

District I  
P.O. Box 1988, Hobbs, NM

District II  
P.O. Drawer 100, 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

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

RECEIVED  
JUL 30 1999

OIL CON. DIV.  
DIST. 3

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: Culpepper Martin #5 GC

Location: Unit M Sec 22 T 32 N R 12 W County San Juan

Pit Type: Separator ☐ Dehydrator ☒ Other

Land Type: BLM ☐ State ☐ Fee ☒ Other

Pit Location: Pit dimensions: length 20' width 20' depth 3'

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 68'

Direction from reference: 80 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) 0

(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) 0

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

RANKING SCORE (TOTAL POINTS): 0

Culpepper Martin #5 GC

Date Remediation Started: 05/04/1999

Date Completed: 05/04/1999

Remediation Method:

Excavation ☒

Approx. Cubic Yard 254

(Check all appropriate sections)

Landfarmed ☒

Amount Landfarmed (cubic yds) 194

Other 60 cu yds overburden

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 pit size of 25' X 25' X 11' 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 11'. See attached risk analysis form and lab analysis.

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 11'

Sample date 05/04/1999

Sample time 8:15:00 AM

Sample Results

Benzene (ppm) 2.600

Total BTEX (ppm) 66.300 \*\*\*

Field headspace (ppm)

TPH (ppm) 610.00

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 July 27, 1999

SIGNATURE

*Maureen Gannon*

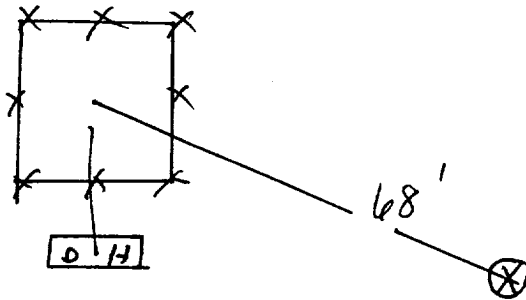
PRINTED NAME Maureen Gannon  
AND TITLE Project Manager

Culpepper Martin #5  
BR  
Sec. 31, 32N, 12W, C

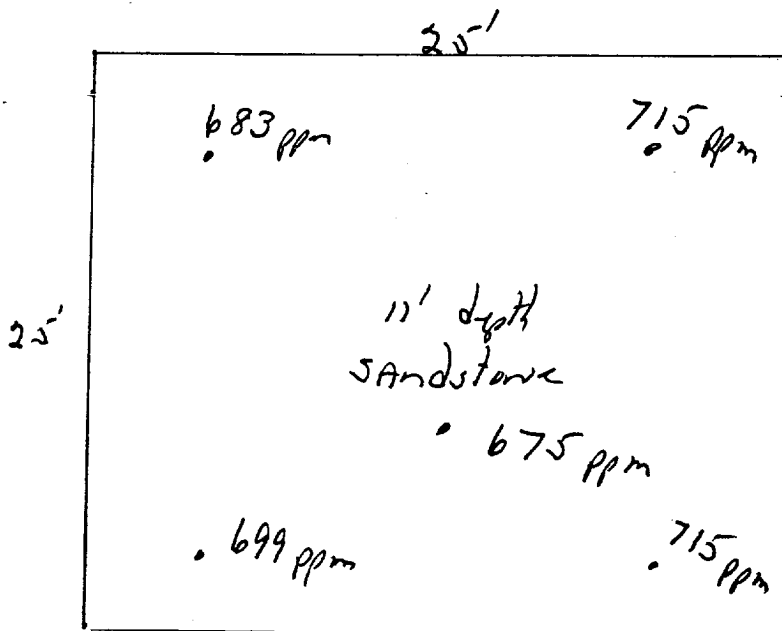
5/3/97

↑  
N

Site diagram:



End of excavation:



OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 14-May-99

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**CLIENT:** PNM - Public Service Company of NM

**Project:** Culpepper Martin #5

**Lab Order:** 9905023

## **CASE NARRATIVE**

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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.

66

OFF: (505) 325-5667



LAB: (505) 325-1556

**ANALYTICAL REPORT**

Date: 14-May-99

|                    |                                    |                            |                           |
|--------------------|------------------------------------|----------------------------|---------------------------|
| <b>Client:</b>     | PNM - Public Service Company of NM | <b>Client Sample Info:</b> | Culpepper Martin #5       |
| <b>Work Order:</b> | 9905023                            | <b>Client Sample ID:</b>   | 9905040815; Bottom @ 11ft |
| <b>Lab ID:</b>     | 9905023-01A                        | <b>Matrix:</b>             | SOIL                      |
| <b>Project:</b>    | Culpepper Martin #5                | <b>Collection Date:</b>    | 5/4/99 8:15:00 AM         |
|                    |                                    | <b>COC Record:</b>         | 7587                      |

| Parameter                           | Result | PQL            | Qual | Units | DF   | Date Analyzed |
|-------------------------------------|--------|----------------|------|-------|------|---------------|
| <b>DIESEL RANGE ORGANICS</b>        |        | <b>SW8015B</b> |      |       |      | Analyst: DC   |
| T/R Hydrocarbons: C10-C28           | 610    | 25             |      | mg/Kg | 1    | 5/13/99       |
| <b>AROMATIC VOLATILES BY GC/PID</b> |        | <b>SW8021B</b> |      |       |      | Analyst: DC   |
| Benzene                             | 2600   | 1000           |      | µg/Kg | 1000 | 5/10/99       |
| Toluene                             | 22000  | 2000           |      | µg/Kg | 1000 | 5/10/99       |
| Ethylbenzene                        | 2700   | 1000           |      | µg/Kg | 1000 | 5/10/99       |
| m,p-Xylene                          | 32000  | 2000           |      | µg/Kg | 1000 | 5/10/99       |
| o-Xylene                            | 7000   | 1000           |      | µg/Kg | 1000 | 5/10/99       |

66300  
66.3 ppm

**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

1 of 1

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- TECHNOLOGIES, LTD. COMMITMENT TO THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 14-May-99

|                    |                                    |                            |                         |
|--------------------|------------------------------------|----------------------------|-------------------------|
| <b>Client:</b>     | PNM - Public Service Company of NM | <b>Client Sample Info:</b> | Culpepper Martin #5     |
| <b>Work Order:</b> | 9905023                            | <b>Client Sample ID:</b>   | 9905040820; Walls @ 6ft |
| <b>Lab ID:</b>     | 9905023-02A                        | <b>Matrix:</b>             | SOIL                    |
| <b>Project:</b>    | Culpepper Martin #5                | <b>Collection Date:</b>    | 5/4/99 8:20:00 AM       |
|                    |                                    | <b>COC Record:</b>         | 7587                    |

| Parameter                    | Result | PQL            | Qual | Units | DF | Date Analyzed      |
|------------------------------|--------|----------------|------|-------|----|--------------------|
| <b>DIESEL RANGE ORGANICS</b> |        | <b>SW8015B</b> |      |       |    | <b>Analyst: DC</b> |
| T/R Hydrocarbons: C10-C28    | ND     | 25             |      | mg/Kg | 1  | 5/10/99            |

**Qualifiers:**

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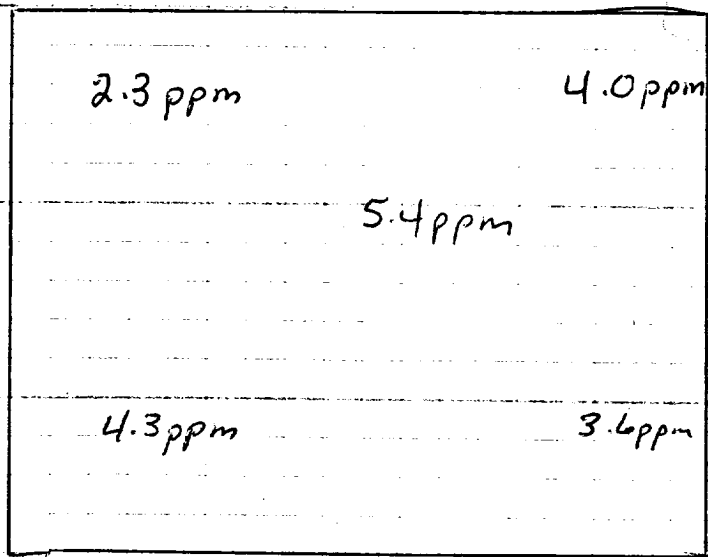
- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

1 of 1

Sec-22 T-32N R-12W ULM  
Burlington

# Land Farm Drawing

App 194 cu yds.



48'

60'

12'



2" to 12" Depth

Headspace Reading 7.9 ppm  
Sample # 9906240922

Not to Scale

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**On Site Technologies, LTD.**

**Date:** 07-Jul-99

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**CLIENT:** PNM - Public Service Company of NM  
**Project:** Culpepper Martin 5, 1A, 15A & 4A LF  
**Lab Order:** 9906073

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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: 07-Jul-99

|                    |                                     |                            |                       |
|--------------------|-------------------------------------|----------------------------|-----------------------|
| <b>Client:</b>     | PNM - Public Service Company of NM  | <b>Client Sample Info:</b> | Culpepper Martin 5 LF |
| <b>Work Order:</b> | 9906073                             | <b>Client Sample ID:</b>   | 9906240922; 5pt Comp  |
| <b>Lab ID:</b>     | 9906073-01A                         | <b>Matrix:</b>             | SOIL                  |
| <b>Project:</b>    | Culpepper Martin 5, 1A, 15A & 4A LF | <b>Collection Date:</b>    | 6/24/99 9:22:00 AM    |
|                    |                                     | <b>COC Record:</b>         | 7723                  |

| Parameter                    | Result | PQL            | Qual | Units | DF | Date Analyzed      |
|------------------------------|--------|----------------|------|-------|----|--------------------|
| <b>DIESEL RANGE ORGANICS</b> |        | <b>SW8015B</b> |      |       |    | <b>Analyst: DC</b> |
| T/R Hydrocarbons: C10-C28    | ND     | 25             |      | mg/Kg | 1  | 7/2/99             |

**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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1 of 1



## **Environmental Services**

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|                                       |                            |
|---------------------------------------|----------------------------|
| Well Name:                            | Culpepper Martin #5 GC     |
| Well Legals:                          | Unit M, Sec 22, T32N, R12W |
| 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 Culpepper Martin #5 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 327 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Adobe Downs Ranch, NM series 7.5 minute topographic map.)
2. PNM excavated 254 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 11 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 Culpepper Martin #5 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 1,000 pits.