

District I
P.O. Box 1980 Hobbs, NM
District II
P.O. Box 1007 Moriarty, NM
District III
1000 Rio Brazos Rd., Aztec, NM 87410
DEPUTY OIL & GAS INSPECTOR
JUL 16 1997

State of New Mexico
Energy, Minerals and Natural Resources Department

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

OIL CONSERVATION DIVISION

2040 South Pacheco Street
Santa Fe, New Mexico 87505

PIT REMEDIATION AND CLOSURE REPORT

Approved

Operator: PNM Gas Services (Amoco) Telephone: 324-3764
Address: 603 W. Elm Street Farmington, NM 87401
Facility or Well Name: JF Day D #1E
Location: Unit: P Sec. 20 T. 28 N R. 10 W County San Juan
Pit Type: Separator ☒ Dehydrator ☐ Other ☐ Drip ☐
Land Type: BLM ☒ State ☐ Fee ☐ Other ☐ No ☐

Pit Location: Pit dimensions: length 18 width 18 depth 3
(Attach diagram) Reference: wellhead ☐ other ☐
Footage from reference: _____
Direction from reference: _____ Degrees _____ East _____ North _____
_____ of _____
_____ 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) 0
(Vertical distance from contaminants to
seasonal high water elevation of ground
water)

Wellhead Protection Area: Yes _____ No _____ (20 points)
(Less than 200 feet from a private (0 points)
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) 0
(Horizontal distance to perennial lakes,
ponds, rivers, streams, creeks, irrigation
canals and ditches)

RANKING SCORE (TOTAL POINTS): 0

RECEIVED
APR 24 1997
OIL CON. DIV.
DIST. 3

Date Remediation Started:

10/1/96

Date Completed:

10/2/96

Remediation Method:

Excavation

☒

Approx. Cubic Yard

344

(Check all appropriate sections)

Landfarmed

☒

Amount Landfarmed (cubic yds)

264

Other

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 21'X26'X17' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil was aerated by plowing/disking until soil met regulatory levels.

***Total BTEX above regulatory level; further excavation impossible due to bedrock.

Ground Water Encountered:

No

☒

Yes

☐

Depth

Final Pit Closure Sampling:

Sample Location

Bottom of excavation.

(if multiple samples, attach sample result and diagram of sample locations and depths.)

Sample depth

17'

Sample date

10/2/96

Sample time

9:15:00 AM

Sample Results

Benzene (ppm)

1.3905

Total BTEX (ppm)

*** 111.8756

Field headspace (ppm)

TPH

757.70

Method

8015A

Vertical Extent (ft)

38.5'

Risk Assessment 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

April 28, 1997

SIGNATURE


PRINTED NAME
AND TITLEDenver Bearden
Administrator III



Well Name:	JF Day D #1E
Well Legals:	Unit P, Sec 20, T28N, R10W
Pit Type:	Separator
Horizontal Distance to Surface Water:	Greater than 1,000 ft
Groundwater Depth:	Greater than 100 ft

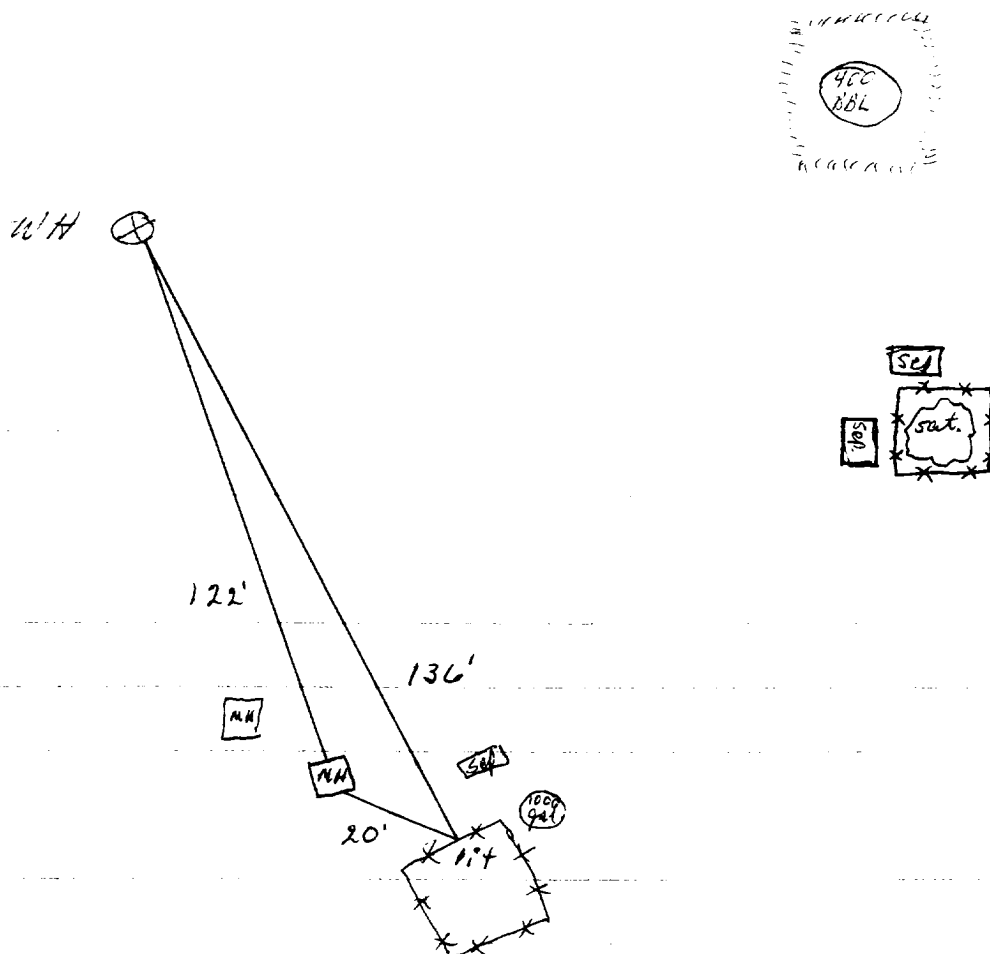
RISK ANALYSIS

PNM requests closure of the JF Day D #1E using a limited risk analysis of the site conditions.

1. PNM estimated groundwater to be at a depth of 175 ft. based upon elevation of site to the San Juan 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 344 cu. yds. from the former pit. Vertical extent was determined using a hollow stem drilling rig. Bedrock was encountered at 38.5 ft. below ground surface.

Based upon the information provided above, PNM believes the JF Day D #1E 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. Bedrock provides an impermeable layer between remaining contamination and groundwater. Vertical migration through bedrock to groundwater is highly unlikely.

IF Day 1 = 1E



OFF: (505) 325-5667



LAB: (505) 325-1556

Diesel Range Organics

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

Date: *4-Oct-96*
COC No.: *5409*
Sample No. *12448*
Job No. *2-1000*

Project Name: *PNM Gas Services - JF Day D #1E*
Project Location: *9610020915; Pit Excavation Bottom Composite Sample*
Sampled by: *RH* Date: *2-Oct-96* Time: *9:15*
Analyzed by: *DC/BV* Date: *4-Oct-96*
Sample Matrix: *Soil*

Laboratory Analysis


<i>Parameter</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>757.7</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

Quality Assurance ReportDRO QC No.: *0489-QC****Calibration Check***

<i>Parameter</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><5.0</i>	<i>ppm</i>	<i>100</i>	<i>110</i>	<i>10.3</i>	<i>15%</i>

Matrix Spike

<i>Parameter</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>112</i>	<i>103</i>	<i>(70-130)</i>	<i>6</i>	<i>20%</i>

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas ChromatographyApproved by: Date: *10/4/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

AROMATIC VOLATILE ORGANICS

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

Date: *4-Oct-96*
COC No.: *5409*
Sample No. *12448*
Job No. *2-1000*

Project Name: *PNM Gas Services - JF Day D #1E*
Project Location: *9610020915; Pit Excavation Bottom Composite Sample*
Sampled by: *RH* Date: *2-Oct-96* Time: *9:15*
Analyzed by: *DC* Date: *4-Oct-96*
Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
<i>Benzene</i>	<i>1390.5</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>5178.4</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>5148.0</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>89107.2</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>11051.6</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
	<i>TOTAL</i>	<i>111875.6</i>		<i>ug/kg</i>

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

Approved by: *[Signature]*
Date: *10/4/96*

OFF: (505) 325-5667



LAB: (505) 325-1556

Diesel Range Organics

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

Date: *4-Oct-96*
COC No.: *5408*
Sample No. *12447*
Job No. *2-1000*

Project Name: *PNM Gas Services - JF Day D #1E*
Project Location: *9610020900; Pit Excavation Composite Wall Sample*
Sampled by: *RH* Date: *2-Oct-96* Time: *9:00*
Analyzed by: *DC/BV* Date: *4-Oct-96*
Sample Matrix: *Soil*

Laboratory Analysis

<i>Parameter</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>150.6</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

Quality Assurance Report

DRO QC No.: 0489-QC

Calibration Check

<i>Parameter</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><5.0</i>	<i>ppm</i>	<i>100</i>	<i>110</i>	<i>10.3</i>	<i>15%</i>

Matrix Spike

<i>Parameter</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>112</i>	<i>103</i>	<i>(70-130)</i>	<i>6</i>	<i>20%</i>

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

Approved by: *[Signature]*
Date: *10/4/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

AROMATIC VOLATILE ORGANICS

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

Date: *4-Oct-96*
COC No.: *5408*
Sample No. *12447*
Job No. *2-1000*

Project Name: *PNM Gas Services - JF Day D #1E*
Project Location: *9610020900; Pit Excavation Composite Wall Sample*
Sampled by: *RH* Date: *2-Oct-96* Time: *9:00*
Analyzed by: *DC* Date: *4-Oct-96*
Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
<i>Benzene</i>	<i>21.4</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>182.0</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>406.0</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>5913.9</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>1369.4</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
	<i>TOTAL</i>	<i>7892.6</i>		<i>ug/kg</i>

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

Approved by: *[Signature]*
Date: *10/4/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

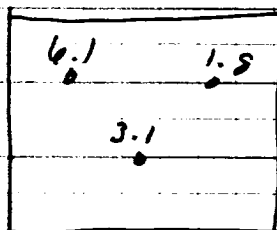
J.F. Day "D" #1E
Amoco
Sec. 20, 28 N, 10 W

11-12-96

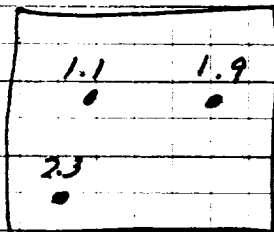
Land Farm: On location

Composite sample # 9611121050

Soil vapor headspace PID reading: 21.6 ppm



2"-13" depth



OFF: (505) 325-5667



LAB: (505) 325-1556

Diesel Range Organics

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

Date: *14-Nov-96*
COC No.: *5124*
Sample No. *12847*
Job No. *2-1000*

Project Name: *PNM Gas Services - J.F. Day D #1E Landfarm*
Project Location: *9611121050; 6pt. Composite, 2"-12" depth*
Sampled by: *GC* Date: *12-Nov-96* Time: *10:50*
Analyzed by: *DC/HR* Date: *13-Nov-96*
Sample Matrix: *Soil*

Laboratory Analysis

<i>Parameter</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><5.0</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

Quality Assurance Report

DRO QC No.: *0512-QC*

Calibration Check

<i>Parameter</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><5.0</i>	<i>ppm</i>	<i>100</i>	<i>100</i>	<i>0.5</i>	<i>15%</i>

Matrix Spike

<i>Parameter</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>100</i>	<i>104</i>	<i>(70-130)</i>	<i>3</i>	<i>20%</i>

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

Approved by:

Date:

[Signature]
11/14/96

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

**EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

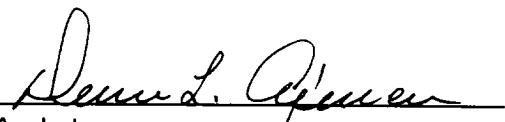
Client:	PNM	Project #:	93108-02
Sample ID:	TH - 1 @ 38.5'	Date Reported:	01-28-97
Laboratory Number:	A918	Date Sampled:	01-27-97
Chain of Custody No:	5060	Date Received:	01-27-97
Sample Matrix:	Soil	Date Extracted:	01-28-97
Preservative:	Cool	Date Analyzed:	01-28-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

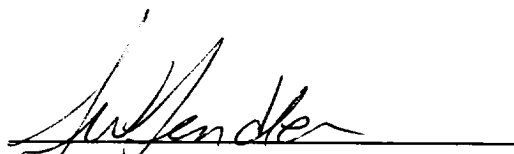
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1,390	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	1,390	0.2

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: J. F. Day "D".


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	PNM	Project #:	93108-02
Sample ID:	TH 1 @ 38.5'	Date Reported:	01-28-97
Laboratory Number:	A918	Date Sampled:	01-27-97
Chain of Custody:	5060	Date Received:	01-27-97
Sample Matrix:	Soil	Date Analyzed:	01-28-97
Preservative:	Cool	Date Extracted:	01-28-97
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	7,950	17.5
Toluene	63,200	16.7
Ethylbenzene	22,900	15.2
p,m-Xylene	49,400	21.6
o-Xylene	44,400	10.4
Total BTEX	187,900	

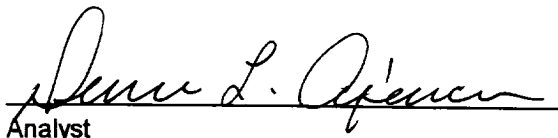
ND - Parameter not detected at the stated detection limit.

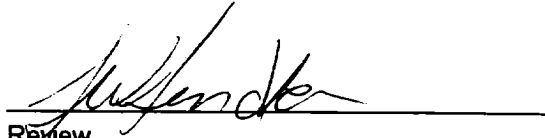
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	98 %
	Bromofluorobenzene	101 %

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1994.

Comments: J. F. Day "D".


Analyst


Review