

District I -
P O Box 1980, Hobbs, NM

District II,
P O Drawer DD, NM 88325

District III
1000 Rio Brazos Rd Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Denny L. Faust
DEPUTY OIL & GAS INSPECTOR

OIL CONSERVATION DIVISION

2040 South Pacheco Street
Santa Fe, New Mexico 87505

JUL 18 1997

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: Florance #41A

Location: Unit: J Sec. 21 T. 29 N R. 9 W County San Juan

Pit Type: Separator Dehydrator ☒ Other One inactive PNM pit.

Land Type: BLM ☒ State Fee Other No

Pit Location: Pit dimensions: length 21 width 21 depth 4

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 90'

Direction from reference: 60 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) | <u>10</u> |

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) | <u>0</u> |

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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) | <u>20</u> |

RANKING SCORE (TOTAL POINTS): 30

Date Remediation Started: 7/29/96 Date Completed: 8/1/96

Remediation Method: Excavation X Approx. Cubic Yard 431

(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds) 431

Other _____

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 pit size of 26'x28'x16' 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 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 16'

Sample date 7/30/96 Sample time 11:10:00 AM

Sample Results

Benzene (ppm) 0.5509

Total BTEX (ppm) *** 100.4372

Field headspace (ppm) _____

TPH 31.00 Method 8015A

Vertical Extent (ft) 16' 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

Denver Bearden

PRINTED NAME
AND TITLE

Denver Bearden
Administrator III



| | |
|---------------------------------------|---------------------------|
| Well Name: | Florance #41A |
| Well Legals: | Unit J, Sec 21, T29N, R9W |
| Pit Type: | Dehydrator |
| Horizontal Distance to Surface Water: | Less 200 ft |
| Groundwater Depth: | Less than 100 ft |

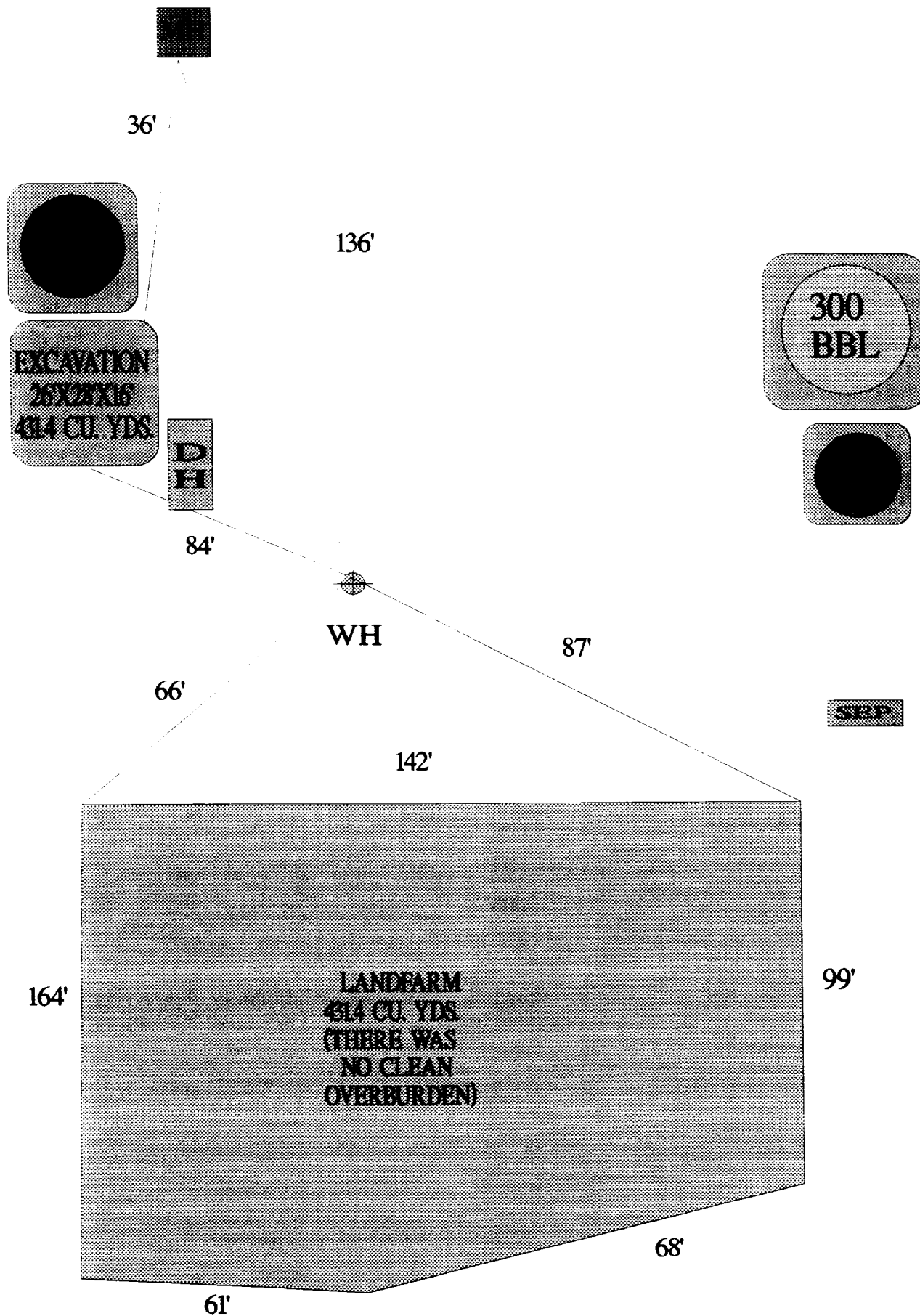
RISK ANALYSIS

PNM requests closure of the Florance #41A using a limited risk analysis of the site conditions.

1. PNM estimated groundwater to be at a depth of 35 ft. based upon elevation of site to the Largo Wash. (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 less than 200 ft.
4. PNM excavated 431 cu. yds. from the former pit. Vertical extent was determined using a hollow stem drilling rig. Bedrock was encountered at 16 ft. below ground surface.

Based upon the information provided above, PNM believes the Florance #41A 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.

FLORENCE #41A EXCAVATION
08/02/96



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: *2-Aug-96*
COC No.: *4735*
Sample No. *11638*
Job No. *2-1000*

Project Name: *PNM Gas Services - Florance #41A*
Project Location: *9607301110; Pit Excavation Composite Sample*
Sampled by: *RH* Date: *30-Jul-96* Time: *11:10*
Analyzed by: *DC/HR* Date: *2-Aug-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>31.0</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>2,221</i> | <i>11.1</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>93</i> | <i>99</i> | <i>(70-130)</i> | <i>5</i> | <i>20%</i> |

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

Approved by: *Ja G*
Date: *8/2/96*

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: *31-Jul-96*
COC No.: *4735*
Sample No. *11638*
Job No. *2-1000*

Project Name: *PNM Gas Services - Florance #41A*
Project Location: *9607301110; Pit Excavation Composite Sample*
Sampled by: *RH* Date: *30-Jul-96* Time: *11:10*
Analyzed by: *DC* Date: *31-Jul-96*
Sample Matrix: *Soil*

Aromatic Volatile Organics

| Component | Result | Units of Measure | Detection Limit | Units of Measure |
|---------------------|-----------------|------------------|-----------------|------------------|
| <i>Benzene</i> | <i>550.9</i> | <i>ug/kg</i> | <i>0.2</i> | <i>ug/kg</i> |
| <i>Toluene</i> | <i>22072.5</i> | <i>ug/kg</i> | <i>0.2</i> | <i>ug/kg</i> |
| <i>Ethylbenzene</i> | <i>6586.2</i> | <i>ug/kg</i> | <i>0.2</i> | <i>ug/kg</i> |
| <i>m,p-Xylene</i> | <i>57033.6</i> | <i>ug/kg</i> | <i>0.2</i> | <i>ug/kg</i> |
| <i>o-Xylene</i> | <i>14194.1</i> | <i>ug/kg</i> | <i>0.2</i> | <i>ug/kg</i> |
| <i>TOTAL</i> | <i>100437.2</i> | <i>ug/kg</i> | | |

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

Approved by: *[Signature]*
Date: *7/31/96*

Florence #41A

9-10-96

Amoco

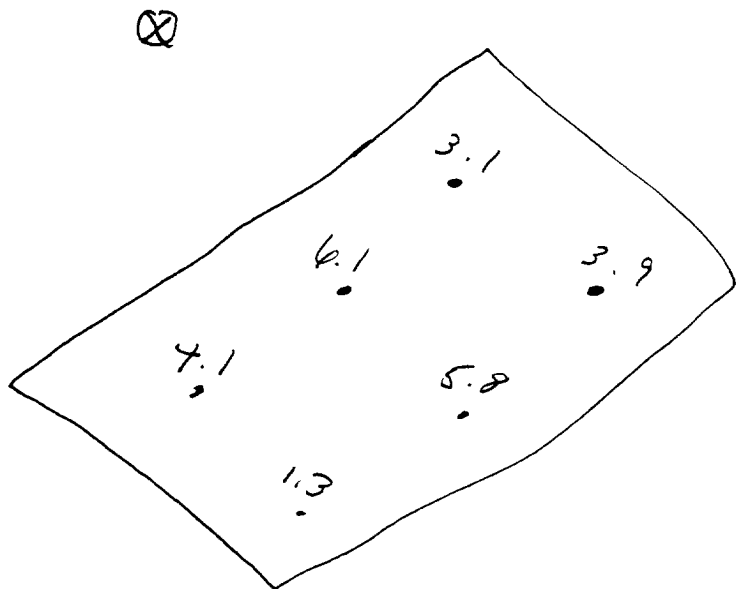
Sec. 21, 29N, 9W

Land Farm : On-location

Composite sample # 9609101220 bpt. comp.

Soil vapor head space PID reading: 16.8 ppm

2"-12" depth
sand



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: *12-Sep-96*
COC No.: *5013*
Sample No. *12095*
Job No. *2-1000*

Project Name: ***PNM Gas Services - Florance #41A Landfarm***
Project Location: ***9609101220; 6pt. Composite, 2"-12" depth***
Sampled by: GC Date: 10-Sep-96 Time: 12:20
Analyzed by: DC/HR Date: 12-Sep-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.: *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>104</i> | <i>3.6</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>96</i> | <i>95</i> | <i>(70-130)</i> | <i>1</i> | <i>20%</i> |

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

Approved by: *[Signature]*
Date: *9/12/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

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