

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

*Risk bedrock*  
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 ( Burlington )</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>Hanks #13 West</u>  |   |   |  |
| <b>Location:</b>   | Unit <u>A</u>                                 | Sec <u>12</u>   | T <u>27 N</u> R <u>10 W</u> County <u>San Juan</u>             |
| <b>Pit Type:</b>   | Separator <input checked="" type="checkbox"/> | Dehydrator <input 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>1</u> '<br>(Attach diagram) Reference: wellhead <input checked="" type="checkbox"/> other <u>                    </u><br>Footage from reference: <u>96</u> '<br>Direction from reference: <u>52</u> Degrees <input type="checkbox"/> East <input checked="" type="checkbox"/> North <input checked="" type="checkbox"/> of<br><input checked="" type="checkbox"/> West <input type="checkbox"/> South <u>                    </u> |   |   |  |
| <b>Depth to Ground Water:</b><br><small>(Vertical distance from contaminants to seasonal high water elevation of ground water)</small>   |   | Less than 50 feet<br>50 feet to 99 feet<br>Greater than 100 feet        | (20 points)<br>(10 points)<br>( 0 points) <u>0</u>             |
| <b>Wellhead Protection Area:</b><br><small>(Less than 200 feet from a private domestic water source, or, less than 1,000 feet from all other water sources)</small>  |   | Yes<br>No   | (20 points)<br>( 0 points) <u>0</u>                            |
| <b>Distance to Surface Water:</b><br><small>(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)</small>  |   | Less than 200 feet<br>200 feet to 1,000 feet<br>Greater than 1,000 feet | (20 points)<br>(10 points)<br>( 0 points) <u>0</u>             |
| <b>RANKING SCORE (TOTAL POINTS):</b>   |   |   | <u>0</u>   |

Date Remediation Started: 07/12/1999 Date Completed: 07/12/1999

Remediation Method: Excavation X Approx. Cubic Yard 439  
Landfarmed X Amount Landfarmed (cubic yds) 420  
(Check all appropriate sections) Other 19 cu yds clean overburden

Remediation Location: Onsite \_\_\_\_\_ Offsite Tierra Environmental  
(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 31' X 42.5' X 9' and transported soil to an offsite commercial landfarm.\*\*\* Sandstone encountered at 9'. 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 9'Sample date 07/12/1999 Sample time 11:45:00 AM

## Sample Results

Benzene (ppm) 1.5Total BTEX (ppm) 101.9 \*\*\*

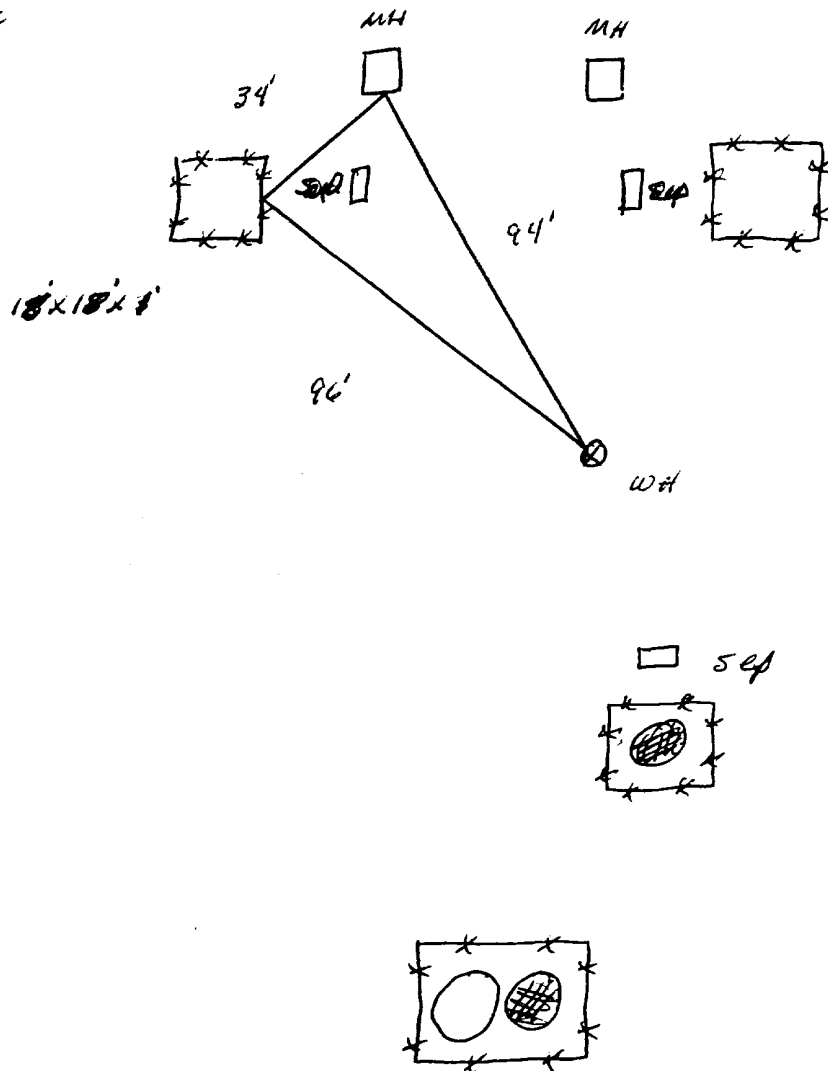
Field headspace (ppm) \_\_\_\_\_

TPH (ppm) 500.00 Method 8015BVertical 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, 2000SIGNATURE Maureen GannonPRINTED NAME Maureen Gannon  
AND TITLE Project Manager

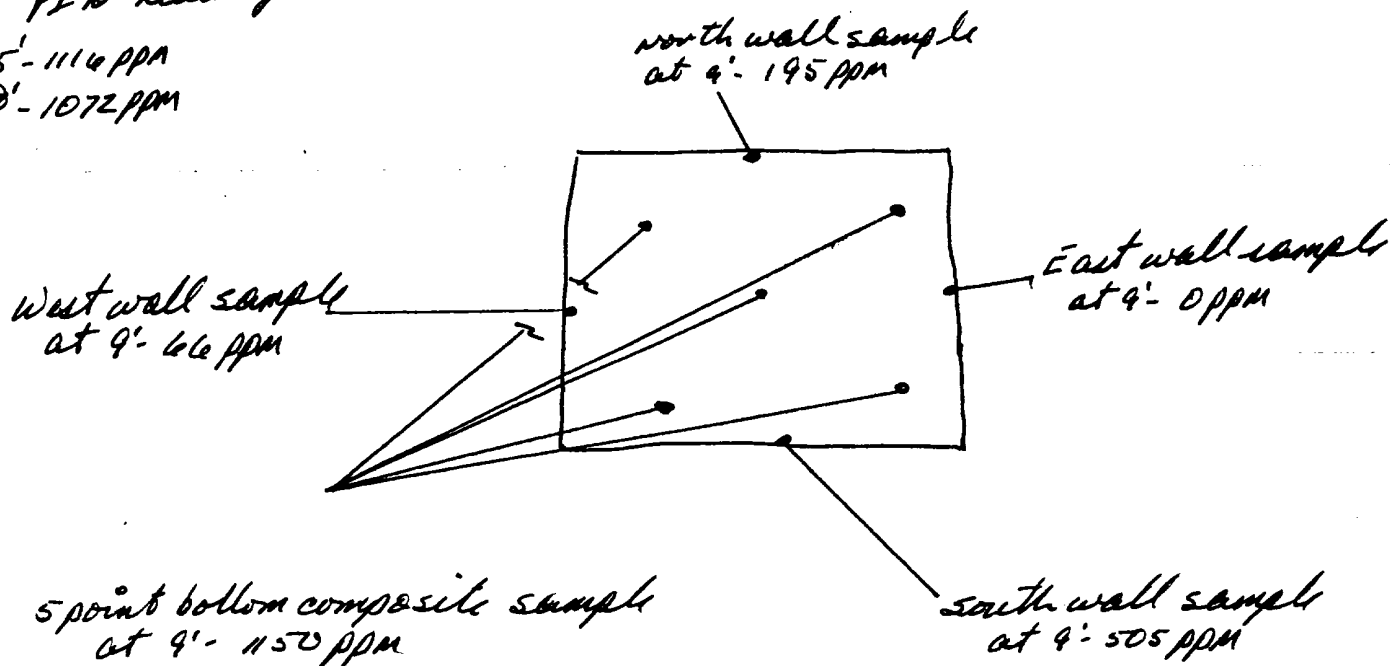
Hawks #13 West  
 (A) 12-27N-10W  
 Burlington  
 7-12-99 @ 0723  
 52° W of N



# Excavation Sampling PID Readings

5' - 1114 ppm  
 10' - 1072 ppm

31'(N+S) x 42.5'(E+W) x 9'(D)



not to scale

OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 28-Jul-99

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

**Project:** Hanks #13 East, #13 West, #11E

**Lab Order:** 9907029

## **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.

OFF: (505) 325-5667



Ray

LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 28-Jul-99

|                    |                                    |                            |                              |
|--------------------|------------------------------------|----------------------------|------------------------------|
| <b>Client:</b>     | PNM - Public Service Company of NM | <b>Client Sample Info:</b> | Hanks #13 West               |
| <b>Work Order:</b> | 9907029                            | <b>Client Sample ID:</b>   | 9907121145; 5pt. Bottom Comp |
| <b>Lab ID:</b>     | 9907029-03A                        | <b>Matrix:</b>             | SOIL                         |
| <b>Project:</b>    | Hanks #13 East, #13 West, #11E     | <b>Collection Date:</b>    | 7/12/99 11:45:00 AM          |
|                    |                                    | <b>COC Record:</b>         | 7647                         |

| Parameter                           | Result | PQL            | Qual | Units | DF  | Date Analyzed |
|-------------------------------------|--------|----------------|------|-------|-----|---------------|
| <b>DIESEL RANGE ORGANICS</b>        |        |                |      |       |     |               |
|                                     |        | <b>SW8015B</b> |      |       |     | Analyst: DC   |
| T/R Hydrocarbons: C10-C28           | 500    | 25             |      | mg/Kg | 1   | 7/23/99       |
| <b>AROMATIC VOLATILES BY GC/PID</b> |        |                |      |       |     |               |
|                                     |        | <b>SW8021B</b> |      |       |     | Analyst: DC   |
| Benzene                             | 1500   | 500            |      | µg/Kg | 500 | 7/16/99       |
| Toluene                             | 8800   | 1000           |      | µg/Kg | 500 | 7/16/99       |
| Ethylbenzene                        | 7600   | 500            |      | µg/Kg | 500 | 7/16/99       |
| m,p-Xylene                          | 73000  | 1000           |      | µg/Kg | 500 | 7/16/99       |
| o-Xylene                            | 11000  | 500            |      | µg/Kg | 500 | 7/16/99       |

101900

101.9 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

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P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNICAL SERVICES DIVISION (505) 325-5667 FAX (505) 325-5668

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 28-Jul-99

|                    |                                    |                            |                         |
|--------------------|------------------------------------|----------------------------|-------------------------|
| <b>Client:</b>     | PNM - Public Service Company of NM | <b>Client Sample Info:</b> | Hanks #13 West          |
| <b>Work Order:</b> | 9907029                            | <b>Client Sample ID:</b>   | 9907121150; 4 Wall Comp |
| <b>Lab ID:</b>     | 9907029-04A                        | <b>Matrix:</b>             | SOIL                    |
| <b>Project:</b>    | Hanks #13 East, #13 West, #11E     | <b>Collection Date:</b>    | 7/12/99 11:50:00 AM     |
|                    |                                    | <b>COC Record:</b>         | 7647                    |

| Parameter                           | Result | PQL            | Qual | Units | DF | Date Analyzed |
|-------------------------------------|--------|----------------|------|-------|----|---------------|
| <b>DIESEL RANGE ORGANICS</b>        |        | <b>SW8015B</b> |      |       |    | Analyst: DC   |
| T/R Hydrocarbons: C10-C28           | 60     | 25             |      | mg/Kg | 1  | 7/23/99       |
| <b>AROMATIC VOLATILES BY GC/PID</b> |        | <b>SW8021B</b> |      |       |    | Analyst: DM   |
| Benzene                             | ND     | 25             |      | µg/Kg | 25 | 7/19/99       |
| Toluene                             | ND     | 50             |      | µg/Kg | 25 | 7/19/99       |
| Ethylbenzene                        | 120    | 25             |      | µg/Kg | 25 | 7/19/99       |
| m,p-Xylene                          | 510    | 50             |      | µg/Kg | 25 | 7/19/99       |
| o-Xylene                            | 170    | 25             |      | µg/Kg | 25 | 7/19/99       |

800  
.800 ppm

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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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## Environmental Services

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|                                       |                            |
|---------------------------------------|----------------------------|
| Well Name:                            | Hanks #13 West             |
| Well Legals:                          | Sec 12, T27N, R10W, Unit A |
| Pit Type:                             | Separator                  |
| 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 Hanks #13 West well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 399 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Huerfanito Peak, NM series 7.5 minute topographic map.)
2. PNM excavated 439 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 9 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 Hanks #13 West well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 1,000 pits.

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