

District I
P.O. Box 1980, Hobbs, NM 88240

District II
P.O. Drawer 100, Hobbs, NM 88240

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

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

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NOV 12 1998

OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Approved

Operator: PNM Gas Services (Cross Timbers) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Canyon #11

Location: Unit G Sec 11 T 25 N R 11 W County San Juan

Pit Type: Separator ☐ Dehydrator ☐ Other Manual drip blowdown

Land Type: BLM ☐ State ☐ Fee ☐ Other Navajo

Pit Location: Pit dimensions: length 20 width 20 depth 4

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 90'

Direction from reference: 30 Degrees ☒ East North ☐
of ☐ West South ☒

Depth to Ground Water: Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 points) 10

(Vertical distance from contaminants to
seasonal high water elevation of ground
water)

Wellhead Protection Area: Yes (20 points)
No (0 points) 0

(Less than 200 feet from a private
domestic water source, or; less than 1,000
feet from all other water sources)

Distance to Surface Water: Less than 200 feet (20 points)
200 feet to 1,000 feet (10 points)
Greater than 1,000 feet (0 points) 20

(Horizontal distance to perennial lakes,
ponds, rivers, streams, creeks, irrigation
canals and ditches)

RANKING SCORE (TOTAL POINTS): 30

Canyon #11

Date Remediation Started: 9/15/98

Date Completed: 9/15/98

Remediation Method: Excavation ☒

Approx. Cubic Yard 398

(Check all appropriate sections)

Landfarmed ☒

Amount Landfarmed (cubic yds) 368

Other 30 yds. clean overburden.

Remediation Location:

Onsite ☒Offsite ☐

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

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Backfill Material Location:

General Description of Remedial Action:

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DIST. 3

Excavated contaminated soil to a pit size of 32' X 21' X 16' and landfarmed soil onsite within a disturbed area at a depth of 6" to 12". Soil was aerated by disking/plowing until soil met regulatory levels.

***Sandstone encountered at 16'. See attached risk analysis and lab analysis form.

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

16'

Sample date

6/16/98

Sample time

9:10:00 AM

Sample Results

Benzene (ppm)

2.2000

Total BTEX (ppm)

252.2000 ***

Field headspace (ppm)

TPH (ppm)

280.00

Method

8015A

Vertical Extent (ft)

Risk Analysis form attached Yes ☒No ☐

Ground Water Sample:

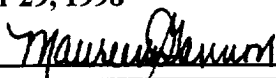
Yes ☐No ☒

(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 October 29, 1998

SIGNATURE

PRINTED NAME Maureen Gannon
AND TITLE Project Manager



Environmental Services

Well Name:	Canyon #11
Well Legals:	Unit G, Sec 11, T25N, R11W
Pit Type:	Manual Drip Blowdown
Horizontal Distance to Surface Water:	Less than 200 feet
Groundwater Depth:	50 feet to 99 feet

RISK ANALYSIS

PNM requests closure of their former pit on the Canyon #11 well site using a limited risk analysis based on the following conditions:

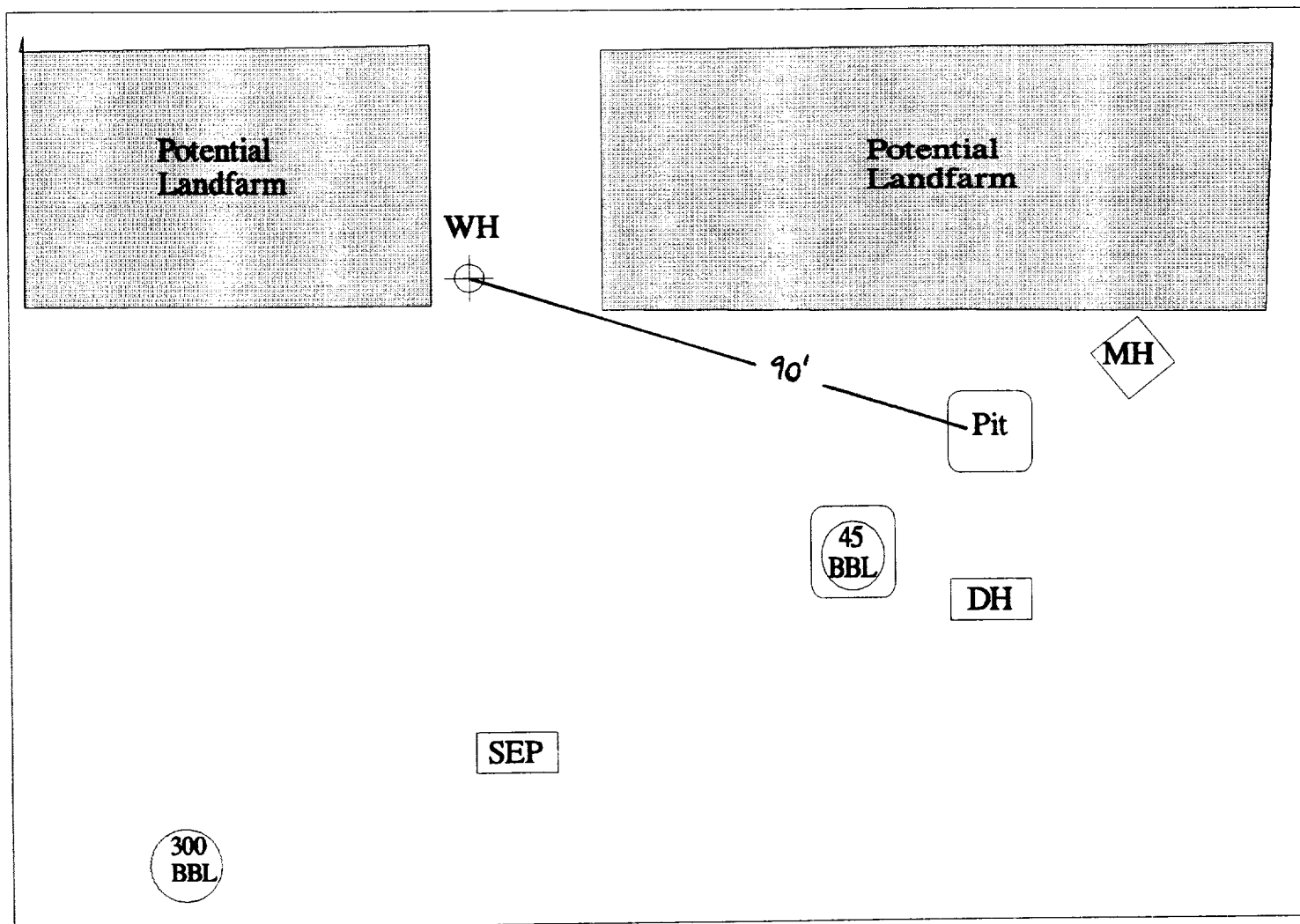
1. Groundwater is estimated to be at a depth of 81 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" river. (Reference: Huerfano Trading Post NW, NM topographic map.)
2. PNM excavated 398 cubic yards of soil from the former pit. Subsurface lateral contamination has been remediated (see attached analytical results). Source removal minimizes the possibility of surface water contamination.
3. Sandstone rock was encountered at 16 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 their former pit on the Canyon #11 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.

Canyon #11
Cross Timbers Oper. Co.
Lease # NM-8405
G (K)-11-25N-11W
San Juan County



300' X 180'



OFF: (505) 325-5667

ON SITE

LAB: (505) 325-1556

TECHNOLOGIES, LTD.

On Site Technologies, LTD.

Date: 24-Jun-98

CLIENT: PNM - Public Service Company of NM

Project: Canyon #11

Lab Order: 9806067

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

ON SITE

TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 24-Jun-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Canyon #11
Work Order:	9806067	Client Sample ID:	9806160910; Bottom
Lab ID:	9806067-01A	Matrix:	SOIL
Project:	Canyon #11	Collection Date:	6/16/98 9:10:00 AM
		COC Record:	5237

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C10-C28	280	25		mg/Kg	1	6/24/98
BTEX		SW8020A				Analyst: DC
Benzene	2200	1000		µg/Kg	1000	6/18/98
Toluene	56000	2000		µg/Kg	1000	6/18/98
Ethylbenzene	15000	1000		µg/Kg	1000	6/18/98
m,p-Xylene	140000	2000		µg/Kg	1000	6/18/98
o-Xylene	39000	1000		µg/Kg	1000	6/18/98

252200
252.200 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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 24-Jun-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Canyon #11
Work Order:	9806067	Client Sample ID:	9806161040; Walls
Lab ID:	9806067-02A	Matrix:	SOIL
Project:	Canyon #11	Collection Date:	6/16/98 10:40:00 AM
		COC Record:	5237

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C10-C28	39	25		mg/Kg	1	6/24/98
BTEX		SW8020A				Analyst: HR
Benzene	ND	1		µg/Kg	1	6/19/98
Toluene	ND	2		µg/Kg	1	6/19/98
Ethylbenzene	ND	1		µg/Kg	1	6/19/98
m,p-Xylene	7.8	2		µg/Kg	1	6/19/98
o-Xylene	4	1		µg/Kg	1	6/19/98
	11.2					

Qualifiers:

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1 of 1

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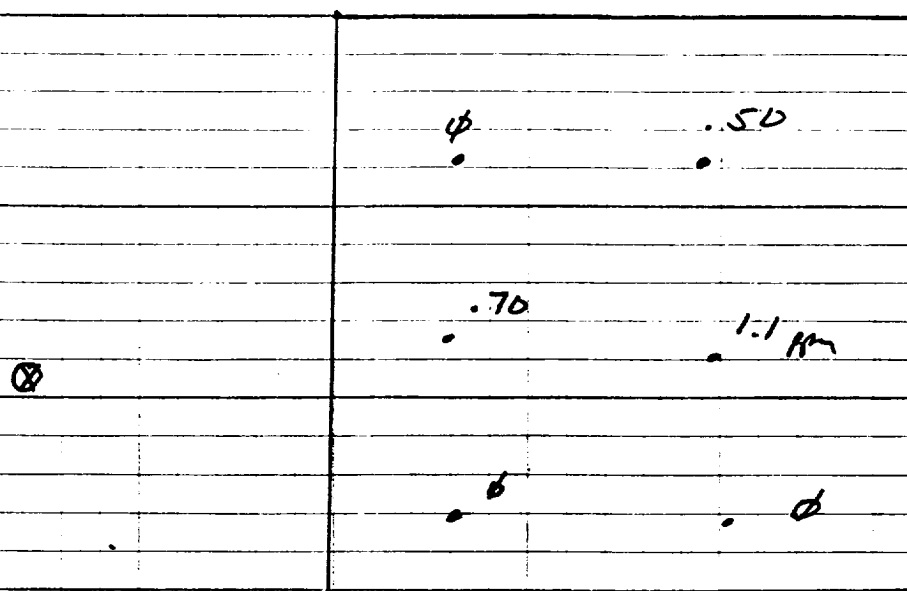
Canyon #11

7/26/98

Cross Timbers

Sec. 11, 25N, 11W, R

Land Farm: On location



400 yards

2"-12" depth

soil vapor head space = 18.4 ppm

9807200730

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:	Canyon #11 LF
Work Order:	9807058	Client Sample ID:	9807200730; 6pt. Comp.
Lab ID:	9807058-01A	Matrix:	SOIL
Project:	PNM Pit Remediation	Collection Date:	7/20/98 9:30:00 AM
		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	7/23/98

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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