

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

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

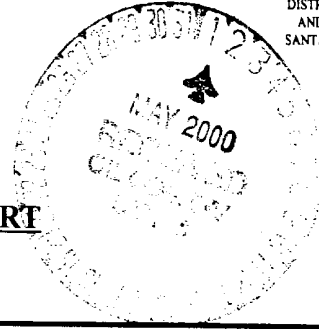
District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco Street
Santa Fe, New Mexico 87505

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



Risk
back

PIT REMEDIATION AND CLOSURE REPORT

Operator: <u>PNM Gas Services (Burlington)</u> Telephone: <u>324-3764</u>										
Address: <u>603 W. Elm Street Farmington, NM 87401</u>										
Facility or Well Name: <u>Sammons #2E</u>										
Location:	Unit <u>I</u> Sec <u>32</u> T <u>30 N</u> R <u>12 W</u> County <u>San Juan</u>									
Pit Type:	Separator <input checked="" type="checkbox"/> Dehydrator <input type="checkbox"/> Other _____									
Land Type:	BLM <input type="checkbox"/> State <input type="checkbox"/> Fee <input checked="" type="checkbox"/> Other _____									
Pit Location:	Pit dimensions: length <u>20'</u> width <u>20'</u> depth <u>3'</u>									
(Attach diagram)	Reference: wellhead <input checked="" type="checkbox"/> other _____									
	Footage from reference: <u>90'</u>									
	Direction from reference: <u>15</u> Degrees <input checked="" type="checkbox"/> East North <input type="checkbox"/> of <input type="checkbox"/> West South <input checked="" type="checkbox"/>									
Depth to Ground Water:	<table style="width:100%; border: none;"> <tr> <td style="width: 50%; border: none;">Less than 50 feet</td> <td style="width: 20%; border: none;">(20 points)</td> <td style="width: 30%; border: none;"></td> </tr> <tr> <td style="border: none;">50 feet to 99 feet</td> <td style="border: none;">(10 points)</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">Greater than 100 feet</td> <td style="border: none;">(0 points)</td> <td style="border: none; text-align: right;"><u>10</u></td> </tr> </table> <small>(Vertical distance from contaminants to seasonal high water elevation of ground water)</small>	Less than 50 feet	(20 points)		50 feet to 99 feet	(10 points)		Greater than 100 feet	(0 points)	<u>10</u>
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:	<table style="width:100%; border: none;"> <tr> <td style="width: 50%; border: none;">Yes</td> <td style="width: 20%; border: none;">(20 points)</td> <td style="width: 30%; border: none;"></td> </tr> <tr> <td style="border: none;">No</td> <td style="border: none;">(0 points)</td> <td style="border: none; text-align: right;"><u>0</u></td> </tr> </table> <small>(Less than 200 feet from a private domestic water source, or, less than 1,000 feet from all other water sources)</small>	Yes	(20 points)		No	(0 points)	<u>0</u>			
Yes	(20 points)									
No	(0 points)	<u>0</u>								
Distance to Surface Water:	<table style="width:100%; border: none;"> <tr> <td style="width: 50%; border: none;">Less than 200 feet</td> <td style="width: 20%; border: none;">(20 points)</td> <td style="width: 30%; border: none;"></td> </tr> <tr> <td style="border: none;">200 feet to 1,000 feet</td> <td style="border: none;">(10 points)</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">Greater than 1,000 feet</td> <td style="border: none;">(0 points)</td> <td style="border: none; text-align: right;"><u>0</u></td> </tr> </table> <small>(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)</small>	Less than 200 feet	(20 points)		200 feet to 1,000 feet	(10 points)		Greater than 1,000 feet	(0 points)	<u>0</u>
Less than 200 feet	(20 points)									
200 feet to 1,000 feet	(10 points)									
Greater than 1,000 feet	(0 points)	<u>0</u>								
RANKING SCORE (TOTAL POINTS):										
<u>10</u>										

Sammons #2E

Date Remediation Started: 04/15/1997 Date Completed: 04/16/1997

Remediation Method: Excavation Approx. Cubic Yard 322
Landfarmed Amount Landfarmed (cubic yds) 322
Other _____
(Check all appropriate sections)

Remediation Location: Onsite _____ Offsite Tierra Environmental, Crouch Mesa, Farmington, NM
(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 23' X 21' X 18' and transported soil to an offsite commercial landfarm.

*** Bedrock encountered at 40'. See attached risk analysis form and laboratory analysis.

Ground Water Encountered: No Yes _____ Depth _____

Final Pit Closure Sampling:

Sample Location Bottom of excavation.

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

Sample depth 22'

Sample date 04/15/1997 Sample time 11:40:00 AM

Sample Results

Benzene (ppm) 2.941

Total BTEX (ppm) 363.132

Field headspace (ppm) _____

TPH (ppm) 531.00 Method 8015A

Vertical Extent (ft) 40' 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

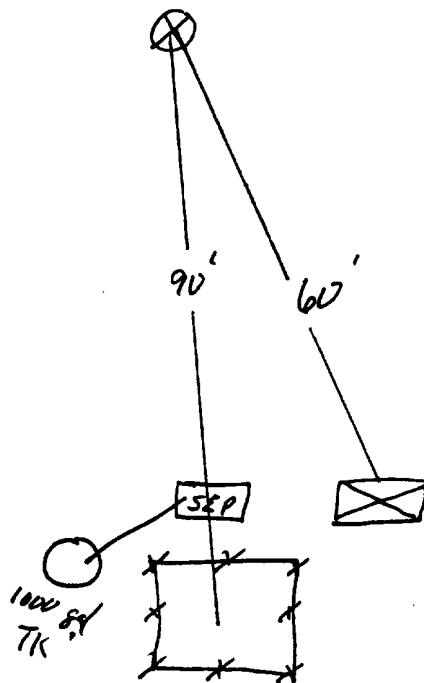
DATE April 24 2000

Sammon #2E
Burlington Resources
Sec. 32, 30N, 12W, I

4-15-97

Start of excavation:

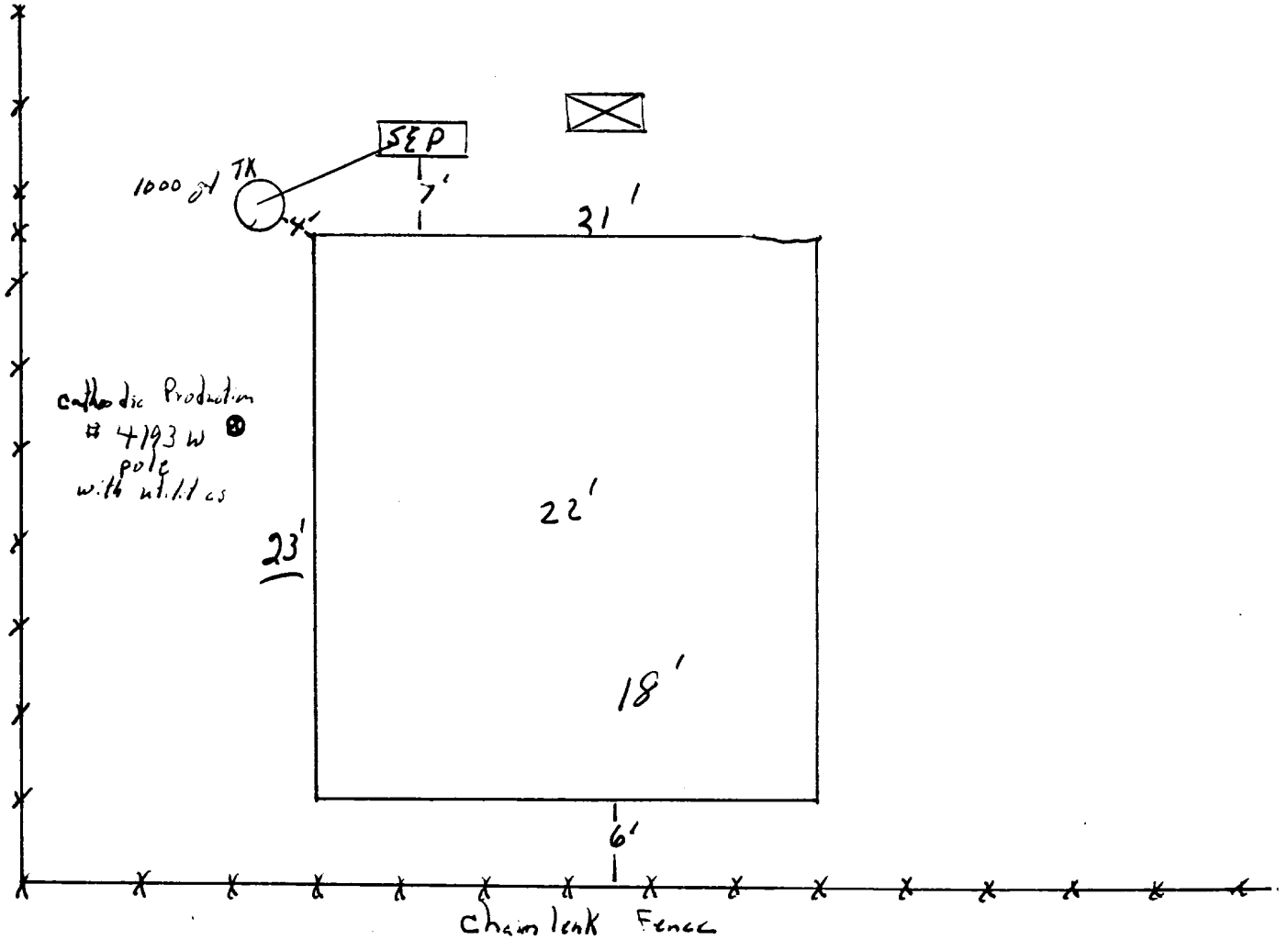
75° E of S



Sammon #2E
Burlington Resources
Sec. 37, 30N, 12W, I

4-15-97

End of excavation:



Southside River Rd

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

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

Date: *22-Apr-97*
 COC No.: *5869*
 Sample No.: *14202*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon #2E*
 Project Location: *9704151140; Bottom @ 22'*
 Sampled by: *GC* Date: *15-Apr-97* Time: *11:40*
 Analyzed by: *HR* Date: *22-Apr-97*
 Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	<i>531</i>	<i>mg/kg</i>	<i>5</i>	<i>mg/kg</i>

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

DRO QC No.: 0519-STD

Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	<i>ND</i>	<i>ppm</i>	<i>100</i>	<i>111</i>	<i>10.1</i>	<i>15%</i>

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>99</i>	<i>99</i>	<i>(70-130)</i>	<i>0</i>	<i>20%</i>

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

Approved by: *[Signature]*
 Date: *4/22/97*

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

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

Date: *21-Apr-97*
COC No.: *5869*
Sample No.: *14202*
Job No.: *2-1000*


Project Name: *PNM Gas Services - Sammon #2E*
Project Location: *9704151140; Bottom, 22'*
Sampled by: *GC* Date: *15-Apr-97* Time: *11:40*
Analyzed by: *DC* Date: *17-Apr-97*
Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	2941	ug/kg	500	ug/kg
<i>Toluene</i>	90746	ug/kg	500	ug/kg
<i>Ethylbenzene</i>	23887	ug/kg	500	ug/kg
<i>m,p-Xylene</i>	201162	ug/kg	500	ug/kg
<i>o-Xylene</i>	44395	ug/kg	500	ug/kg
	<i>TOTAL</i>	363132		ug/kg

ND - Not Detected at Limit of Quantitation

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

Approved by: 
Date: *4/21/97*

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

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

Date: *22-Apr-97*
 COC No.: *5869*
 Sample No.: *14203*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon #2E*
 Project Location: *9704151345; Walls @ 16'*
 Sampled by: *GC* Date: *15-Apr-97* Time: *13:45*
 Analyzed by: *HR* Date: *22-Apr-97*
 Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	ND	mg/kg	5.0	mg/kg

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

DRO QC No.: *0519-STD*

Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	ND	ppm	100	111	10.1	15%

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	99	99	(70-130)	0	20%

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

Approved by: *[Signature]*
 Date: *4/22/97*

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

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

Date: *21-Apr-97*
 COC No.: *5869*
 Sample No.: *14203*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon #2E*
 Project Location: *9704151345; Walls, 16'*
 Sampled by: *GC* Date: *15-Apr-97* Time: *13:45*
 Analyzed by: *DC* Date: *17-Apr-97*
 Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/kg	1.0	ug/kg
<i>Toluene</i>	ND	ug/kg	1.0	ug/kg
<i>Ethylbenzene</i>	ND	ug/kg	1.0	ug/kg
<i>m,p-Xylene</i>	2.8	ug/kg	1.0	ug/kg
<i>o-Xylene</i>	2.1	ug/kg	1.0	ug/kg
	<i>TOTAL</i>	4.8		ug/kg

ND - Not Detected at Limit of Quantitation

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

Approved by: *[Signature]*
 Date: *4/21/97*

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

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

Date: *9-Dec-97*
 COC No.: *7103*
 Sample No.: *16986*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon #2E*
 Project Location: *9711261100; 40' depth*
 Sampled by: GC Date: *26-Nov-97* Time: *11:00*
 Analyzed by: DC/HR Date: *4-Dec-97*
 Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	<i>1427</i>	<i>mg/kg</i>	<i>10</i>	<i>mg/kg</i>

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

DRO QC No.: 0555-STD

Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	<i>ND</i>	<i>ppm</i>	<i>200</i>	<i>194</i>	<i>3.3</i>	<i>15%</i>

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>94</i>	<i>95</i>	<i>(70-130)</i>	<i>2</i>	<i>20%</i>

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

Approved by: *[Signature]*
 Date: *12/9/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

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

Date: *5-Dec-97*
 COC No.: *7103*
 Sample No.: *16986*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon #2E*
 Project Location: *9711261100; 40' depth*
 Sampled by: GC Date: *26-Nov-97* Time: *11:00*
 Analyzed by: DC Date: *4-Dec-97*
 Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	<i>22874</i>	<i>ug/kg</i>	<i>5000</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>300565</i>	<i>ug/kg</i>	<i>5000</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>86705</i>	<i>ug/kg</i>	<i>5000</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>746983</i>	<i>ug/kg</i>	<i>5000</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>165608</i>	<i>ug/kg</i>	<i>5000</i>	<i>ug/kg</i>
	<i>TOTAL</i>	<i>1322735</i>		<i>ug/kg</i>

ND - Not Detected at Limit of Quantitation

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

Approved by: *[Signature]*
 Date: *12/5/97*



Well Name:	Sammons #2E
Well Legals:	Unit I, Sec 32, T30N, R12W
Pit Type:	Separator
Horizontal Distance to Surface Water:	Greater than 1,000 ft
Groundwater Depth:	50' to 99'

RISK ANALYSIS

PNM requests closure of the Sammons #2E using a limited risk analysis of the site conditions.

1. PNM estimated groundwater to be at a depth of 60 ft. based upon elevation of site to the Animas 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 322 cu. yds. from the former pit. Vertical extent was determined using a hollow stem drilling rig. Bedrock was encountered @ 40 ft. below ground surface.

Based upon the information provided above, PNM believes the Sammons #2E poses minimal risk to the environment. Subsurface lateral migration is limited based upon PNM's past experience in excavating 1200 pits. Source removal minimizes the possibility of surface water contamination. Bedrock/sandstone provides a barrier between remaining contamination and groundwater. Vertical migration through bedrock or sandstone to groundwater is highly unlikely.