Public Service Company of NM

Project: PNM Pit Remediation

Lab Order: 9810070

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: 10-Nov-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Axi Apache O-3
Work Order:	9810070	Client Sample ID:	9810230746; 3pt. Comp. Bottom
Lab ID:	9810070-02A	Matrix:	SOIL
Project:	PNM Pit Remediation	Collection Date:	10/23/98 7:46:00 AM
		COC Record:	7358

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	760	25		mg/Kg	1	11/2/98
3TEX		SW8020A				Analyst: DC
Benzene	ND	500		µg/Kg	500	10/28/98
Toluene	5800	1000		µg/Kg	500	10/28/98
Ethylbenzene	4900	500		µg/Kg	500	10/28/98
m,p-Xylene	38000	1000		µg/Kg	500	10/28/98
o-Xylene	8900	500		µg/Kg	500	10/28/98

57600
57.600ppm

Qualifiers:	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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Technology. Blending Industry with the Environment.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 10-Nov-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Axi Apache O-3
Work Order:	9810070	Client Sample ID:	9810230745; 4pt. Comp. Walls
Lab ID:	9810070-01A	Matrix:	SOIL
Project:	PNM Pit Remediation	Collection Date:	10/23/98 7:45:00 AM
		COC Record:	7358

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	11/2/98

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

Well Name:	Axi Apache O #3
Well Legals:	Unit M, Sec 9, T25N, R4W
Pit Type:	Separator
Horizontal Distance to Surface Water:	Greater than 1,000 feet
Groundwater Depth:	Greater than 100 feet

RISK ANALYSIS

PNM requests closure of their former pit on the Jicarilla O #3 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 330 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Lapis Point, 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 51 cubic yards of soil from the former pit. Subsurface lateral contamination has been remediated (see attached analytical results). Source removal minimizes the possibility of surface water contamination.
4. Sandstone was encountered at 3 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 O #3 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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ENVIRONMENTAL
PROTECTION OFFICE
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DULCE, NEW MEXICO 87528

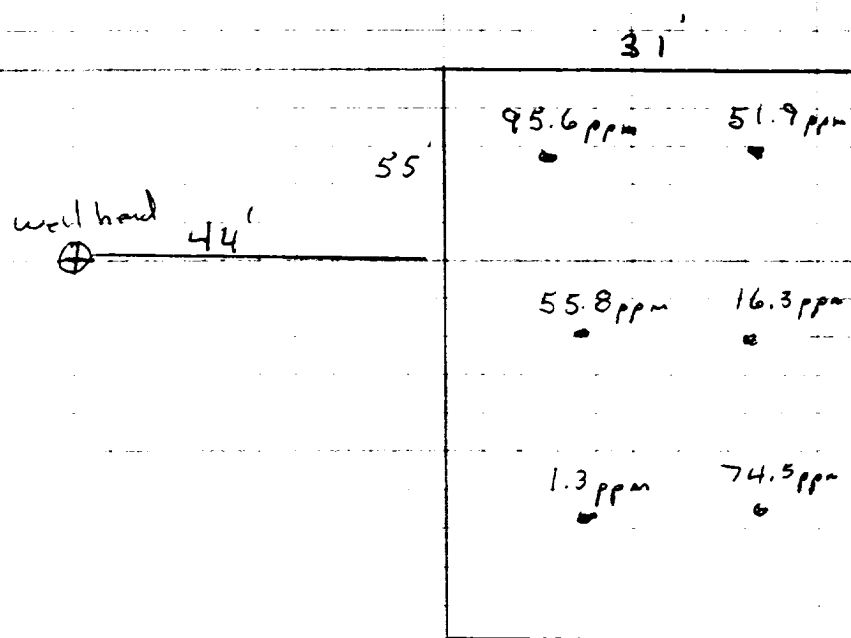
SUBMIT 1 COPY TO
NATURAL
RESOURCE DEPT
AND OIL GAS
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: <u>PNM Gas Services (Conoco)</u> Telephone: <u>324-3764</u>	
Address: <u>603 W. Elm Street Farmington, NM 87401</u>	
Facility or Well Name: <u>Axi Apache 03</u>	
Location:	Unit: <u>M</u> Sec. <u>9</u> T. <u>25 N</u> R. <u>4 W</u> County <u>Rio Arriba</u>
Land Type: <u>Jicarilla Apache</u>	
Date Remediation Started: <u>10/23/98</u> Date Completed: <u>12/11/98</u>	
Remediation Method: Landfarmed <input checked="" type="checkbox"/> Approx. cubic yards <u>51</u> Composted <input type="checkbox"/> Other <input type="checkbox"/>	
Depth to Ground Water: (pts.) <u>0</u>	Final Closure Sampling: Sampling Date: <u>12/9/98</u> Time <u>1010</u> Sampling Results: Field Headspace (ppm) <u>95.6</u> TPH (ppm) <u>39</u> Method <u>8015</u> Other _____
Distance to an Ephemeral Stream: (pts.) <u>0</u>	
Distance to Nearest Lake, Playa, or Watering Pond: (pts.) <u>0</u>	
Wellhead Protection Area: (pts.) <u>0</u>	
Distance to Surface Water: (pts.) <u>0</u>	
Ranking Score (Total Points): <u>0</u>	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
DATE <u>12-17-98</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 <input checked="" type="checkbox"/> NO <input type="checkbox"/> (REASON) <u>used as Backfill</u>	
SIGNED: <u>Kurt C. Marshall</u> DATE: <u>12-21-98</u>	

At: Apache 0-3
Sec-9 T-25N R-4W ULM
Conoco

LAND FARM Drawing



Not to Scale

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 15-Dec-98

CLIENT: PNM - Public Service Company of NM

Project: Jicarilla Pit Remediation

Lab Order: 9812017

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: 15-Dec-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Ax1 Apache O-3 LF
Work Order:	9812017	Client Sample ID:	9812091010 6pt Composite
Lab ID:	9812017-05A	Matrix:	SOIL
Project:	Jicarilla Pit Remediation	Collection Date:	12/9/98 10:10:00 AM
		COC Record:	7449

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	39	25		mg/Kg	1	12/11/98

Qualifiers:

PQL - Practical Quantitation Limit

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