

District I
P.O. Box 1980 Hobbs, NM

District I
P.O. Drawer DD Artesia, NM 88221

District I
1000 Rio Brazos Rd. Aztec, NM 87410

JUL 1 8 1997

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

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

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Florance H #37A

Location: Unit: J Sec: 6 T: 30 N R: 8 W County: San Juan

Pit Type: Separator Dehydrator ☒ Other No

Land Type: BLM ☒ State Fee Other No

Pit Location: Pit dimensions: length 20 width 20 depth 3

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 36'

Direction from reference: 40 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

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

Date Remediation Started: 5/2/96 Date Completed: 5/6/96

Remediation Method: Excavation X Approx. Cubic Yard 666

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds) 666

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 37'x27'x18' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil will be aerated by plowing and disking until soil meets regulatory levels.

*** Vertical extent at 62' provided BTEX at 7.01 ppm and TPH at 1.3 ppm. See attached risk analysis form and lab analysis.

Ground Water Encountered: No ✓ Yes _____ Depth _____

Final Pit Closure Sampling:

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

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

Sample depth 18'

Sample date 5/6/96 Sample time 11:40:00 AM

Sample Results

Benzene (ppm) 0.5809

Total BTEX (ppm) *** 63.6092

Field headspace (ppm) _____

TPH 195.70 Method 8015A

Vertical Extent (ft) 62' 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 H #37A
Well Legals:	Unit J, Sec 6, T30N, R8W
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 H #37A using a limited risk analysis of the site conditions.

1. PNM estimated groundwater to be at a depth of 215 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 666 cu. yds. from the former pit. Vertical extent was determined using a hollow stem drilling rig. Bedrock was encountered at 62 ft. below ground surface.

Based upon the information provided above, PNM believes the Florance H #37A 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 H #37 A

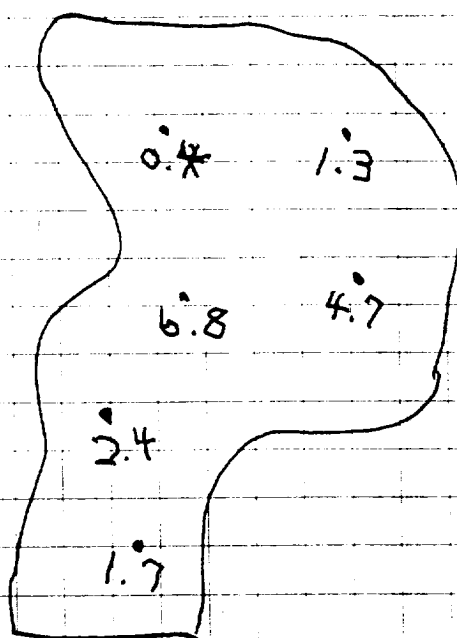
7-1-96

Sec. 6-30N-8W

Amoco

Soil Vapor Head Space: 54.8 ppm

Composite # 960701300



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: *7-May-96*
COC No.: *4623*
Sample No. *10811*
Job No. *2-1000*

Project Name: ***PNM Gas Services - Florance H 37A***
Project Location: ***9605061140; Composite of Pit Excavation***
Sampled by: GC Date: *6-May-96* Time: *11:40*
Analyzed by: DC Date: *7-May-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>	195.7	mg/kg	5.0	mg/kg

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>	<5.0	ppm	2,000	2,120	6.0	15%

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>	82	77	(70-130)	4	20%

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

Approved by: 

Date: *5/7/96*

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: *7-May-96*
COC No.: *4623*
Sample No. *10811*
Job No. *2-1000*

Project Name: ***PNM Gas Services - Florance H 37A***
Project Location: ***9605061140; Composite of Pit Excavation***

Sampled by: GC Date: *6-May-96* Time: *11:40*
Analyzed by: DC Date: *7-May-96*
Type of Sample: *Soil*

Aromatic Volatile Organics

<i>Component</i>	<i>Result</i>	<i>Units of Measure</i>	<i>Detection Limit</i>	<i>Units of Measure</i>
<i>Benzene</i>	580.9	ug/kg	0.2	ug/kg
<i>Toluene</i>	5240.9	ug/kg	0.2	ug/kg
<i>Ethylbenzene</i>	2408.2	ug/kg	0.2	ug/kg
<i>m,p-Xylene</i>	44466.8	ug/kg	0.2	ug/kg
<i>o-Xylene</i>	10912.4	ug/kg	0.2	ug/kg
	<i>TOTAL</i>	63609.2		ug/kg

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

Approved by: *DAF*
Date: *5/7/96*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

MH

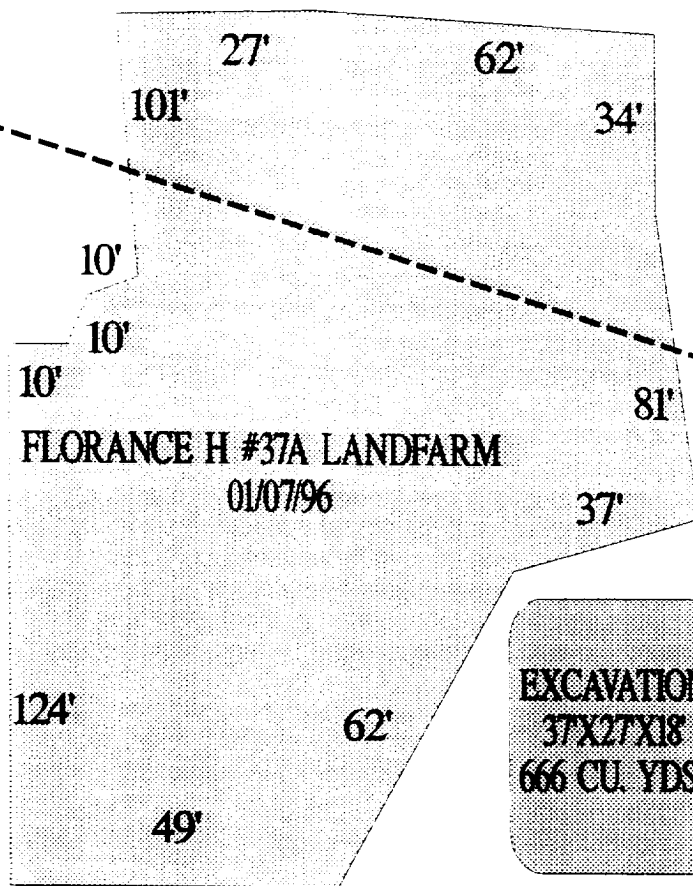
DH

N

PIT

PIT

MH



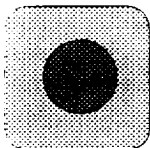
EXCAVATION
37'X27'X18'
666 CU. YDS.

DH

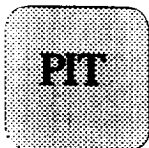
MH



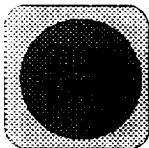
WH



S
E
P



PIT



FLORANCE H #37A EXCAVATION
01/07/96

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-Jul-96*
COC No.: *4698*
Sample No. *11381*
Job No. *2-1000*

Project Name: *PNM Gas Services - Florance H #37A Landfarm*
Project Location: *9607011300; 6pt. Composite, 2"-12" deep*
Sampled by: *GC* Date: *1-Jul-96* Time: *13:00*
Analyzed by: *DC* Date: *2-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>10.2</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>1,796</i>	<i>10.2</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>117</i>	<i>112</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: *Jack*
Date: *7/2/96*

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

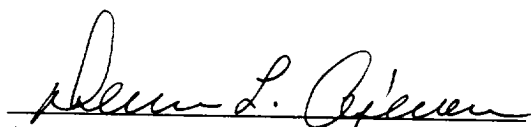
Client:	Public Service Co. of NM.	Project #:	93108-02
Sample ID:	TH - 1 @ 62'	Date Reported:	01-07-97
Laboratory Number:	A875	Date Sampled:	12-30-96
Chain of Custody No:	5045	Date Received:	12-30-96
Sample Matrix:	Soil	Date Extracted:	01-07-97
Preservative:	Cool	Date Analyzed:	01-07-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

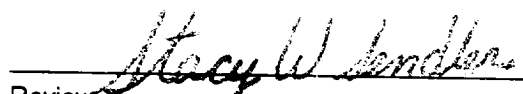
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.3	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	1.3	0.2

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 H #37A.**


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 @ 62'	Date Reported:	01-08-97
Laboratory Number:	A875	Date Sampled:	12-30-96
Chain of Custody:	5045	Date Received:	12-30-96
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	1,330	8.8
Toluene	323	8.4
Ethylbenzene	1,750	7.6
p,m-Xylene	3,300	10.8
o-Xylene	310	5.2
Total BTEX	7,010	

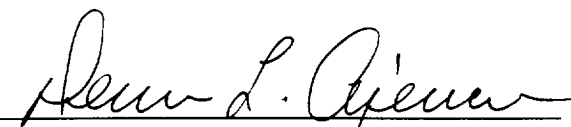
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	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 H #37A.


Analyst


Review