

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> PNM Gas Services ( Burlington )		<b>Telephone:</b> 324-3764	
<b>Address:</b> 603 W. Elm Street Farmington, NM 87401			
<b>Facility or Well Name:</b> Whitley #8			
<b>Location:</b>	Unit <u>M</u>	Sec <u>8</u>	T <u>27 N</u> R <u>9 W</u> County <u>San Juan</u>
<b>Pit Type:</b>	Separator <input checked="" type="checkbox"/>	Dehydrator <input type="checkbox"/>	Other _____
<b>Land Type:</b>	BLM <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Fee <input type="checkbox"/> Other _____
<b>Pit Location:</b>	Pit dimensions: length <u>16</u> ' width <u>16</u> ' depth <u>3</u> '		
(Attach diagram)	Reference: wellhead <input checked="" type="checkbox"/> other _____		
	Footage from reference: <u>90</u> '		
	Direction from reference: <u>45</u> Degrees <input checked="" type="checkbox"/> East <input type="checkbox"/> West of North <input checked="" type="checkbox"/> South <input type="checkbox"/>		
<b>Depth to Ground Water:</b>	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)			
<b>Wellhead Protection Area:</b>	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)			
<b>Distance to Surface Water:</b>	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)			
<b>RANKING SCORE (TOTAL POINTS):</b>			<u>0</u>

Whitley #8

Date Remediation Started: 07/19/1999 Date Completed: 07/19/1999

Remediation Method: Excavation ☒ Approx. Cubic Yard 74

(Check all appropriate sections)

Landfarmed ☒ Amount Landfarmed (cubic yds) 50

Other 24 cu yds clean 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 a pit size of 20' X 20' X 5' 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.

\*\*\* Rock encountered at 6'. 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 5'

Sample date 07/19/1999 Sample time 8:55:00 AM

## Sample Results

Benzene (ppm) 0.71

Total BTEX (ppm) 73.71 \*\*\*

Field headspace (ppm)

TPH (ppm) 46.00 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

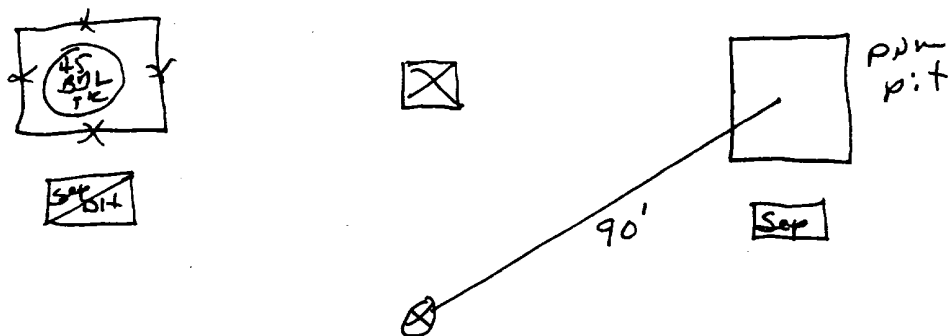
DATE January 24, 2000

SIGNATURE

PRINTED NAME Maureen Gannon  
AND TITLE Project Manager

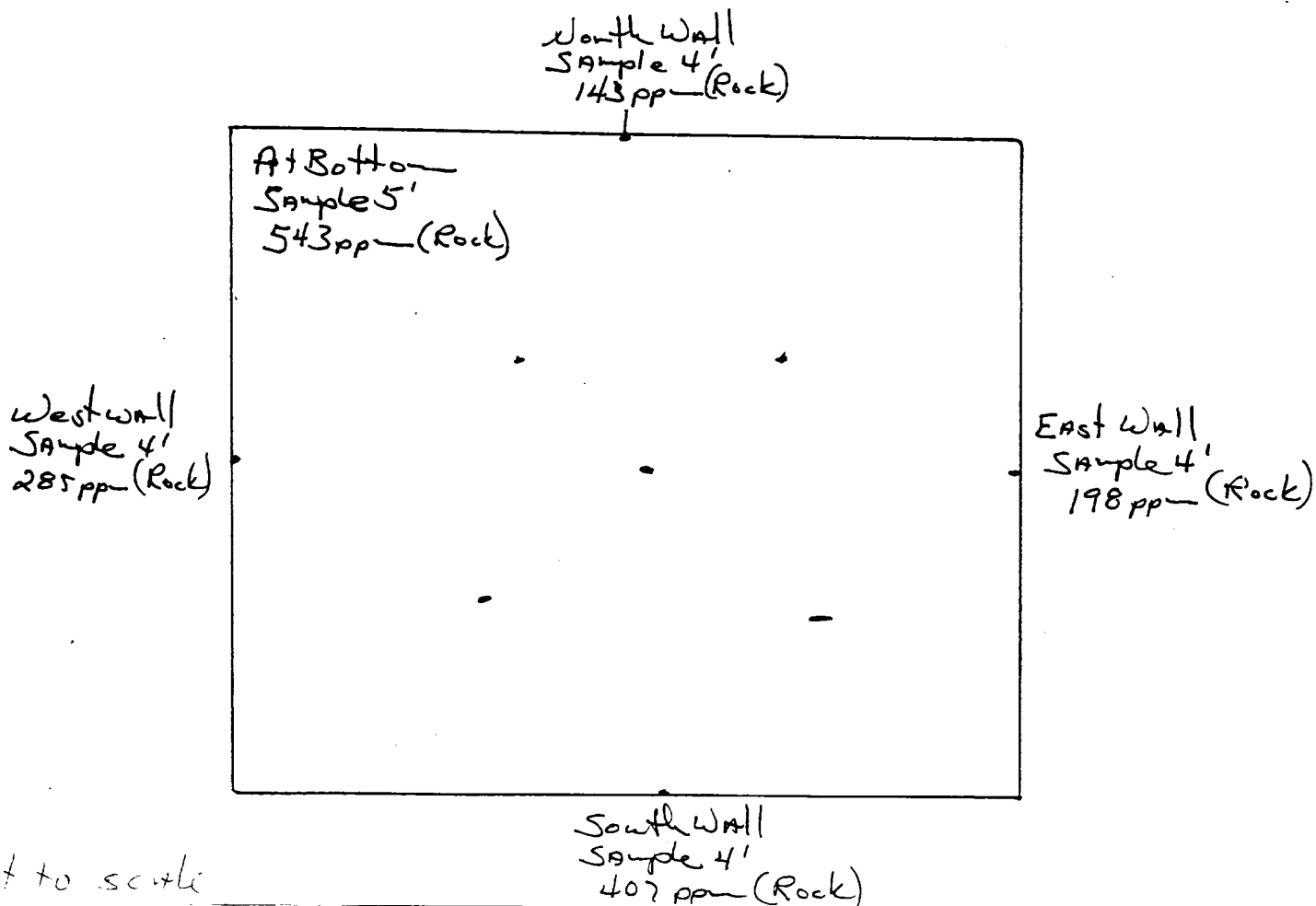
Whitley 8  
Sec. 8 T27N R9W Unit m  
Burlington

### Site Drawing



### Excavation Drawing:

20'x20'x5'



cut to settle

OFF: (505) 325-5667



LAB: (505) 325-1556

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**On Site Technologies, LTD.**

Date: 04-Aug-99

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

**Project:** Whitley 8 & 7E

**Lab Order:** 9907045

**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



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 04-Aug-99

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Whitley 8
<b>Work Order:</b>	9907045	<b>Client Sample ID:</b>	9907190855; 5pt Bottom Comp
<b>Lab ID:</b>	9907045-02A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Whitley 8 & 7E	<b>Collection Date:</b>	7/19/99 8:55:00 AM
		<b>COC Record:</b>	7492

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>						
		<b>SW8015B</b>				Analyst: DC
T/R Hydrocarbons: C10-C28	46	25		mg/Kg	1	7/30/99
<b>AROMATIC VOLATILES BY GC/PID</b>						
		<b>SW8021B</b>				Analyst: DC
Benzene	710	500		µg/Kg	500	7/29/99
Toluene	5300	1000		µg/Kg	500	7/29/99
Ethylbenzene	5900	500		µg/Kg	500	7/29/99
m,p-Xylene	53000	1000		µg/Kg	500	7/29/99
o-Xylene	8800	500		µg/Kg	500	7/29/99

73710  
73.71 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

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- TECHNICAL SUPPORT SERVING THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 04-Aug-99

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Whitley 8
<b>Work Order:</b>	9907045	<b>Client Sample ID:</b>	9907190853; 4pt Wall Comp
<b>Lab ID:</b>	9907045-01A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Whitley 8 & 7E	<b>Collection Date:</b>	7/19/99 8:53:00 AM
		<b>COC Record:</b>	7492

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	7/29/99
<b>AROMATIC VOLATILES BY GC/PID</b>		<b>SW8021B</b>				Analyst: DC
Benzene	ND	50		µg/Kg	50	7/29/99
Toluene	110	100		µg/Kg	50	7/29/99
Ethylbenzene	510	50		µg/Kg	50	7/29/99
m,p-Xylene	4600	100		µg/Kg	50	7/29/99
o-Xylene	990	50		µg/Kg	50	7/29/99

6210  
6.21 ppm

### Qualifiers:

PQL - Practical Quantitation Limit

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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

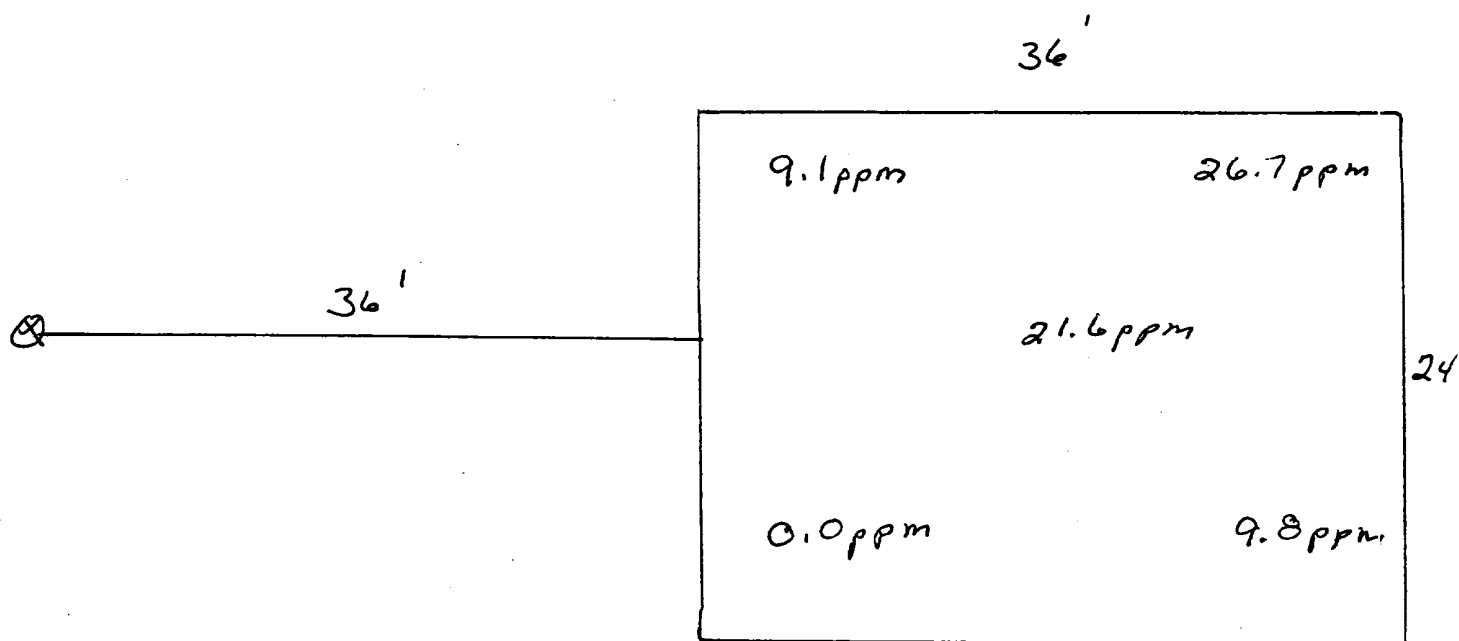
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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Whitley 8  
Sec. 8 T27N R9W Unit m  
Burlington

Landform Drawing

App cu. yds



2" to 12" Depth  
Headspace 20.4 ppm  
Sample # 9909011025

Not to scale

# ON SITE

OFF: (505) 325-5667

LAB: (505) 325-1556

TECHNOLOGIES, LTD.

**On Site Technologies, LTD.**

Date: 15-Sep-99

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**CLIENT:** PNM - Public Service Company of NM  
**Project:** Hanks & Whitley Landfarms  
**Lab Order:** 9909004

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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: 15-Sep-99

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Whitley #8 LF
<b>Work Order:</b>	9909004	<b>Client Sample ID:</b>	9909011025; 5pt Composite
<b>Lab ID:</b>	9909004-08A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Hanks & Whitley Landfarms	<b>Collection Date:</b>	9/1/99 10:25:00 AM
		<b>COC Record:</b>	7655

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015B</b>				Analyst: DM
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	9/9/99

**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

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



## Environmental Services

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Well Name:	Whitley #8
Well Legals:	Sec 8, T27N, R9W, Unit M
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 Whitley #8 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 452 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 74 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. Rock was encountered at 6 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 Whitley #8 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 1,000 pits.