

District I
P.O. Box 1000 Santa Fe, NM 87501
Donny E. Frost
DEPUTY OIL & GAS INSPECTOR

District II
P.O. Box 1000 Santa Fe, NM 87501
FEB 28 1997
Approval

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

RECEIVED
OCT 31 1996

OIL CON. DIV.
DIST. 3

Operator: PNM Gas Services (S&J Oil & Gas Co.) **Telephone:** 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Michael #1

Location: Unit: D Sec. 13 T. 30 N R. 11 W County San Juan

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type: BLM ☒ State ☐ Fee ☐ Other ☐

Pit Location: Pit dimensions: length 20 width 20 depth 4

(Attach diagram) Reference: wellhead ☒ other ☐

Footage from reference: 104'

Direction from reference: 35 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) 0

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) 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) : 0

Date Remediation Started:

4/23/96

Date Completed:

4/23/96

Remediation Method:

Excavation

☒

Approx. Cubic Yard

89

(Check all appropriate sections)

Landfarmed

☒

Amount Landfarmed (cubic yds)

59

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 pit size of 15'x23'x7' 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.

Ground Water Encountered:

No

☒

Yes

☐

Depth

Final Pit Closure Sampling:

Sample Location

5 pt. composite-4 side walls and center of pit bottom

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

Sample depth

7'

Sample date

4/23/96

Sample time

2:00:00 PM

Sample Results

Benzene (ppm)

0.0511

Total BTEX (ppm)

5.9733

Field headspace (ppm)

TPH

14.70

Method

8015A

Vertical Extent (ft)

Risk Assessment form attached

Yes

No

☒

Ground Water Sample:

Yes

No

☒

(If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

DATE

October 25, 1996

PRINTED NAME
AND TITLE

Maureen Gannon

Environmental Engineer

SIGNATURE

Maureen Gannon

Michael #1

4-23-96

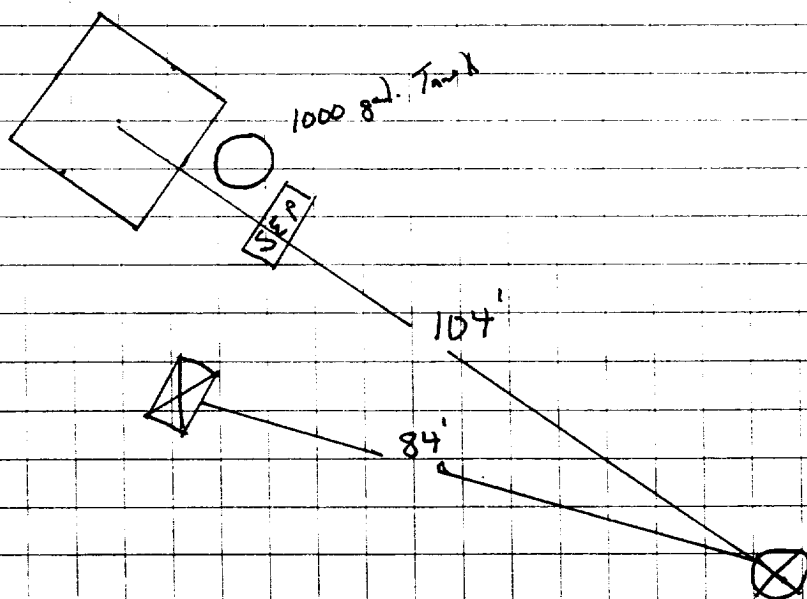
S & J Oil & Gas Co.

Sec. 13, T30N, R11W

795' FNL + 1010' FNL

Run # 10-42

35° West of North



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: *25-Apr-96*
COC No.: *4613*
Sample No. *10707*
Job No. *2-1000*

Project Name: *PNM Gas Services - Michael #1*
Project Location: *9604231400; 5pt. Composite, 4 Walls & Bottom, 7'*
Sampled by: *GC* Date: *23-Apr-96* Time: *14:00*
Analyzed by: *DC* Date: *24-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>14.7</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><5.0</i>	<i>ppm</i>	<i>2,000</i>	<i>2,038</i>	<i>1.9</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>101</i>	<i>101</i>	<i>(70-130)</i>	<i>0</i>	<i>20%</i>

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

Approved by: *DeL*

Date: *4/25/96*

P. O. BOX 2606 • FARMINGTON, NM 87499

- 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: *24-Apr-96*
COC No.: *4613*
Sample No. *10707*
Job No. *2-1000*

Project Name: *PNM Gas Services - Michael #1*
Project Location: *9604231400; 5pt. Composite, 4 Walls & Bottom, 7'*
Sampled by: *GC* Date: *23-Apr-96* Time: *14:00*
Analyzed by: *DC* Date: *24-Apr-96*
Type of Sample: *Soil*

Aromatic Volatile Organics

Component	Result	Units of Measure	Detection Limit	Units of Measure
<i>Benzene</i>	<i>51.1</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>866.0</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>477.0</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>3615.0</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>964.1</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>TOTAL</i>	<i>5973.3</i>	<i>ug/kg</i>		

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

Approved by: *[Signature]*
Date: *4/25/96*

P. O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

MICHAEL #1
S&J
Sec. 13-30N-11W

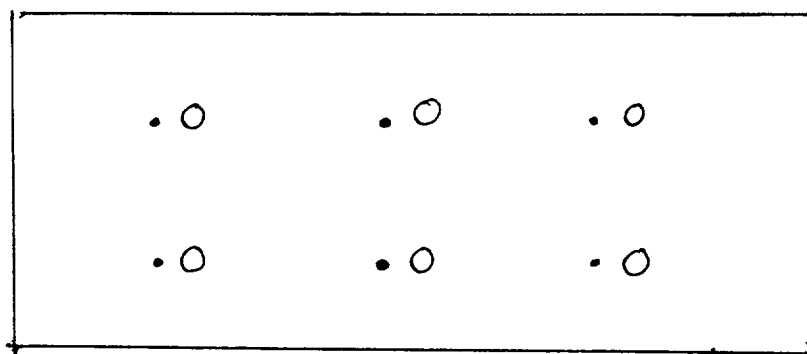
July 23, 1996

Land Farm: On Location
59 Yards

Composite Sample #: 9607230950

Soil Vapor Head-Space Reading = 8.6 ppm (PID)

Sample depths between 2" and 12"



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: *24-Jul-96*
COC No.: *4908*
Sample No. *11572*
Job No. *2-1000*

Project Name: *PNM Gas Services - Michael #1 Landfarm*
Project Location: *9607230950; 6pt. Composite, 2" - 12" depth*
Sampled by: *GC* Date: *23-Jul-96* Time: *9:50*
Analyzed by: *HR* Date: *24-Jul-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>11.7</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

Quality Assurance Report

DRO QC No.: 0479-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>2,000</i>	<i>1,798</i>	<i>10.1</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>98</i>	<i>100</i>	<i>(70-130)</i>	<i>2</i>	<i>20%</i>

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

Approved by: *JAG*
Date: *7/24/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -