

District I  
P.O. Box 1980, Hobbs, NM

District II  
P.O. Drawer DD, Artesia, NM 88221

District III  
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco Street  
Santa Fe, New Mexico 87505

*Ask  
behind*

SUBMIT 1 COPY TO  
APPROPRIATE  
DISTRICT OFFICE  
AND 1 COPY TO  
SANTA FE OFFICE

**PIT REMEDIATION AND CLOSURE REPORT**

<b>Operator:</b> <u>PNM Gas Services ( Amoco )</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>Pritchard #4A</u>	
<b>Location:</b>	Unit <u>F</u> Sec <u>31</u> T <u>29 N</u> R <u>8 W</u> County <u>San Juan</u>
<b>Pit Type:</b>	Separator <input type="checkbox"/> Dehydrator <input checked="" type="checkbox"/> Other <u>                    </u>
<b>Land Type:</b>	BLM <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Other <u>                    </u>
<b>Pit Location:</b> Pit dimensions: length <u>18</u> ' width <u>18</u> ' depth <u>3</u> ' (Attach diagram) Reference: wellhead <input checked="" type="checkbox"/> other <u>                    </u> Footage from reference: <u>125</u> ' Direction from reference: <u>22</u> Degrees <input type="checkbox"/> East North <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> West of South <input type="checkbox"/>	
<b>Depth to Ground Water:</b> (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) <u>0</u>	
<b>Wellhead Protection Area:</b> (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) <u>0</u>	
<b>Distance to Surface Water:</b> (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) <u>0</u>	
<b>RANKING SCORE (TOTAL POINTS):</b> <u>0</u>	

Pritchard #4A

Date Remediation Started: 06/30/1999

Date Completed: 06/30/1999

Remediation Method: Excavation ☒

Approx. Cubic Yard 44

(Check all appropriate sections)

Landfarmed ☒

Amount Landfarmed (cubic yds) 44

Other \_\_\_\_\_

Remediation Location:

Onsite ☒

Offsite \_\_\_\_\_

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

Backfill Material Location: \_\_\_\_\_

## General Description of Remedial Action:

Excavated contaminated soil to a pit size of 16.5' X 14.5' X 5' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil was aerated by disking/plowing until soil met regulatory levels.

\*\*\* Sandstone encountered at 5'. See attached risk analysis form.

Ground Water Encountered:

No ☒Yes ☐

Depth \_\_\_\_\_

## Final Pit Closure Sampling:

Sample Location 5 pt. composite - bottom.

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

Sample depth 5'

Sample date 06/30/1999

Sample time 11:10:00 AM

## Sample Results

Benzene (ppm) 3.6

Total BTEX (ppm) 130.4 \*\*\*

Field headspace (ppm) \_\_\_\_\_

TPH (ppm) 560.00

Method 8015B

Vertical Extent (ft) \_\_\_\_\_

Risk Analysis form attached Yes ☒ No ☐

Ground Water Sample:


Yes ☐No ☒

(If yes, see attached Groundwater Site Summary Report)

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

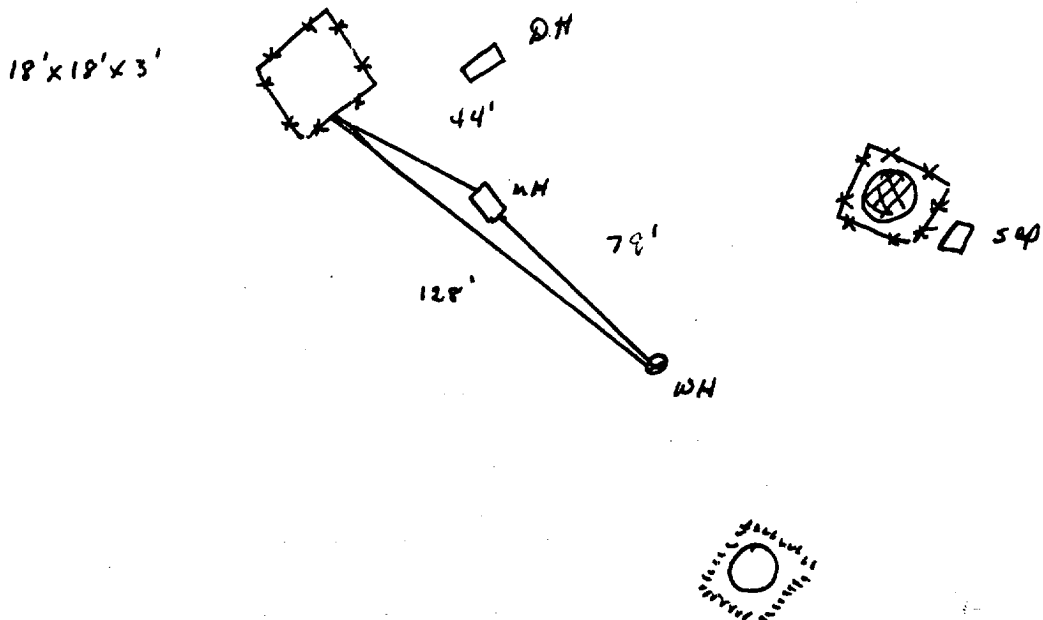
DATE January 24, 2000

SIGNATURE



PRINTED NAME Maureen Gannon  
AND TITLE Project Manager

PM10000 4M  
 (F) 31-29N-8W  
 AMOCO  
 6-30-94 @ 1033



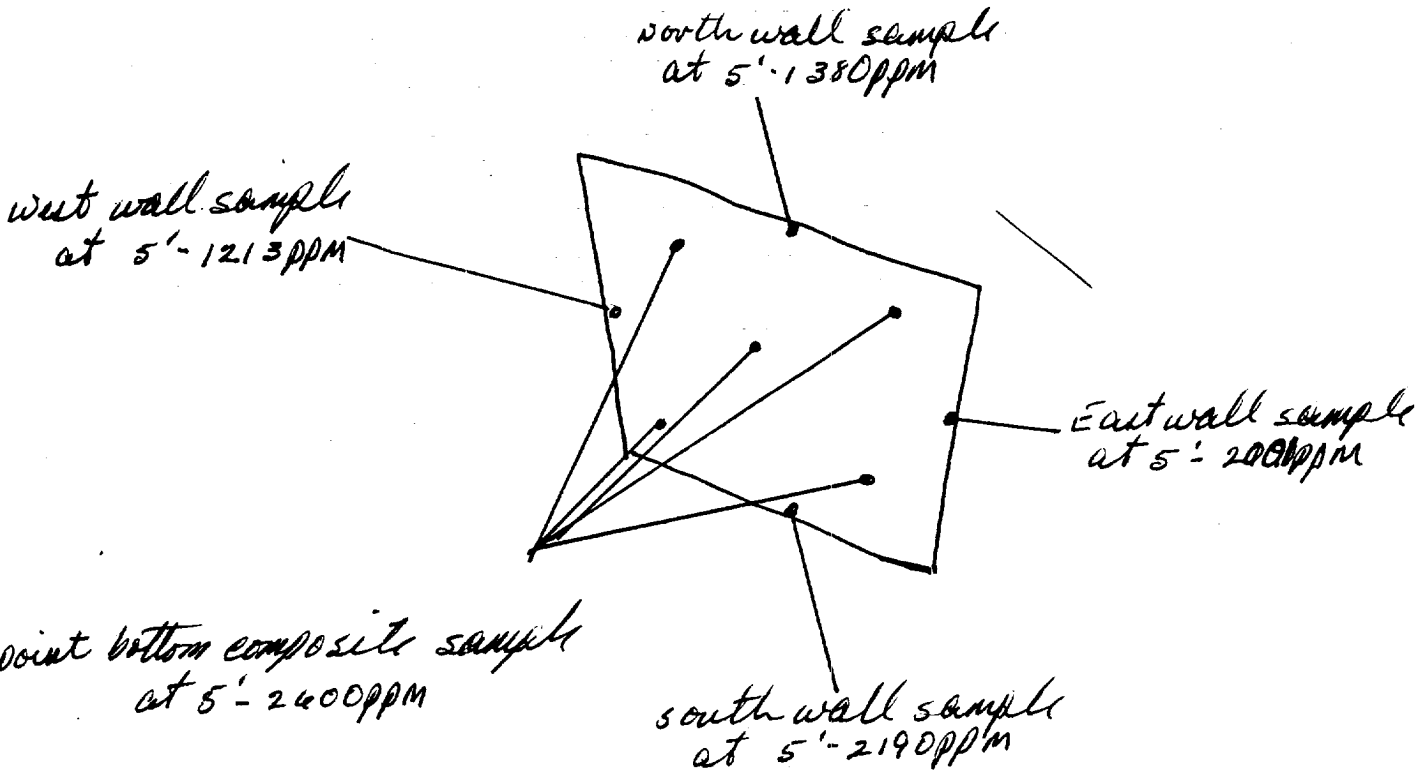
# Excavation Sampling

PID readings

3' - 2789 ppm

5' - 2539 ppm

14.5'(N+S) x 14.5'(E+W) x 5'(D)



not to scale

OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 15-Jul-99

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**CLIENT:** PNM - Public Service Company of NM  
**Project:** PNM Pit Remediation  
**Lab Order:** 9907001

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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.

'Kay

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 15-Jul-99

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Pritchard 4A
<b>Work Order:</b>	9907001	<b>Client Sample ID:</b>	9906301110; 5pt. Bottom Comp
<b>Lab ID:</b>	9907001-03A	<b>Matrix:</b>	SOIL
<b>Project:</b>	PNM Pit Remediation	<b>Collection Date:</b>	6/30/99 11:10:00 AM
		<b>COC Record:</b>	7642

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015B</b>				Analyst: DC
T/R Hydrocarbons: C10-C28	560	25		mg/Kg	1	7/12/99
<b>AROMATIC VOLATILES BY GC/PID</b>		<b>SW8021B</b>				Analyst: DM
Benzene	3600	2500		µg/Kg	2500	7/1/99
Toluene	37000	5000		µg/Kg	2500	7/1/99
Ethylbenzene	6800	2500		µg/Kg	2500	7/1/99
m,p-Xylene	67000	5000		µg/Kg	2500	7/1/99
o-Xylene	16000	2500		µg/Kg	2500	7/1/99

130400  
130.40 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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OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 15-Jul-99

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Pritchard 4A
<b>Work Order:</b>	9907001	<b>Client Sample ID:</b>	9906301115; 4pt. Wall Comp
<b>Lab ID:</b>	9907001-04A	<b>Matrix:</b>	SOIL
<b>Project:</b>	PNM Pit Remediation	<b>Collection Date:</b>	6/30/99 11:15:00 AM
		<b>COC Record:</b>	7642

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015B</b>				Analyst: DC
T/R Hydrocarbons: C10-C28	340	25		mg/Kg	1	7/12/99
<b>AROMATIC VOLATILES BY GC/PID</b>		<b>SW8021B</b>				Analyst: DM
Benzene	350	250		µg/Kg	250	7/1/99
Toluene	5300	500		µg/Kg	250	7/1/99
Ethylbenzene	2300	250		µg/Kg	250	7/1/99
m,p-Xylene	30000	500		µg/Kg	250	7/1/99
o-Xylene	7200	250		µg/Kg	250	7/1/99

45150  
45.15 ppm

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R - RPD outside accepted recovery limits  
E - Value above quantitation range  
Surr: - Surrogate

1 of 1

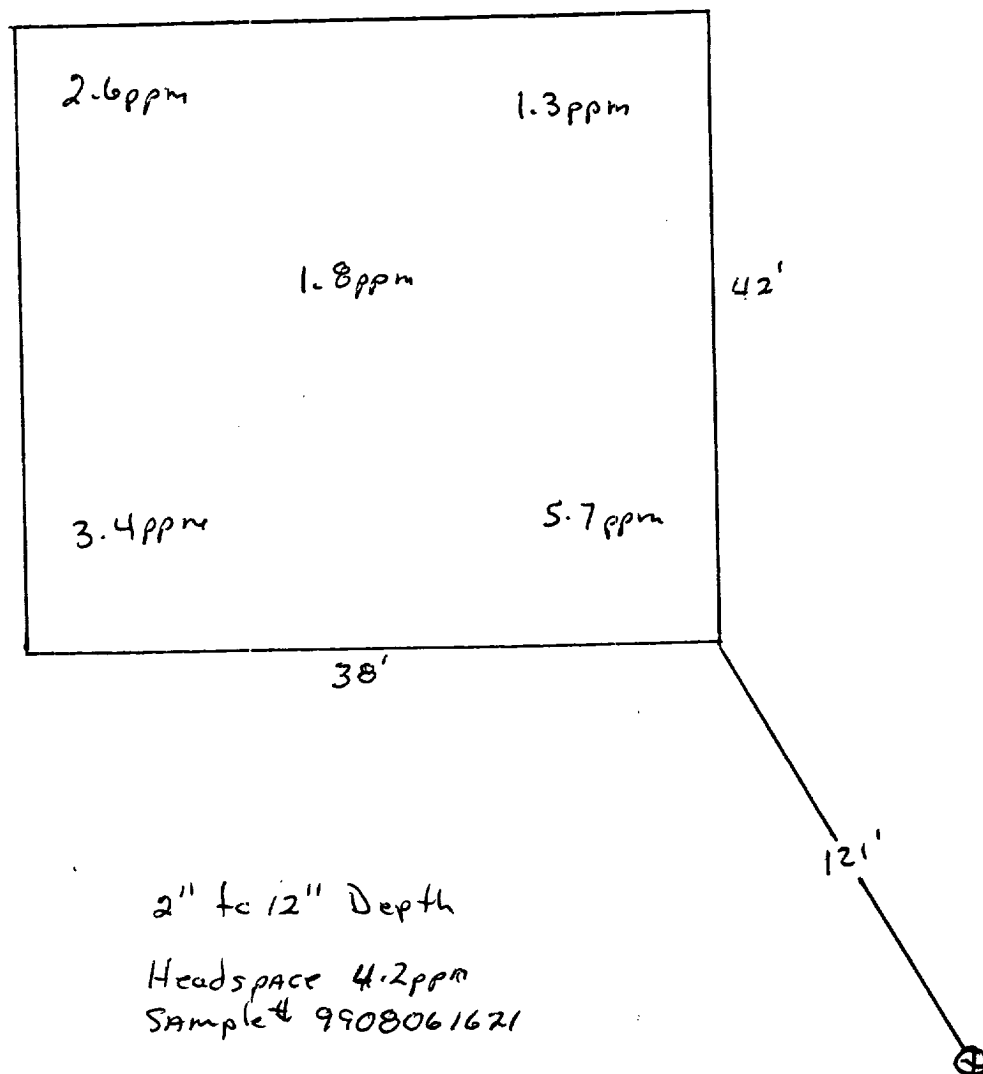
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- TREATING THE REMEDIATION INDUSTRY WITH THE ENVIRONMENT -

Pritchard 4H  
Sec 31 T29N R8W UL F  
Amoco

# Landfarm Drawing

App 44.30 cu. yds



OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 11-Aug-99

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**CLIENT:** PNM - Public Service Company of NM  
**Project:** Pritchard 4A Landfarm  
**Lab Order:** 9908019

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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: 11-Aug-99

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Pritchard 4A LF
<b>Work Order:</b>	9908019	<b>Client Sample ID:</b>	9908061621; 5pt. Composite
<b>Lab ID:</b>	9908019-01A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Pritchard 4A Landfarm	<b>Collection Date:</b>	08/06/1999 4:21:00 PM
		<b>COC Record:</b>	7804

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015B</b>				Analyst: DC
T/R Hydrocarbons: C10-C28	28	25		mg/Kg	1	08/10/1999

**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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ANALYSIS OF PITCHARD 4A LANDFARM - SOIL SAMPLES



## Environmental Services

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Well Name:	Pritchard #4A
Well Legals:	Sec 31, T29N, R8W, Unit F
Pit Type:	Dehydrator
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 Pritchard #4A well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 361 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Cutter Canyon, NM series 7.5 minute topographic map.)
2. PNM excavated 44 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.
3. Sandstone was encountered at 5 feet below ground surface. Bedrock/sandstone provides a barrier between remaining contamination and groundwater. Vertical migration through bedrock or sandstone to groundwater is unlikely.
4. PNM excavated and performed remediation to the maximum depth and horizontal extent practicable.

PNM believes that their former pit on the Pritchard #4A well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 1,000 pits.