

District I
P.O. Box 1986, Hobbs, NM

District II
P.O. Box 1986, Hobbs, NM

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 E. Tamm
DEPUTY OIL & GAS INSPECTOR

OIL CONSERVATION DIVISION

2040 South Pacheco Street
Santa Fe, New Mexico 87505

FEB 28 1997

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OCT 31 1996

OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (Amoco) **Telephone:** 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Florance #2

Location: Unit: B Sec. 20 T. 30 N R. 9 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: 54'

Direction from reference: 45 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: <u>6/14/96</u>		Date Completed: <u>6/19/96</u>	
Remediation Method: (Check all appropriate sections)	Excavation <u>X</u>	Approx. Cubic Yard <u>451</u>	
	Landfarmed <u>X</u>	Amount Landfarmed (cubic yds) <u>421</u>	
	Other _____		
Remediation Location: (i.e., landfarmed onsite, name and location of offsite facility)	Onsite <u>X</u>	Offsite _____	
Backfill Material Location: _____			
General Description of Remedial Action: Excavated contaminated soil to pit size of 29'x21'x20' 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 <u><input checked="" type="checkbox"/></u>	Yes <u><input type="checkbox"/></u>	Depth _____

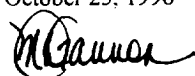
Final Pit Closure Sampling: (if multiple samples, attach sample result and diagram of sample locations and depths.)	Sample Location <u>5 pt composite-4 side walls and center of pit bottom</u>

Sample depth <u>20'</u>	
Sample date <u>6/17/96</u>	Sample time <u>1:30:00 PM</u>
Sample Results	
Benzene (ppm)	<u>0.0082</u>
Total BTEX (ppm)	<u>0.9311</u>
Field headspace (ppm)	_____
TPH <u>< 5.00</u>	Method <u>8015A</u>
Vertical Extent (ft) _____	Risk Assessment form attached Yes <u><input type="checkbox"/></u> No <u><input checked="" type="checkbox"/></u>
Ground Water Sample: Yes <u><input type="checkbox"/></u> No <u><input checked="" type="checkbox"/></u>	(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

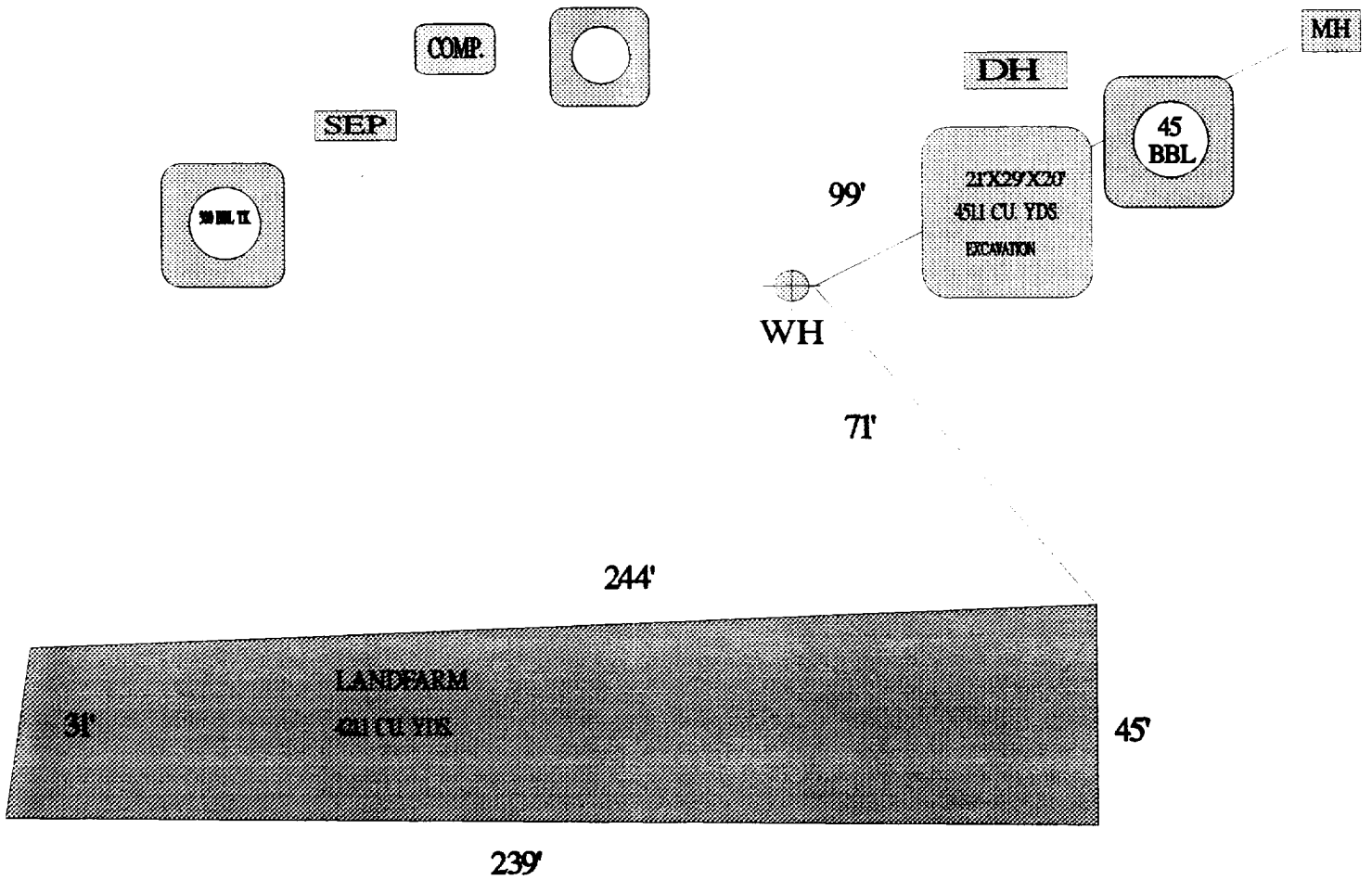
DATE October 25, 1996

SIGNATURE



PRINTED NAME
AND TITLE

Maureen Gannon
Environmental Engineer



FLORANCE #2 EXCAVATION — 06/19/96

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: *18-Jun-96*
COC No.: *4713*
Sample No. *11204*
Job No. *2-1000*

Project Name: ***PNM Gas Services - Florance #2***
Project Location: ***9606171330; Pit Excavation Composite***
Sampled by: RH Date: *17-Jun-96* Time: *13:30*
Analyzed by: HR Date: *18-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><5.0</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>1,762</i>	<i>11.9</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>99</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: *Deff*

Date: *6/19/96*

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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: *18-Jun-96*
COC No.: *4713*
Sample No.: *11204*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Florance #2*
Project Location: *9606171330; Pit Excavation Composite*
Sampled by: *RH* Date: *17-Jun-96* Time: *13:30*
Analyzed by: *HR* Date: *18-Jun-96*
Sample Matrix: *Soil*

Laboratory Analysis

<i>Component</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Benzene</i>	8.2	ug/kg	0.2	ug/kg
<i>Toluene</i>	283.2	ug/kg	0.2	ug/kg
<i>Ethylbenzene</i>	53.2	ug/kg	0.2	ug/kg
<i>m,p-Xylene</i>	473.0	ug/kg	0.2	ug/kg
<i>o-Xylene</i>	113.4	ug/kg	0.2	ug/kg
<i>TOTAL</i>	931.1	ug/kg		

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

Approved by: *[Signature]*
Date: *6/19/96*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-8786



LAB: (505) 325-5667

Date Analyzed: 18-Jun-96

Internal QC No.: 0444-STD

Surrogate QC No.: 0445-STD

Reference Standard QC No.: 0355-STD

Method Blank

Analyte	Result	Unit of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Analyte	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20.0	17.6	12	15%
Toluene	ppb	20.0	18.1	10	15%
Ethylbenzene	ppb	20.0	18.5	8	15%
m,p-Xylene	ppb	40.0	36.3	9	15%
o-Xylene	ppb	20.0	18.7	6	15%

Matrix Spike

Analyte	1- Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	104	100	(39-150)	3	20%
Toluene	106	102	(46-148)	3	20%
Ethylbenzene	108	105	(32-160)	2	20%
m,p-Xylene	105	101	(35-145)	3	20%
o-Xylene	102	98	(35-145)	2	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovered	(70-130)	
11204-4713	99	

S1: Fluorobenzene

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

FLORANCE #2
Amoco
Sec. 20-30N-09W

July 24, 1996

Land Farm: On Location
451 Yards

Composite Sample #: 9607241130

Soil Vapor Head-Space Reading = 8.1 ppm (PID)

Sample depths between 2" and 12"



• 7.2	• 0	• 11.1
• 6.1	• 3.2	• 9.6

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: *26-Jul-96*
COC No.: *4925*
Sample No. *11591*
Job No. *2-1000*

Project Name: *PNM Gas Services - Florance #2 Landfarm*
Project Location: *9607241130; 6pt. Composite, 2"-12" depth*
Sampled by: *GC* Date: *24-Jul-96* Time: *11:30*
Analyzed by: *DC* Date: *26-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><5.0</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>1,977</i>	<i>1.1</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>111</i>	<i>121</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: *7/26/96*

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