

District III  
P.O. Box 1000  
Santa Fe, NM 87505  
DEPUTY OIL & GAS INSPECTOR

District III  
1000 Rio Brazos Road, Santa Fe, NM 87505  
JUL 18 1997

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco Street  
Santa Fe, New Mexico 87505

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

PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (Burlington Resources) Telephone: 324-3764  
Address: 603 W. Elm Street Farmington, NM 87401  
Facility or Well Name: Phillips #1  
Location: Unit: 1 Sec. 23 T. 31 N R. 13 W County San Juan  
Pit Type: Separator Dehydrator ☒ Other No  
Land Type: BLM ☒ State Fee Other No

Pit Location: Pit dimensions: length 16 width 16 depth 3  
(Attach diagram) Reference: wellhead ☒ other  
Footage from reference: 149'  
Direction from reference: due Degrees East North ☒  
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) 10

(Vertical distance from contaminants to  
seasonal high water elevation of ground  
water)

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 No  
RECEIVED  
APR 24 1997  
(20 points)  
(0 points) 0

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) 0

RANKING SCORE (TOTAL POINTS): 10

<b>Date Remediation Started:</b>	<u>3/11/96</u>		<b>Date Completed:</b>	<u>3/11/96</u>	
<b>Remediation Method:</b>  (Check all appropriate sections)	Excavation	<u>X</u>	Approx. Cubic Yard	<u>405</u>	
	Landfarmed	<u>X</u>	Amount Landfarmed (cubic yds)	<u>405</u>	
	Other	<u></u>			
<b>Remediation Location:</b>  (i.e., landfarmed onsite, name and location of offsite facility)	Onsite	<u></u>	Offsite	<u>Senter Federal #1 (P&amp;A)</u> <u>26-31N-13W</u>	
<b>Backfill Material Location:</b> <u></u>					
<b>General Description of Remedial Action:</b>					
Excavated contaminated soil to pit size of 23'x28'x17' and landfarmed soil offsite within a bermed area at a depth of 6" to 12". Soil was aerated by plowing/disking until soil met regulatory levels.					
*** Vertical extent at 21.5' provided clean soil, headspace reading of 22 ppm and no detected levels of TPH. See attached risk analysis form and lab analysis.					
<b>Ground Water Encountered:</b> No <u>✓</u> Yes <u></u> Depth <u></u>					

<b>Final Pit Closure Sampling:</b>  (if multiple samples, attach sample result and diagram of sample locations and depths.)	Sample Location	<u>5 pt. composite-4 side walls and center of pit bottom</u>			
	Sample depth	<u>17'</u>			
	Sample date	<u>3/11/96</u>	Sample time	<u>10:00:00 AM</u>	
	<b>Sample Results</b>				
	Benzene (ppm)	<u>0.5824</u>			
	Total BTEX (ppm)	<u>*** 182.7815</u>			
	Field headspace (ppm)	<u></u>			
	TPH	<u>9608.00</u>	Method	<u>418.1</u>	
Vertical Extent (ft)	<u>21.5</u>	Risk Assessment form attached	Yes	<u>✓</u>	No <u></u>
<b>Ground Water Sample:</b>	Yes <u></u>	No <u>✓</u>	(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 April 28, 1997

SIGNATURE

*Denver Bearden*

PRINTED NAME  
AND TITLE

Denver Bearden  
Administrator III



Well Name:	Phillips #1
Well Legals:	Unit 1, Sec 23, T31N, R13W
Pit Type:	Dehydrator
Horizontal Distance to Surface Water:	Greater than 1,000 ft
Groundwater Depth:	50 ft to 99 ft

## **RISK ANALYSIS**

PNM requests closure of the Phillips #1 using a limited risk analysis of the site conditions.

1. PNM estimated groundwater to be at a depth of 75 ft. based upon elevation of site to the La Plata River. (Reference: topographic map.)
2. This site is not located within 200 ft. of a domestic water well and is not within 1,000 ft. of any other water source.
3. Distance from the site to surface water is greater than 1,000 ft.
4. PNM excavated 405 cu. yds. from the former pit. Vertical extent was determined using a hollow stem drilling rig. Clean soil was encountered @ 21.5 ft. below ground surface. Analytical results are attached.

Based upon the information provided above, PNM believes the Phillips #1 poses minimal risk to the environment. Subsurface lateral migration is limited based upon PNM's past experience in excavating 400 pits. Source removal minimizes the possibility of surface water contamination.

3-11-96

meter house



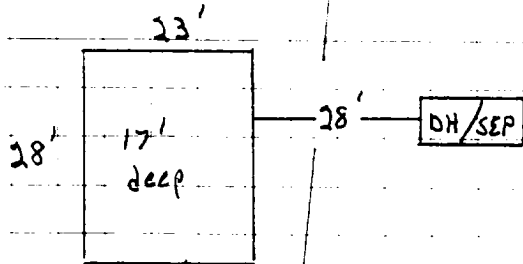
Phillips #1

meridian 0:1

Sec. 23, T31 N, R13 W

1750' FSL + 875' FSL

San Juan County



145'

217'



well head

OFF: (505) 325-8786



LAB: (505) 325-5667

### **TOTAL PETROLEUM HYDROCARBONS**

Attn: *Denver Bearden*  
Company: *PNM Gas Services*  
Address: *603 W. Elm*  
City, State: *Farmington, NM 87401*

Date: *12-Mar-96*  
COC No.: *4607*  
Sample No. *10384*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Phillips #1*  
Project Location: *9603111000; 5pt. Composite, 4 Walls and Bottom*  
Sampled by: *GC* Date: *11-Mar-96* Time: *10:00*  
Analyzed by: *HR* Date: *12-Mar-96*  
Type of Sample: *Soil*

#### **Laboratory Analysis**

<b>Laboratory Identification</b>	<b>Sample Identification</b>	<b>Total Petroleum Hydrocarbons</b>
<i>10384-4607</i>	<i>PNM Gas Services - Phillips #1</i> <i>9603111000; 5pt. Composite, 4 Walls and Bottom</i>	<i>9,608 mg/kg</i>

#### **Quality Assurance Report**

<b>Laboratory Identification</b>	<b>Analyzed Value</b>	<b>Acceptable Range</b>	<b>Units of Measure</b>
<i>Laboratory Fortified Blank Soil - QCBS2</i>	<i>&lt;25</i>	<i>&lt;25</i>	<i>mg/kg</i>
<i>Laboratory Fortified Spike Soil - QCSS1</i>	<i>917</i>	<i>828 - 1024</i>	<i>mg/kg</i>

**Method** - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: *DAF*  
Date: *3/12/96*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



OFF: (505) 325-8786

LAB: (505) 325-5667

### AROMATIC VOLATILE ORGANICS

Attn: *Denver Bearden*  
Company: *PNM Gas Services*  
Address: *603 W. Elm*  
City, State: *Farmington, NM 87401*

Date: *12-Mar-96*  
COC No.: *4607*  
Sample No. *10384*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Phillips #1*  
Project Location: *9603111000; 5pt. Composite, 4 Walls and Bottom*  
Sampled by: *GC* Date: *11-Mar-96* Time: *10:00*  
Analyzed by: *HR* Date: *12-Mar-96*  
Type of Sample: *Soil*

#### Aromatic Volatile Organics

Component	Result	Units of Measure	Detection Limit	Units of Measure
<i>Benzene</i>	582.4	ug/kg	0.2	ug/kg
<i>Toluene</i>	35084.1	ug/kg	0.2	ug/kg
<i>Ethylbenzene</i>	9677.0	ug/kg	0.2	ug/kg
<i>m,p-Xylene</i>	107745.5	ug/kg	0.2	ug/kg
<i>o-Xylene</i>	29692.5	ug/kg	0.2	ug/kg
	<i>TOTAL</i>	182781.5		ug/kg

**Method** - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*  
Date: *3/12/96*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Phillips #1  
Meridian Oil  
Sec. 23, T31N, R13W

4-25-96

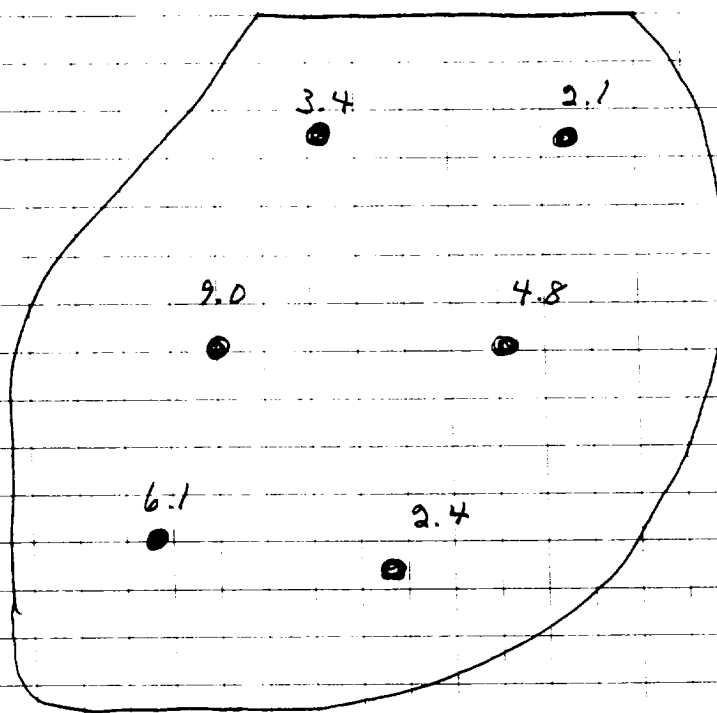
Land Farm: Senter Federal #1  
Sec. 23, T31N, R13W

405 yds.

Composite sample # 9604251000

6 pt.

Soil vapor head-space = 81.2 ppm



sample depth 2"-12"

OFF: (505) 325-8786



LAB: (505) 325-5667

***Diesel Range Organics EPA 8015-Modified***

Attn: *Denver Bearden*  
Company: *PNM Gas Services*  
Address: *603 W. Elm*  
City, State: *Farmington, NM 87401*

Date: *30-Apr-96*  
COC No.: *4632*  
Sample No. *10745*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Phillips #1 ( P&A Senter Federal #1 )*  
Project Location: *9604251000; 6pt. Composite, 2"-12" deep*  
Sampled by: GC Date: *25-Apr-96* Time: *10:00*  
Analyzed by: DC Date: *30-Apr-96*  
Sample Matrix: *Soil*

***Laboratory Analysis***

<i>Analyte</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Diesel Range Organics (C10 - C28)</i>	<i>336.5</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

***Quality Assurance Report***

DRO QC No.: *0446-STD*

***Calibration Check***

<i>Analyte</i>	<i>Method Blank</i>	<i>Unit of Measure</i>	<i>True Value</i>	<i>Analyzed Value</i>	<i>% Diff</i>	<i>Limit</i>
<i>Diesel Range (C10 - C28)</i>	<i>&lt;5.0</i>	<i>ppm</i>	<i>2,000</i>	<i>1,913</i>	<i>4.3</i>	<i>15%</i>

***Matrix Spike***

<i>Analyte</i>	<i>1- Percent Recovered</i>	<i>2 - Percent Recovered</i>	<i>Limit</i>	<i>%RSD</i>	<i>Limit</i>
<i>Diesel Range (C10-C28)</i>	<i>82</i>	<i>77</i>	<i>(70-130)</i>	<i>4</i>	<i>20%</i>

***Method*** - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: *JaH*  
Date: *4/30/96*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

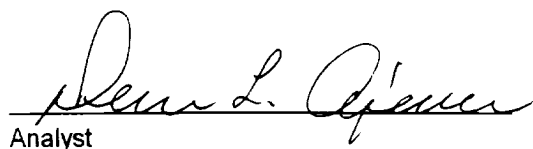
Client:	PNM	Project #:	93108-02
Sample ID:	TH - 1 @ 21'	Date Reported:	01-22-97
Laboratory Number:	A913	Date Sampled:	01-21-97
Chain of Custody No:	5057	Date Received:	01-21-97
Sample Matrix:	Soil	Date Extracted:	01-22-97
Preservative:	Cool	Date Analyzed:	01-22-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

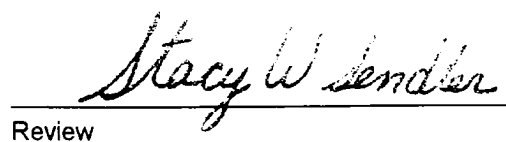
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: **Phillips #1.**

  
Analyst

  
Review