

District I
P.O. Box 1980, Hobbs, NM

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

District III
1000 Rio Brazos Rd. Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco Street
Santa Fe, New Mexico 87505

*Risk
back*

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APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

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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 #27A			
Location:	Unit <u>E</u>	Sec <u>26</u>	T <u>29 N</u> R <u>9 W</u> County <u>San Juan</u>
Pit Type:	Separator <input type="checkbox"/>	Dehydrator <input checked="" type="checkbox"/>	Other _____
Land Type:	BLM <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Fee <input type="checkbox"/> Other _____
Pit Location:	Pit dimensions: length <u>18</u> ' width <u>18</u> ' depth <u>3</u> '		
(Attach diagram)	Reference: wellhead <input checked="" type="checkbox"/> other _____		
	Footage from reference: <u>75</u> '		
	Direction from reference: <u>5</u> Degrees <input checked="" type="checkbox"/> East <input type="checkbox"/> North <input type="checkbox"/> South <input checked="" type="checkbox"/> West of _____		
Depth to Ground Water:	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points) <u>0</u>		
<small>(Vertical distance from contaminants to seasonal high water elevation of ground water)</small>			
Wellhead Protection Area:	Yes (20 points) No (0 points) <u>0</u>		
<small>(Less than 200 feet from a private domestic water source, or; less than 1,000 feet from all other water sources)</small>			
Distance to Surface Water:	Less than 200 feet (20 points) 200 feet to 1,000 feet (10 points) Greater than 1,000 feet (0 points) <u>0</u>		
<small>(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)</small>			
RANKING SCORE (TOTAL POINTS):			<u>0</u>

Florance #27A

Date Remediation Started: 07/01/1999

Date Completed: 07/01/1999

Remediation Method:

Excavation

☒

Approx. Cubic Yard

156

(Check all appropriate sections)

Landfarmed

☒

Amount Landfarmed (cubic yds)

126

Other

30 cu. yds. overburden

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 a pit size of 22' X 24' X 8' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil was aerated by disking/plowing until soil met regularoy levels.

*** Sandstone encountered at 8'. See attached risk analysis form.

Ground Water Encountered:

No



Yes



Depth

Final Pit Closure Sampling:

Sample Location

5 pt. composite - bottom.

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

Sample depth

8'

Sample date

07/01/1999

Sample time

7:45:00 AM

Sample Results

Benzene (ppm)

1.4

Total BTEX (ppm)

71.7 ***

Field headspace (ppm)

TPH (ppm)

1260.00

Method

8015B

Vertical Extent (ft)

Risk Analysis form attached Yes



No

Ground Water Sample:

Yes



No

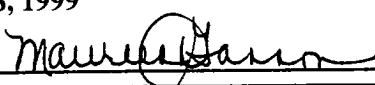


(If yes, see attached Groundwater Site Summary Report)

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

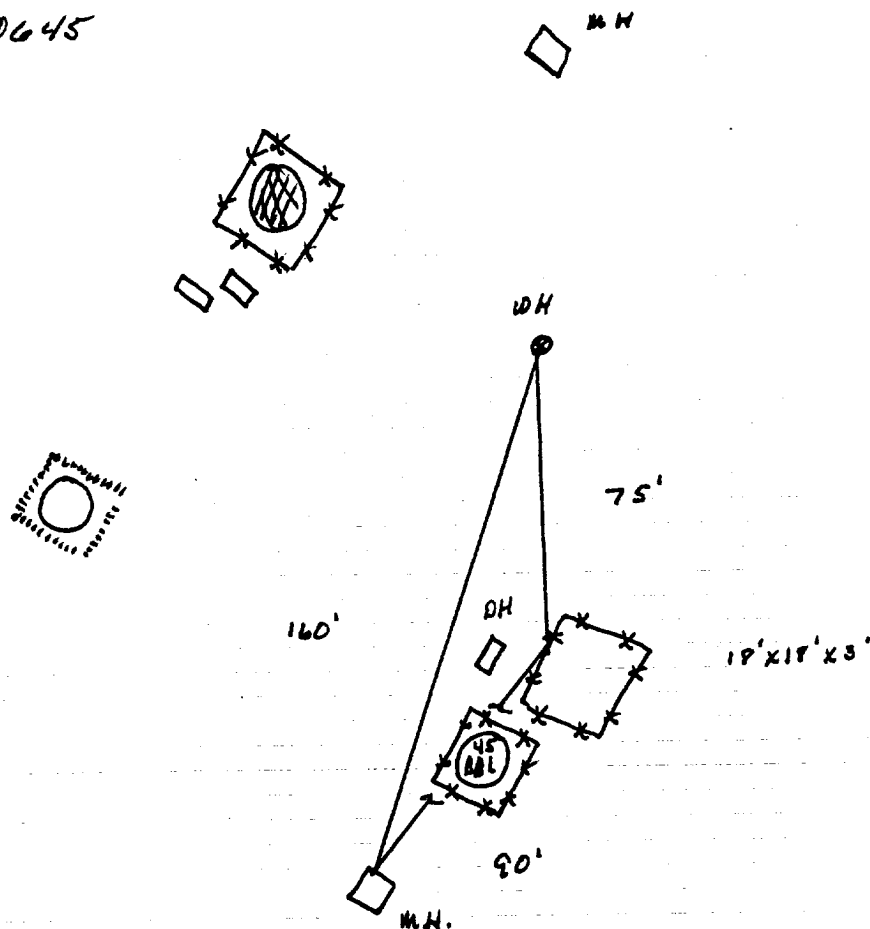
DATE October 28, 1999

SIGNATURE

PRINTED NAME Maureen Gannon
AND TITLE Project Manager

Florence #27A
 (E) 26-29N-9W
 AMOCO
 7-1-84 @ 0645
 5° E of S

↑
N

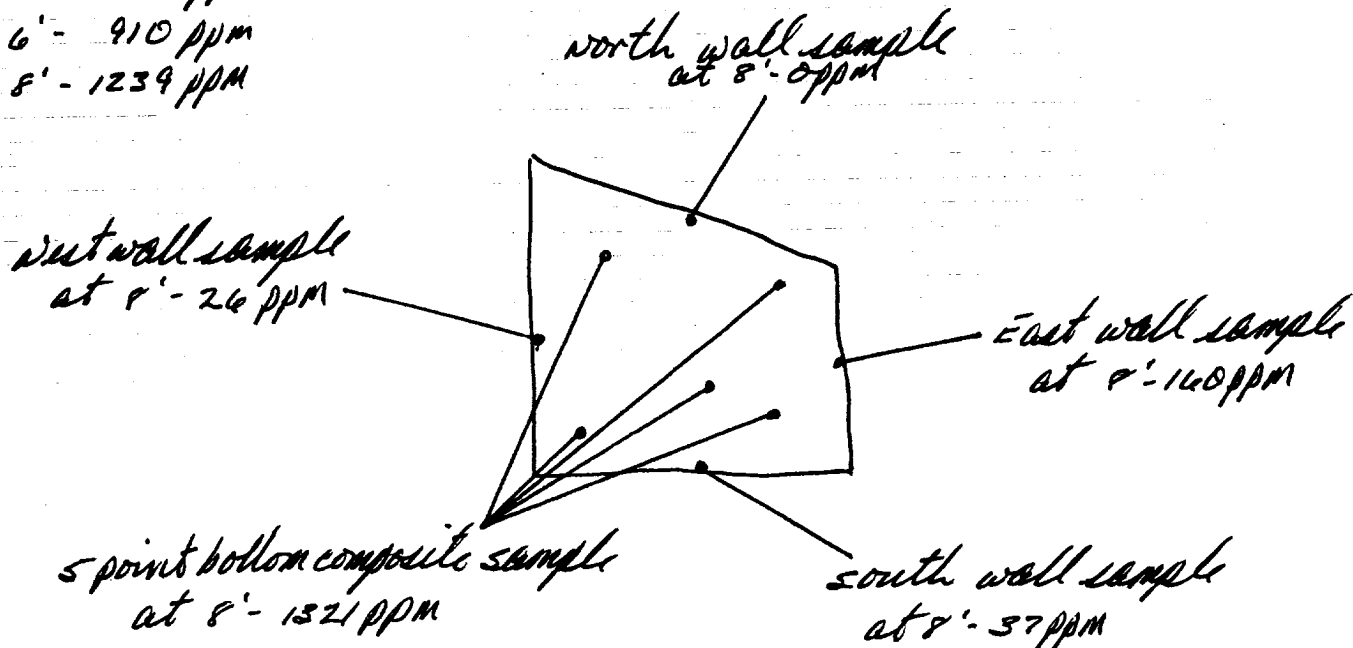


Excavation Sampling

22' (N+S) x 24' (E+W) x 8' (D)
 Field headspace: 106 (walls)

PID Readings

3' - 603 ppm
 6' - 910 ppm
 8' - 1239 ppm



not to scale

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 19-Jul-99

CLIENT: PNM - Public Service Company of NM
Project: Florance #27A & #25
Lab Order: 9907004

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

OFF: (505) 325-5667



LAB: (505) 325-1556

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ANALYTICAL REPORT

Date: 19-Jul-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Florance #27A
Work Order:	9907004	Client Sample ID:	9907010745; 5pt. Bottom Comp
Lab ID:	9907004-01A	Matrix:	SOIL
Project:	Florance #27A & #25	Collection Date:	7/1/99 7:45:00 AM
		COC Record:	7643

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	1260	25		mg/Kg	1	7/14/99
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DC
Benzene	1400	500		µg/Kg	500	7/9/99
Toluene	16000	1000		µg/Kg	500	7/9/99
Ethylbenzene	5300	500		µg/Kg	500	7/9/99
m,p-Xylene	38000	1000		µg/Kg	500	7/9/99
o-Xylene	11000	500		µg/Kg	500	7/9/99

71700
71.70 ppm

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 19-Jul-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Florance #27A
Work Order:	9907004	Client Sample ID:	9907010750; 4pt. Wall Comp
Lab ID:	9907004-02A	Matrix:	SOIL
Project:	Florance #27A & #25	Collection Date:	7/1/99 7:50:00 AM
		COC Record:	7643

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	1410	25		mg/Kg	1	7/14/99

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

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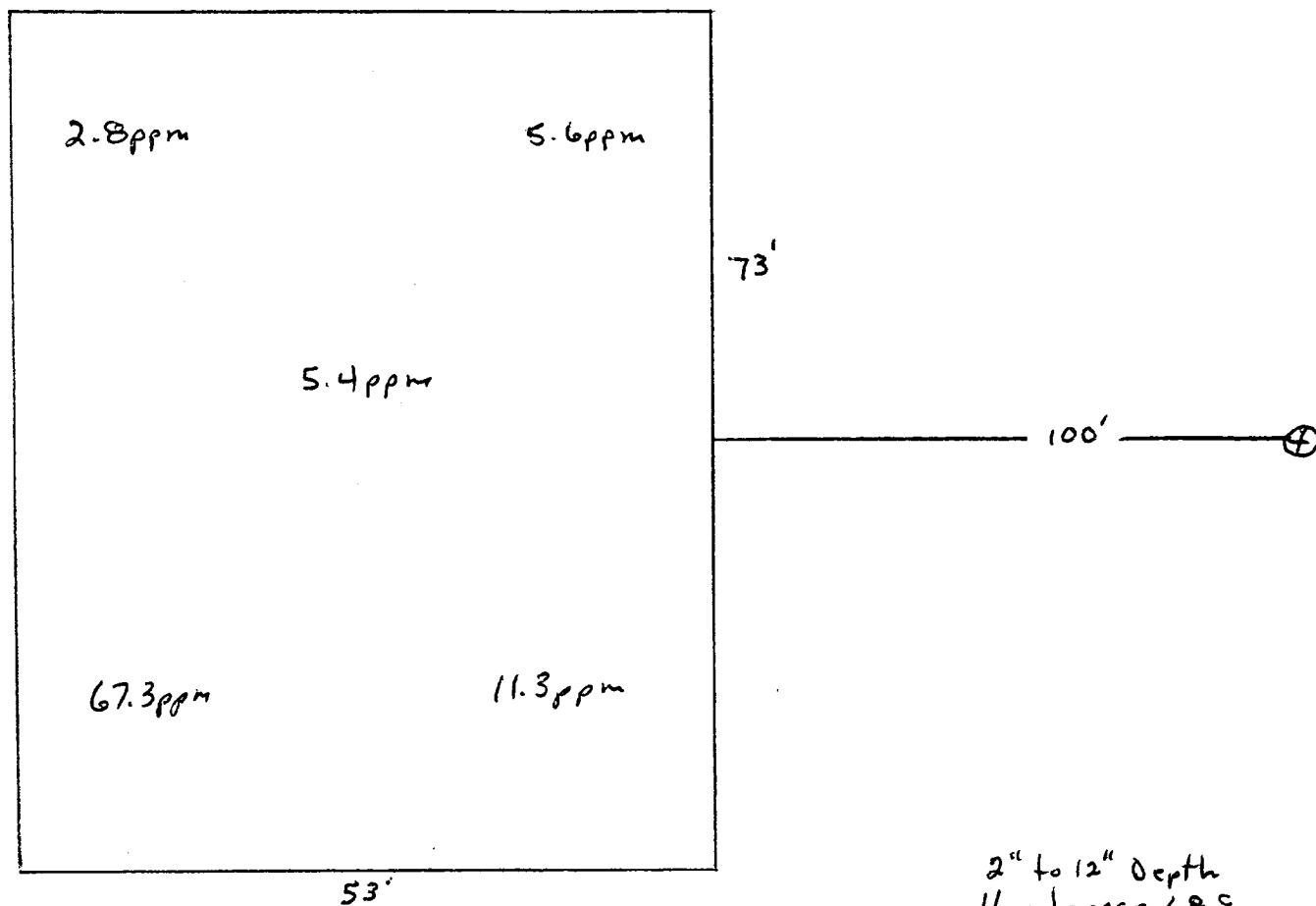
Surr: - Surrogate

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Florange 27A
Sec-26 T-29N R-9W ULE
Amoco

Land farm Drawing

App 126 cu. yds



2" to 12" Depth
Headspace 68.9 ppm
Sample # 9908061500

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 11-Aug-99

CLIENT: PNM - Public Service Company of NM
Project: PNM Pit Remediation Landfarms
Lab Order: 9908018

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 11-Aug-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Florance 27A LF
Work Order:	9908018	Client Sample ID:	9908061500; 5pt. Composite
Lab ID:	9908018-02A	Matrix:	SOIL
Project:	PNM Pit Remediation Landfarms	Collection Date:	08/06/1999 3:00:00 PM
		COC Record:	7805

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	510	50		mg/Kg	2	08/09/1999

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499



Environmental Services

Well Name:	Florance #27A
Well Legals:	Sec 26, T29N, R9W, Unit E
Pit Type:	Dehydrator
Horizontal Distance to Surface Water:	Greater than 1,000 feet
Groundwater Depth:	Greater than 100 feet

RISK ANALYSIS

PNM requests closure of their former pit on the Florance #27A well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 244 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Blanco Canyon, NM series 7.5 minute topographic map.)
2. PNM excavated 156 cubic yards of soil from the former pit. Source removal minimizes the possibility of surface water contamination.
3. Sandstone was encountered at 8 feet below ground surface. Bedrock/sandstone provides a barrier between remaining contamination and groundwater. Vertical migration through bedrock or sandstone to groundwater is unlikely.
4. PNM excavated and performed remediation to the maximum depth and horizontal extent practicable.

PNM believes that their former pit on the Florance #27A well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 1,000 pits.