

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

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
OIL CON. DIV.

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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: Hare #13

Location: Unit O Sec 3 T 29N R 10W County San Juan

Pit Type: Separator ☐ Dehydrator ☐ Other Drip

Land Type: BLM ☒ State ☐ Fee ☐ Other

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

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 78'

Direction from reference: 40 Degrees ☐ East ☒ North
of ☒ West ☐ 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>10</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): 10

Hare #13

Date Remediation Started: 06/14/1999 Date Completed: 06/14/1999

Remediation Method: Excavation X Approx. Cubic Yard 119
(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds) 100
Other 19 cu yds overburden.

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 23' X 20' X 7' and landfarmed soil on location 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 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 7'

Sample date 06/14/1999 Sample time 8:05:00 AM

Sample Results

Benzene (ppm) 1.4

Total BTEX (ppm) 55 ***

Field headspace (ppm) _____

TPH (ppm) 3410.00 *** 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 **October 28, 1999**

SIGNATURE Maureen Gannon

PRINTED NAME **Maureen Gannon**
AND TITLE **Project Manager**

Have #13

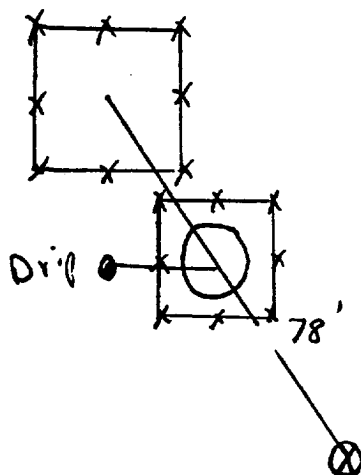
Burlington

Sec. 3, 29 N, 10 W, N

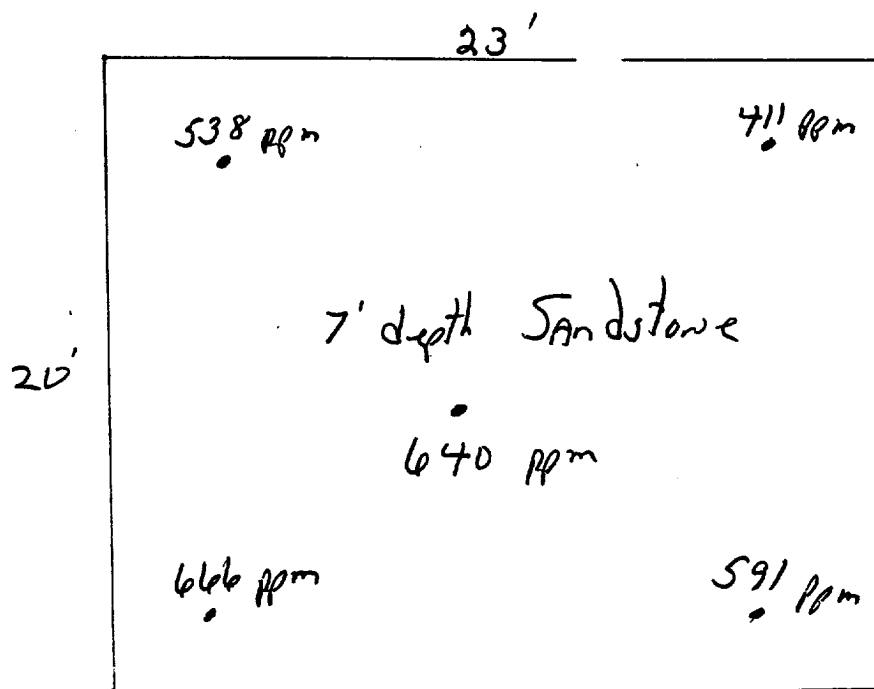
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↑
N

Site diagram:



End of excavation:



Field headspace: 12.2 ppm (walk)

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 28-Jun-99

CLIENT: PNM - Public Service Company of NM

Project: PNM Pit Remediation

Lab Order: 9906051

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



LC

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Jun-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Hare #13
Work Order:	9906051	Client Sample ID:	9906140805; 7ft. - 5pt composite-bottom
Lab ID:	9906051-01A	Matrix:	SOIL
Project:	PNM Pit Remediation	Collection Date:	6/14/99 8:05:00 AM
		COC Record:	7610

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	3410	25		mg/Kg	1	6/21/99
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DC
Benzene	1400	250		µg/Kg	250	6/18/99
Toluene	ND	500		µg/Kg	250	6/18/99
Ethylbenzene	6400	250		µg/Kg	250	6/18/99
m,p-Xylene	43000	500		µg/Kg	250	6/18/99
o-Xylene	4200	250		µg/Kg	250	6/18/99

55000
55 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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Jun-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Hare #13
Work Order:	9906051	Client Sample ID:	9906140810; 4ft. <i>Walls</i>
Lab ID:	9906051-02A	Matrix:	SOIL
Project:	PNM Pit Remediation	Collection Date:	6/14/99 8:10:00 AM
		COC Record:	7610

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	6/21/99

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

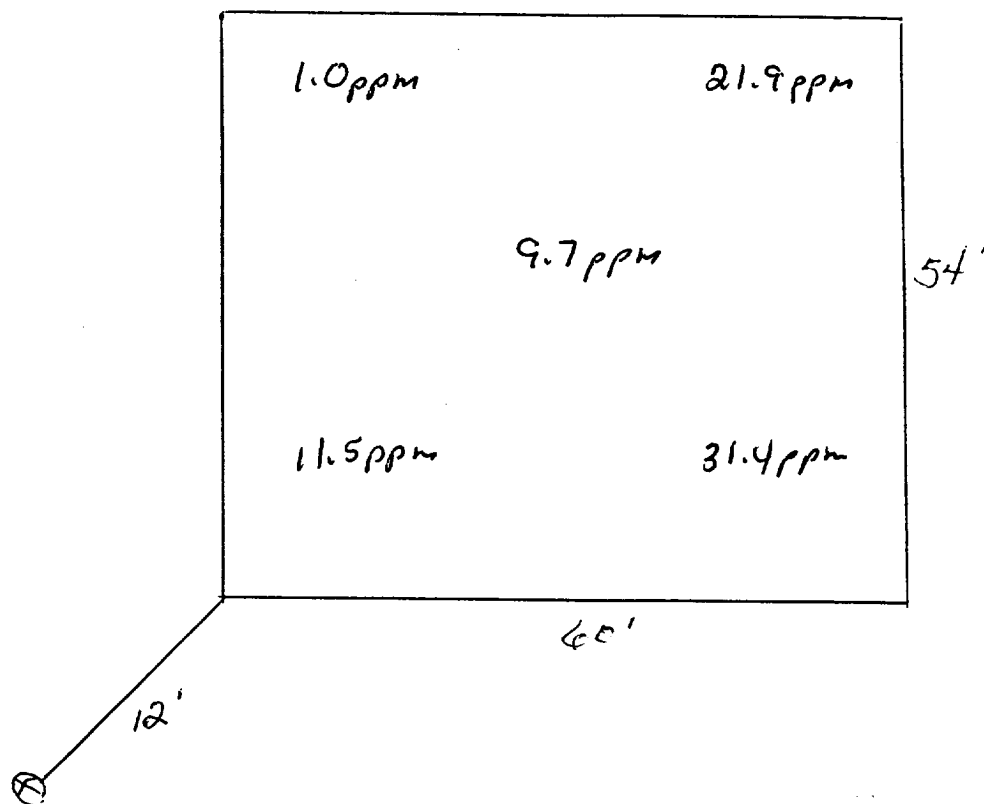
P.O. BOX 2606 • FARMINGTON, NM 87499

1 of 1

Sec 3 T29N R10W Unit 0
Burlington

Landfarm Drawing

App 100 cu. yds



2" to 12" Depth
Headspace 19.4
Sample # 9907191825

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 04-Aug-99

CLIENT: PNM - Public Service Company of NM
Project: PNM Pit Remediation Landfarms
Lab Order: 9907047

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: 04-Aug-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Hare 13 LF
Work Order:	9907047	Client Sample ID:	9907191825; 5pt Composite
Lab ID:	9907047-04A	Matrix:	SOIL
Project:	PNM Pit Remediation Landfarms	Collection Date:	7/19/99 6:25:00 PM
		COC Record:	7493

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	750	25		mg/Kg	1	7/30/99

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

1 of 1



Environmental Services

Well Name:	Hare #13
Well Legals:	Sec 3, T29N, R10W, Unit O
Pit Type:	Drip
Horizontal Distance to Surface Water:	Greater than 1,000 feet
Groundwater Depth:	50 feet to 99 feet

RISK ANALYSIS

PNM requests closure of their former pit on the Hare #13 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 64 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Turley, NM series 7.5 minute topographic map.)
2. PNM excavated 119 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 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.
4. PNM excavated and performed remediation to the maximum depth and horizontal extent practicable.

PNM believes that their former pit on the Hare #13 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 1,000 pits.