

District I
P.O. Box 1980 Hobbs NM

District II
P.O. Drawer 100 Artesia NM 88221

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

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 AA #14A

Location: Unit: C Sec. 8 T. 30 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 20 width 20 depth 5

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 75'

Direction from reference: 30 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)

OIL CON. DIV.
DIST. 3

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

RECEIVED
APR 24 1997

Date Remediation Started:

6/20/96

Date Completed:

6/24/96

Remediation Method:

Excavation

X

Approx. Cubic Yard

203

(Check all appropriate sections)

Landfarmed

X

Amount Landfarmed (cubic yds)

203

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 18'x19'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.

*** Vertical extent at 80.5' provided BTEX at 36.04 ppm and TPH at 733 ppm. Bedrock was encountered at 80.5'. See attached risk analysis form and lab analysis.

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

6/21/96

Sample time

10:40:00 AM

Sample Results

Benzene (ppm)

0.0547

Total BTEX (ppm)

58.1347

Field headspace (ppm)

TPH

165.60

Method

8015A

Vertical Extent (ft)

80.5'

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 TITLE

Denver Bearden
Administrator III



Well Name:	Florance AA #14A
Well Legals:	Unit C, Sec 8, T30N, R9W
Pit Type:	Dehydrator
Horizontal Distance to Surface Water:	Greater than 1,000 ft
Groundwater Depth:	Greater than 100 ft

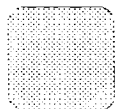
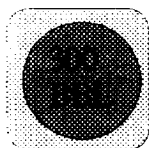
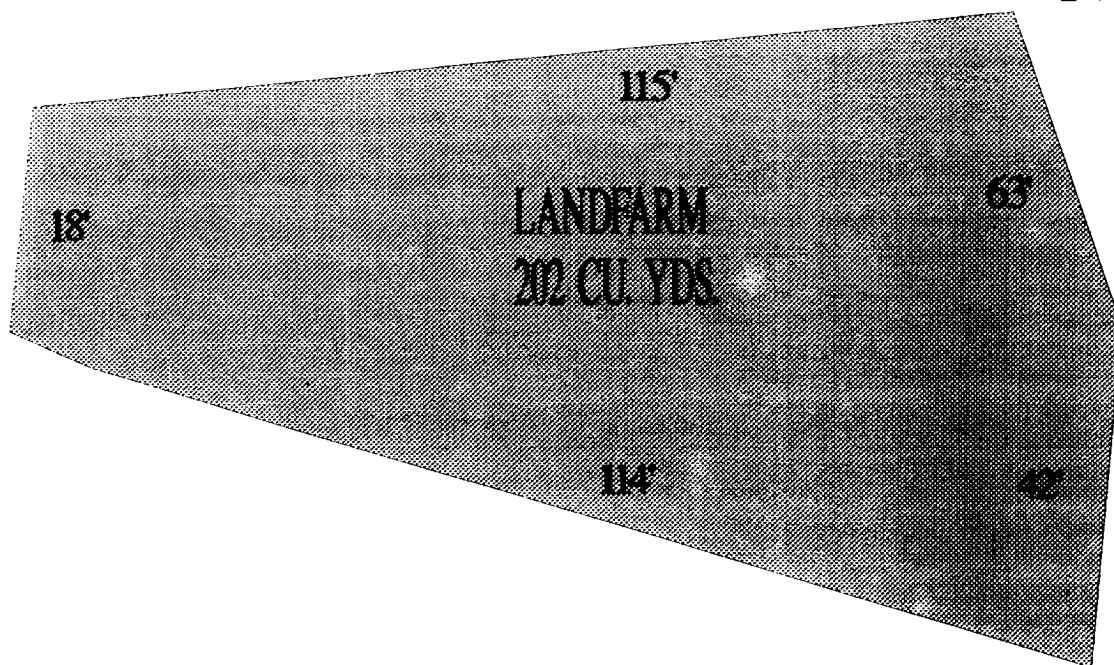
RISK ANALYSIS

PNM requests closure of the Florance AA #14A using a limited risk analysis of the site conditions.

1. PNM estimated groundwater to be at a depth of 125 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 202 cu. yds. from the former pit. Vertical extent was determined using a hollow stem drilling rig. Bedrock was encountered at 80.5 ft. below ground surface.

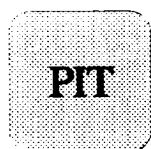
Based upon the information provided above, PNM believes the Florance AA #14A poses minimal risk to the environment. Subsurface lateral migration is limited based upon PNM's past experience in excavating 400 pits. Source removal minimizes the possibility of surface water contamination. Bedrock provides an impermeable layer between remaining contamination and groundwater. Vertical migration through bedrock to groundwater is highly unlikely.

FLORANCE #14A EXCAVATION
06/24/96

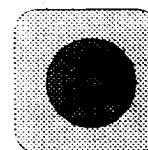


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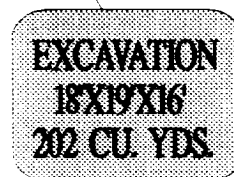
75'



S
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P



D
H



OFF: (505) 325-8786



LAB: (505) 325-5667

Diesel Range Organics

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

Date: *25-Jun-96*
COC No.: *4717*
Sample No. *11284*
Job No. *2-1000*

Project Name: *PNM Gas Services - Florance #14A*
Project Location: *9606211040; Pit Excavation Composite Sample*
Sampled by: *RH* Date: *21-Jun-96* Time: *10:40*
Analyzed by: *DC* Date: *25-Jun-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>165.6</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

Quality Assurance Report

DRO QC No.: *0475-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>1,898</i>	<i>5.1</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>103</i>	<i>94</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: *6/25/96*

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: *25-Jun-96*
COC No.: *4717*
Sample No. *11284*
Job No. *2-1000*

Project Name: *PNM Gas Services - Florance #14A*
Project Location: *9606211040; Pit Excavation Composite Sample*
Sampled by: *RH* Date: *21-Jun-96* Time: *10:40*
Analyzed by: *DC* Date: *24-Jun-96*
Sample Matrix: *Soil*

Aromatic Volatile Organics

Component	Result	Units of Measure	Detection Limit	Units of Measure
<i>Benzene</i>	<i>54.7</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>3528.7</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>3272.5</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>42328.5</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>8950.3</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>TOTAL</i>	<i>58134.7</i>	<i>ug/kg</i>		

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

Approved by: *[Signature]*
Date: *6/25/96*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Florance 14A
Amoco
Sec. 08-30N-09W

July 30, 1996

Land Farm: On Location
202 Yards

Composite Sample #: 9607311600

Soil Vapor Head-Space Reading = 17.4 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: *2-Aug-96*
 COC No.: *4945*
 Sample No. *11649*
 Job No. *2-1000*

Project Name: *PNM Gas Services - Florance 14A Landfarm*
 Project Location: *9607301600; 6pt. Composite, 2"-12" depth*
 Sampled by: *GC* Date: *30-Jul-96* Time: *16:00*
 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>14.2</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

Quality Assurance ReportDRO 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 ChromatographyApproved by: Date: *8/2/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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

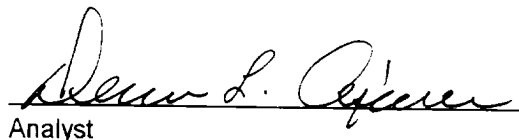
Client:	Public Service Co. of NM.	Project #:	93108-02
Sample ID:	TH - 1 @ 80.5'	Date Reported:	01-07-97
Laboratory Number:	A890	Date Sampled:	01-02-97
Chain of Custody No:	5050	Date Received:	01-02-97
Sample Matrix:	Soil	Date Extracted:	01-07-97
Preservative:	Cool	Date Analyzed:	01-07-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

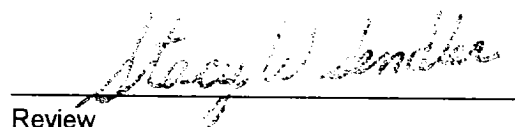
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	733	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	733	0.2

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: **Florance AA #14A.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Public Service Co. of NM.	Project #:	93108-02
Sample ID:	TH - 1 @ 80.5'	Date Reported:	01-08-97
Laboratory Number:	A890	Date Sampled:	01-02-97
Chain of Custody:	5050	Date Received:	01-02-97
Sample Matrix:	Soil	Date Analyzed:	01-07-97
Preservative:	Cool	Date Extracted:	01-07-97
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	100	8.8
Toluene	8,950	8.4
Ethylbenzene	2,420	7.6
p,m-Xylene	19,700	10.8
o-Xylene	4,870	5.2
Total BTEX	36,040	

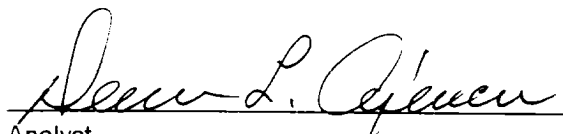
ND - Parameter not detected at the stated detection limit.

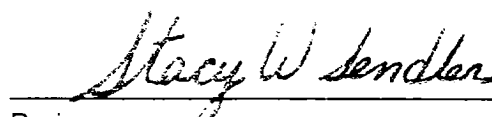
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	101 %
	Bromofluorobenzene	95 %

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: Florance AA #14A.


Analyst


Review