

District I
P.O. Box

Denny G. Fort
DEPUTY OIL & GAS INSPECTOR

State of New Mexico
Energy, Minerals and Natural Resources Department

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

District II

P.O. Drawer DD, Artesia, NM 87021
FEB 10 8 1999

OIL CONSERVATION DIVISION

District III

1000 Rio Brazos Rd, Aztec, NM 87410

2040 South Pacheco Street
Santa Fe, New Mexico 87505

PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (Burlington)		Telephone: 324-3764	
Address: 603 W. Elm Street Farmington, NM 87401			
Facility or Well Name: AD Hudson #4			
Location:	Unit <u>J</u>	Sec <u>29</u>	T <u>27 N</u> R <u>9 W</u> County <u>San Juan</u>
Pit Type:	Separator <input checked="" type="checkbox"/>	Dehydrator <input type="checkbox"/>	Other _____
Land Type:	BLM <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Fee <input type="checkbox"/> Other <u>No</u>
Pit Location:	Pit dimensions: length <u>20</u> width <u>20</u> depth <u>3</u>		
(Attach diagram)	Reference: wellhead <input checked="" type="checkbox"/> other _____		
	Footage from reference: <u>105'</u>		
	Direction from reference: <u>45</u> Degrees <input checked="" type="checkbox"/> East <input checked="" type="checkbox"/> North <input type="checkbox"/> West <input type="checkbox"/> 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)	<u>0</u>
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)	<u>0</u>
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)	<u>0</u>
RANKING SCORE (TOTAL POINTS) :			<u>0</u>

Date Remediation Started: 6/30/98 Date Completed: 6/30/98Remediation Method: Excavation X Approx. Cubic Yard 98

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds) 98

Other _____

Remediation Location: Onsite X 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 18' X 21' X 7' 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 7'. See attached risk analysis.Ground Water Encountered: No ☒ Yes ☐ Depth _____

Final Pit Closure Sampling:

Sample Location Bottom of excavation.

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

Sample depth 7'Sample date 6/30/98 Sample time 2:50:00 PM

Sample Results

Benzene (ppm) 0.3500Total BTEX (ppm) 89.2500 ***

Field headspace (ppm) _____

TPH (ppm) 190.00 Method 8015AVertical Extent (ft) _____ Risk Analysis form attached Yes ☒ No ☐Ground Water Sample: Yes ☐ No ☒ (If yes, see attached Groundwater Site Summary Report)

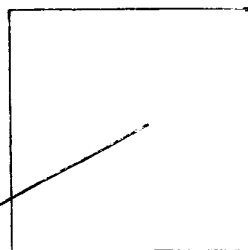
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

DATE January 26, 1999SIGNATURE Maureen GannonPRINTED NAME Maureen Gannon
AND TITLE Project Manager

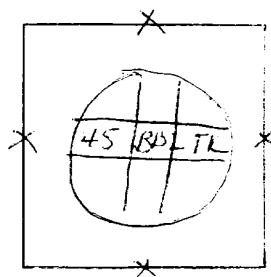
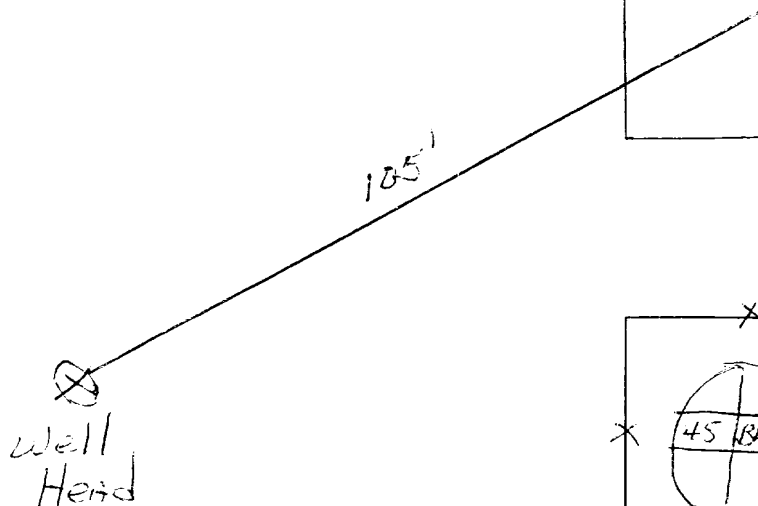
AD Hudson #4
S29 T27N R9W Unit J
BR06

Site Map

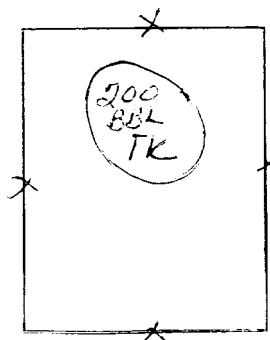
Meter
House



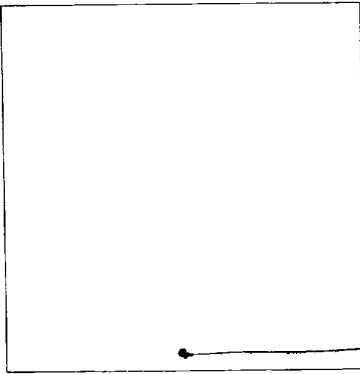
well
pit



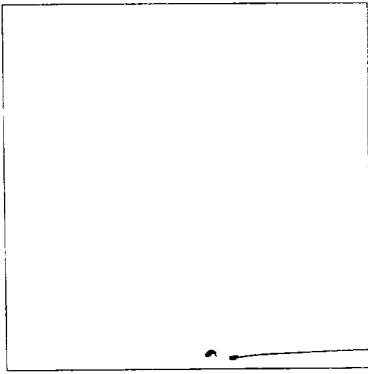
Sep



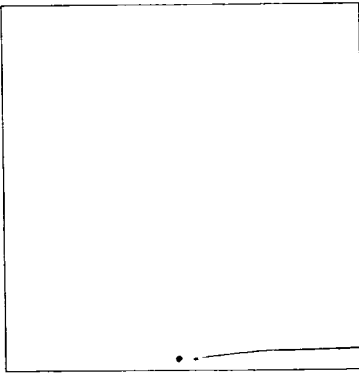
North Wall



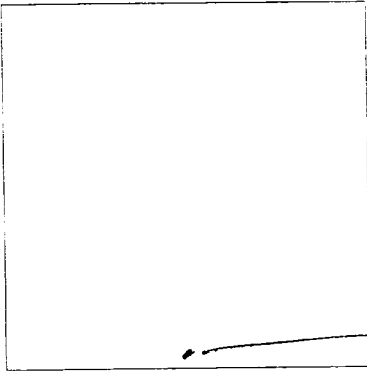
South Wall



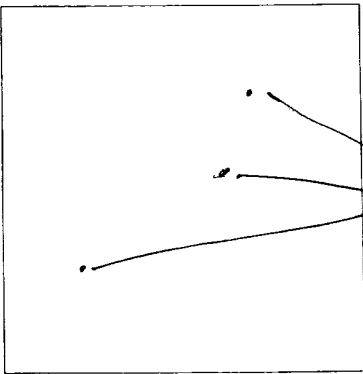
East Wall



West Wall



Bottom



OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 07-Jul-98

CLIENT: PNM - Public Service Company of NM

Project: AD Hudson #4

Lab Order: 9806117

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: 08-Jul-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	AD Hudson #4
Work Order:	9806117	Client Sample ID:	9806301450; Bottom
Lab ID:	9806117-01A	Matrix:	SOIL
Project:	AD Hudson #4	Collection Date:	6/30/98 2:50:00 PM
		COC Record:	5244

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	190	25		mg/Kg	1	7/3/98
BTEX		SW8020A				Analyst: HR
Benzene	350	250		µg/Kg	250	7/2/98
Toluene	20000	500		µg/Kg	250	7/2/98
Ethylbenzene	3900	250		µg/Kg	250	7/2/98
m,p-Xylene	54000	500		µg/Kg	250	7/2/98
o-Xylene	11000	250		µg/Kg	250	7/2/98
	<u>89250</u>					

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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 07-Jul-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	AD Hudson #4
Work Order:	9806117	Client Sample ID:	9806301500; Walls
Lab ID:	9806117-02A	Matrix:	SOIL
Project:	AD Hudson #4	Collection Date:	6/30/98 3:00:00 PM
		COC Record:	5244

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS						
		SW8015				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/7/98
BTEX						
		SW8020A				Analyst: HR
Benzene	ND	1		µg/Kg	1	7/1/98
Toluene	3.8	2		µg/Kg	1	7/1/98
Ethylbenzene	1.2	1		µg/Kg	1	7/1/98
m,p-Xylene	17	2		µg/Kg	1	7/1/98
o-Xylene	5.3	1		µg/Kg	1	7/1/98

.027₄₃

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

Surrogate - Surrogate

1 of 1

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- TECHNOLOGY BLENDED WITH THE ENVIRONMENT -



Environmental Services

Well Name:	AD Hudson #4
Well Legals:	Unit J, Sec 29, T27N, R9W
Pit Type:	Drip Blowdown
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 AD Hudson #4 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 143 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Huerfano Peak, 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 98 cubic yards of soil from the former pit. Subsurface lateral contamination has been remediated. 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 AD Hudson #4 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.

A.D. Hudson #4
BR
Sec 29, 27N, 9W

7/20/98

Land Farm: On location

3.1 0	2.8 0	4.1 0
.90 .	.40 .	1.3 .

⊗

98 yards

2"-12" depth

soil vapor head space = 16.7 ppm

980720 1600

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 28-Jul-98

CLIENT: PNM - Public Service Company of NM

Project: PNM Pit Remediation

Lab Order: 9807058

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

Client:	PNM - Public Service Company of NM	Client Sample Info:	A.D. Hudson #4 LF
Work Order:	9807058	Client Sample ID:	9807201600; 6pt. Comp.
Lab ID:	9807058-15A	Matrix:	SOIL
Project:	PNM Pit Remediation	Collection Date:	7/20/98 4:00:00 PM
		COC Record:	7389

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/24/98

- 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