

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  
SANTA FE OFFICE

**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: Richardson #9E	
Location:	Unit <u>L</u> Sec <u>15</u> T <u>31 N</u> R <u>12 W</u> County <u>San Juan</u>
Pit Type:	Separator <input type="checkbox"/> Dehydrator <input checked="" type="checkbox"/> Other _____
Land Type:	BLM <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Other _____
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>75</u> ' _____
	Direction from reference: <u>45</u> Degrees <input checked="" type="checkbox"/> East North <input checked="" type="checkbox"/>
	_____ of _____ West South <input type="checkbox"/>
Depth to Ground Water:	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet ( 0 points) <u>0</u>
(Vertical distance from contaminants to seasonal high water elevation of ground water)	
Wellhead Protection Area:	Yes (20 points) No ( 0 points) <u>0</u>
(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) <u>0</u>
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	
RANKING SCORE (TOTAL POINTS): <u>0</u>	

Richardson #9E

Date Remediation Started: 06/08/1999 Date Completed: 06/08/1999

Remediation Method: Excavation X Approx. Cubic Yard 140  
(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds) 100  
Other 40 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 18' X 21' X 10' 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.

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 10'

Sample date 06/08/1999 Sample time 8:05:00 AM

**Sample Results**

Benzene (ppm) < 0.5

Total BTEX (ppm) 36.35

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

TPH (ppm) 88.00 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

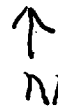
DATE January 24, 2000

SIGNATURE Maureen Gannon

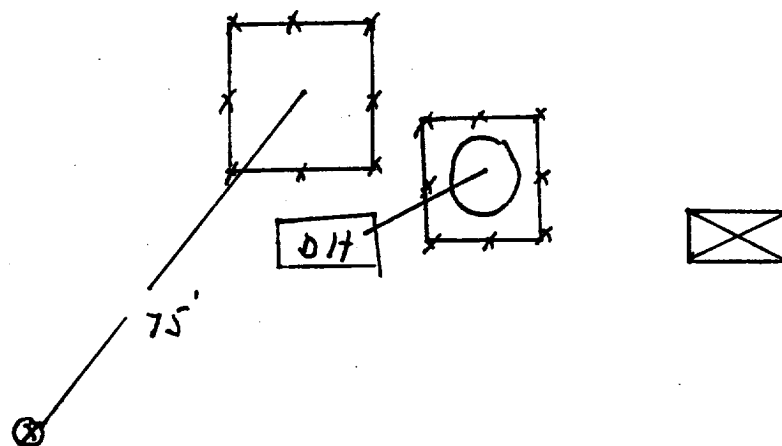
PRINTED NAME **Maureen Gannon**  
AND TITLE **Project Manager**

Richardson #9E  
Burlington  
Sec. 15, 31N, 12W, ~~E~~L"  
M<sub>6</sub>

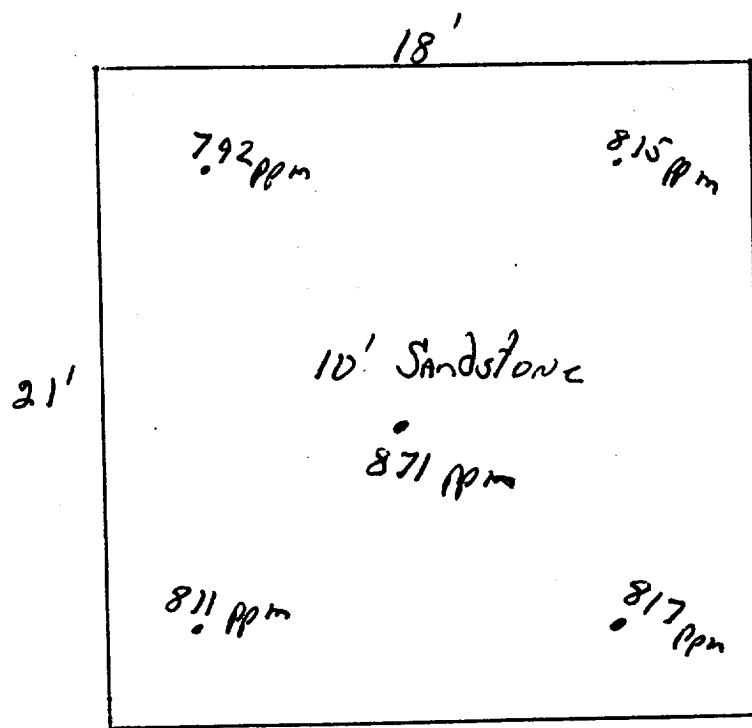
6-8-99



Site Diagram:



End of excavation:



not to scale

OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 21-Jun-99

---

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

**Project:** PNM Pit Remediation

**Lab Order:** 9906025

## **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: 21-Jun-99

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Richardson #9E
<b>Work Order:</b>	9906025	<b>Client Sample ID:</b>	9906080805; 10ft.
<b>Lab ID:</b>	9906025-01A	<b>Matrix:</b>	SOIL
<b>Project:</b>	PNM Pit Remediation	<b>Collection Date:</b>	6/8/99 8:05:00 AM
		<b>COC Record:</b>	7606

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>						
		<b>SW8015B</b>				Analyst: DC
T/R Hydrocarbons: C10-C28	88	25		mg/Kg	1	6/16/99
<b>AROMATIC VOLATILES BY GC/PID</b>						
		<b>SW8021B</b>				Analyst: DC
Benzene	ND	500		µg/Kg	500	6/10/99
Toluene	ND	1000		µg/Kg	500	6/10/99
Ethylbenzene	2500	500		µg/Kg	500	6/10/99
m,p-Xylene	33000	1000		µg/Kg	500	6/10/99
o-Xylene	850	500		µg/Kg	500	6/10/99

36.350  
36.35 ppm

<b>Qualifiers:</b>	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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 21-Jun-99

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Richardson #9E
<b>Work Order:</b>	9906025	<b>Client Sample ID:</b>	9906080810; 6ft.
<b>Lab ID:</b>	9906025-02A	<b>Matrix:</b>	SOIL
<b>Project:</b>	PNM Pit Remediation	<b>Collection Date:</b>	6/8/99 8:10:00 AM
		<b>COC Record:</b>	7606

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015B</b>				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	6/14/99

### 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

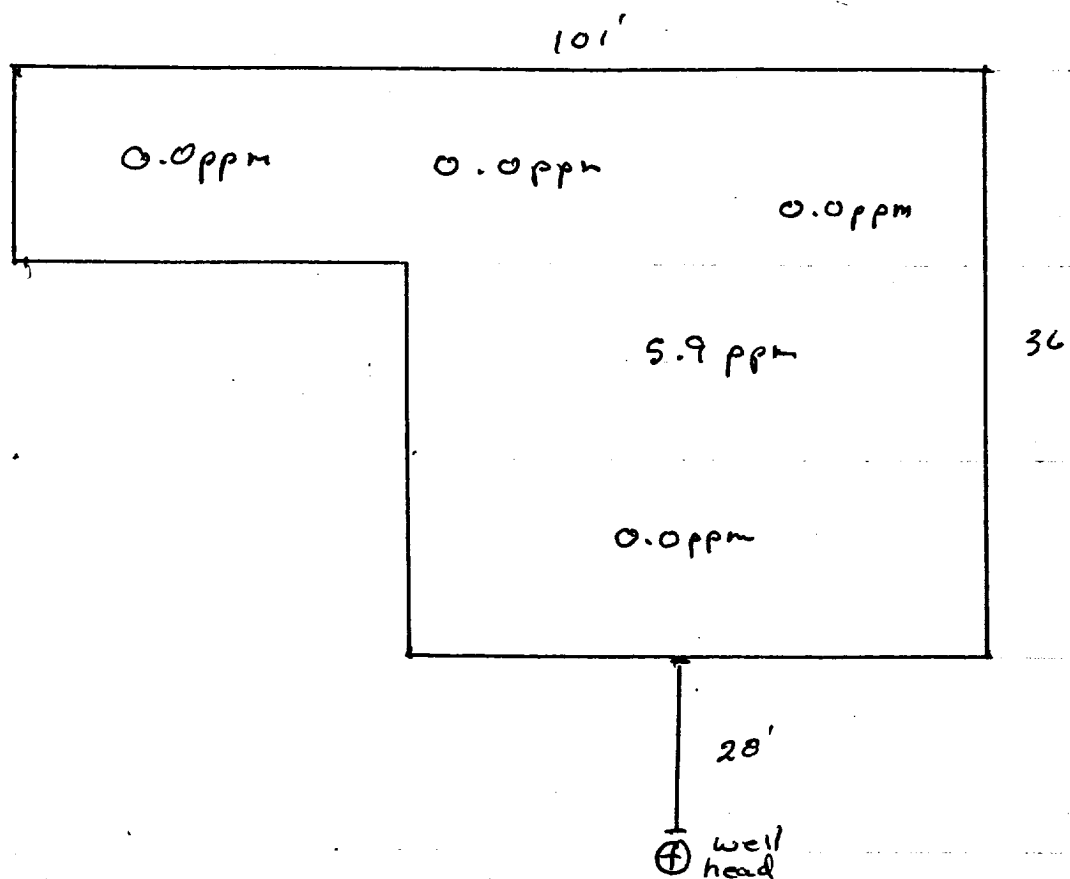
P.O. BOX 2606 • FARMINGTON, NM 87499

1 of 1

Richardson #9E  
Sec-15 T-31N R-12W UL-<sup>NG</sup> L  
Burlington

# Landfarm Drawing

App 100 cu. yds



2" to 12" Depth  
Headspace 23.0 ppm  
Sample # 9907130920

Not to Scale

OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 28-Jul-99

---

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

**Project:** PNM Pit Remediation Landfarms

**Lab Order:** 9907030

**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-99

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Richardson 9E LF
<b>Work Order:</b>	9907030	<b>Client Sample ID:</b>	9907130920; 5pt. Comp
<b>Lab ID:</b>	9907030-10A	<b>Matrix:</b>	SOIL
<b>Project:</b>	PNM Pit Remediation Landfarms	<b>Collection Date:</b>	7/13/99 9:20:00 AM
		<b>COC Record:</b>	7489

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	7/26/99

**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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -