

3R - 310

# REPORTS

DATE:

April 29, 1998

Public Service Company  
of New Mexico  
603 W. Elm - P.O. Box 4750  
Farmington, NM 87499  
505 950-1997  
Fax 505 325-7365

April 29, 1998

Oil Conservation Division  
Attention: Bill Olson  
2040 South Pacheco  
Santa Fe, NM 87505

**RECEIVED**

MAY 01 1998

Environmental Bureau  
Oil Conservation Division

Subject: OCD Closure Reports  
1<sup>st</sup> Reporting Quarter, 1998



Dear Mr. Olson:

PNM Environmental Services is submitting closure reports to the Oil Conservation Division for the sites listed below.

1. Breech B #217 Drip
2. Breech D #640
3. Breech F #545
4. Mangum #5E
5. Sammons #2E

In addition, PNM Environmental Services is filing closure for the following groundwater locations:

1. Sammons #2
  2. Cozzens B #1
- } filed in case files

If you have any questions, please me at (505) 324-3764.

Sincerely,

A handwritten signature in cursive script that reads "Kathy Juckes". The signature is written in dark ink and is positioned above the typed name and title.

Kathy Juckes  
Staff Assistant

cc: Denny Foust  
BLM - Farmington  
Williams Field Services

District I  
P O. Box 1980, Hobbs, NM

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

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

**OIL CONSERVATION DIVISION**

District III  
1000 Rio Brazos Rd, Aztec, NM 87410

2040 South Pacheco Street  
Santa Fe, New Mexico 87505

**PIT REMEDIATION AND CLOSURE REPORT**

<b>Operator:</b> <u>PNM Gas Services ( SRC )</u>		<b>Telephone:</b> <u>324-3764</u>	
<b>Address:</b> <u>603 W. Elm Street Farmington, NM 87401</u>			
<b>Facility or Well Name:</b> <u>Cozzens B #1</u>			
<b>Location:</b>	Unit <u>L</u>	Sec <u>19</u>	T <u>29 N</u> R <u>11 W</u> County <u>San Juan</u>
<b>Pit Type:</b>	Separator <input type="checkbox"/>	Dehydrator <input checked="" type="checkbox"/>	Other _____
<b>Land Type:</b>	BLM <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Fee <input type="checkbox"/> Other <u>No</u>
<b>Pit Location:</b> Pit dimensions: length <u>20</u> ' width <u>20</u> ' depth <u>4</u> '			
(Attach diagram)	Reference: wellhead <input checked="" type="checkbox"/> other _____		
Footage from reference: <u>63'</u>			
Direction from reference: <u>30</u> Degrees <input checked="" type="checkbox"/> East <input checked="" type="checkbox"/> North <input type="checkbox"/> West <input type="checkbox"/> South			
<b>Depth to Ground Water:</b>			
(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)	<u>20</u>
<b>Wellhead Protection Area:</b>			
(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)	<u>20</u>
<b>Distance to Surface Water:</b>			
(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)	<u>10</u>
<b>RANKING SCORE (TOTAL POINTS) :</b>			<u>50</u>

Cozzens B #1

Date Remediation Started: 2/20/96

Date Completed: 2/22/96

Remediation Method: Excavation

X

Approx. Cubic Yard 369

(Check all appropriate sections)

Landfarmed

X

Amount Landfarmed (cubic yds) 369

Other

Remediation Location:

Onsite

Offsite

Cozzens #5

(i.e., landfarmed onsite, name and location of offsite facility)

Cozzens #2

Backfill Material Location:

General Description of Remedial Action:

Excavated contaminated soil to pit size of 36'x26'x8' and landfarmed soil offsite 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



Yes



Depth

3 feet

Final Pit Closure  
Sampling:

Sample Location

Center of pit

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

Sample depth

7'

Sample date

2/20/96

Sample time

1:20:00 PM

Sample Results

Benzene (ppm) &lt; 0.0002

Total BTEX (ppm) 0.0085

Field headspace (ppm)

TPH (ppm)

&lt; 25.00

Method

418.1

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

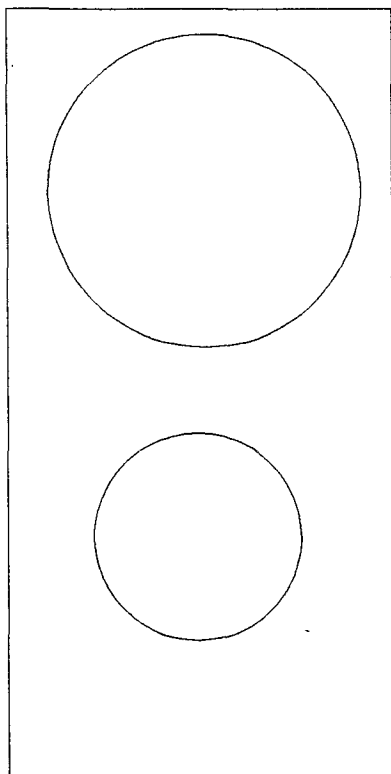
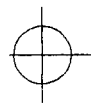
DATE April 29, 1998

SIGNATURE

*Maureen Gannon*PRINTED NAME  
AND TITLEMaureen Gannon  
Project Manager*Kathy Gannon*



95'X3.5'X4'  
42.2 cu. yds.



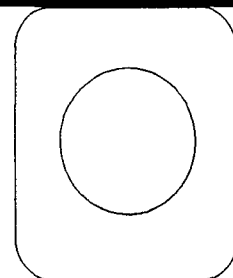
SEP



10'X4'X4'  
59 cu. yds.



36'X26'X8'  
277 cu. yds.



DH

61'X4'X5.25'  
47.4 cu. yds.

65'X4'X4'  
38.5 cu. yds.

WH.

COZZENS B1

MH



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: *22-Feb-96*  
COC No.: *4551*  
Sample No. *10313*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Cozzens B-1*  
Project Location: *9602201320; Center of Pit 7ft. depth*  
Sampled by: *RH* Date: *20-Feb-96* Time: *13:20*  
Analyzed by: *DC* Date: *21-Feb-96*  
Type of Sample: *Soil*

#### Aromatic Volatile Organics

Component	Result	Units of Measure	Detection Limit	Units of Measure
<i>Benzene</i>	<i>&lt; 0.2</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>2.1</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>0.8</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>4.4</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>1.1</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>TOTAL</i>		<i>8.5</i>		<i>ug/kg</i>

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

Approved by: *[Signature]*  
Date: *2/22/96*

P. O. BOX 2606 • FARMINGTON, NM 87499

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OFF: (505) 325-8786

LAB: (505) 325-5667

### **TOTAL PETROLEUM HYDROCARBONS**

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

Date: *22-Feb-96*  
COC No.: *4551*  
Sample No. *10313*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Cozzens B-1*  
Project Location: *9602201320; Center of Pit 7ft. depth*  
Sampled by: *RH* Date: *20-Feb-96* Time: *13:20*  
Analyzed by: *HR* Date: *21-Feb-96*  
Type of Sample: *Soil*

#### **Laboratory Analysis**

<b>Laboratory Identification</b>	<b>Sample Identification</b>	<b>Total Petroleum Hydrocarbons</b>
<i>10313-4551</i>	<i>PNM Gas Services - Cozzens B-1</i> <i>9602201320; Center of Pit 7ft. depth</i>	<i>&lt; 25 mg/kg</i>

#### **Quality Assurance Report**

<b>Laboratory Identification</b>	<b>Analyzed Value</b>	<b>Acceptable Range</b>	<b>Units of Measure</b>
<i>Laboratory Fortified Blank Soil - QCBS2</i>	<i>&lt; 25</i>	<i>&lt; 25</i>	<i>mg/kg</i>
<i>Laboratory Fortified Spike Soil - QCSS1</i>	<i>929</i>	<i>828 - 1024</i>	<i>mg/kg</i>

**Method** - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: *JAL*

Date: *2/22/96*

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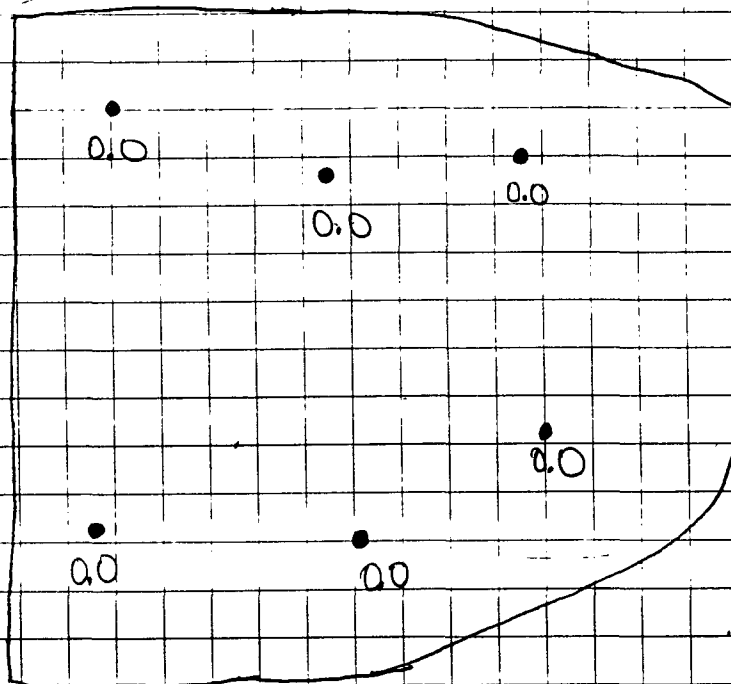
7/2/96

Cozzens Bl

Cozzens #5 (Location of L.F.)

Composite Sample 960702 0850

Soil Vapor Reading 85



Sample Depth between 2"-12" deep



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: *8-Jul-96*  
COC No.: *4700*  
Sample No. *11388*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Cozzens #5 Landfarm ( Cozzens B1)*  
Project Location: *9607020850; 6pt. Composite, 2"-12" deep*  
Sampled by: *KL* Date: *2-Jul-96* Time: *8:50*  
Analyzed by: *DC* Date: *3-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>&lt;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>&lt;5.0</i>	<i>ppm</i>	<i>2,000</i>	<i>1,915</i>	<i>4.3</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: *[Signature]*  
Date: *7/9/96*

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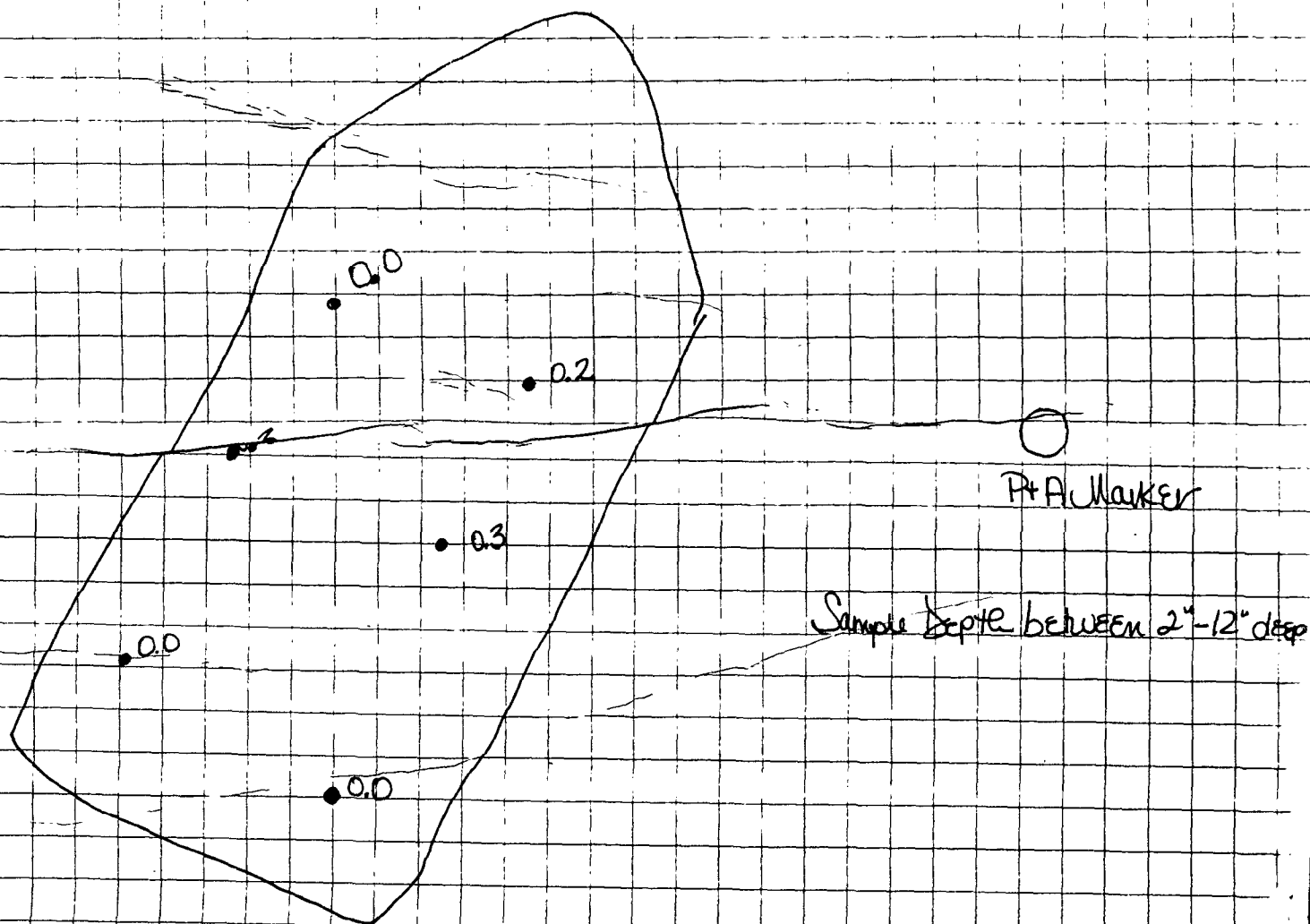
- TECHNOLOGY: BLENDING INDUSTRY WITH THE ENVIRONMENT -

7/2/96

Cozzens Bl  
Location Cozzens #2 (P+A) 19-29N-11W  
Mendocino

Composite Sample # 9607020805 bpt.

Soil Vapor Headspace Reading = 6.6



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: *8-Jul-96*  
COC No.: *4699*  
Sample No. *11387*  
Job No. *2-1000*

Project Name: *PNM Gas Services - Cozzens #2 Landfarm ( Cozzens B1)*  
Project Location: *9607020805; 6pt. Composite, 2"-12" deep*  
Sampled by: *KL* Date: *2-Jul-96* Time: *8:05*  
Analyzed by: *DC* Date: *3-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>&lt;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>&lt;5.0</i>	<i>ppm</i>	<i>2,000</i>	<i>1,915</i>	<i>4.3</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: *[Signature]*  
Date: *7/8/96*

PNMGS Well Site: Cozzens B 1

## **Groundwater Site Summary Report**

Copies: WFS(1)  
Operator (1)  
NMOCD District Office (1)  
NMOCD Santa Fe (1)

Quarter/Year: 2<sup>nd</sup>/97, 3<sup>rd</sup>/97, 4<sup>th</sup>/97 & 1<sup>st</sup>/98

Operator: Burlington Resources  
Sec: 19 Twn: 29 Rng: 11 Unit: L  
Canyon: San Juan

Vulnerable Class: Original  
OCD Ranking: 60  
Lead Agency: NMOCD

Topo Map: previously submitted

Well Completion Diagram: previously submitted

Site Map with Analysis: Figure 1

Groundwater Contour Maps: Figure 2 (May 1997) & Figure 3 (August 1997)

Groundwater Hydrograph: Figure 4

Analytical Results: attached

### **Activities for Previous Year:**

On May 29 and August 28, 1997, PNM conducted quarterly groundwater sampling at the Cozzens B1 well site. Prior to sampling, water level measurements were taken in MW-1, -2, -3, -4 and -5.

During the August sampling event, free phase product was discovered in monitor well MW-3. This well is located in a southwesterly direction downgradient of Burlington Resources' (BR) 300 bbl product storage tank. PNM immediately notified BR of a potential leak in their tank. PNM and BR visited the site on September 24, 1997, and discovered that a flange located near the bottom of the tank was leaking.

In a November 12, 1997 letter to OCD, PNM proposed to install a groundwater monitoring well in a true downgradient direction from our former pit and monitor MW-1, MW-2 and the new downgradient well to demonstrate successful remediation of groundwater beneath our former pit. OCD provided approval of our recommendations in a March 3, 1998 letter to PNM.

On January 27, 1998, two monitor wells, MW-7 and MW-8, were installed immediately downgradient of our former pit. The wells were developed. Water levels were not taken in the new wells and therefore a groundwater contour map is not provided for January 1998. PNM performed sampling in MW-1, -2, -7 and -8.

All groundwater sampling at the Cozzens B1 well site was conducted in strict compliance with EPA protocol. PNM delivered groundwater samples to OnSite Technologies, Farmington, New Mexico, for chemical analyses of benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8020.

### **Results:**

Figure 1 is a site map of the Cozzens B1 well site and includes the groundwater analytical results. Figure(s) 2, 3 and 4 are groundwater contour maps for the months of May and August 1997. The groundwater gradient flows in a southwesterly direction beneath the site and is dependent on discharge from the Citizens Ditch which flows in a northwesterly direction above the well site. Figure 4 is the hydrograph (water level versus time) for the site. Since June of 1996, water levels have held fairly constant except for MW-5. This well may not be completed within the same permeable layer as the other wells. We believe MW-5 receives groundwater from the canyon located to the northeast of the site.

Results of all sampling events show that BTEX concentrations in MW-1 and MW-2 have been below WQCC standards or non-detectable for seven quarters of monitoring. BTEX concentrations in the newest wells, MW-7 and MW-8, are also below WQCC standards or non-detectable.

### **Further Action:**

Consistent with PNM's San Juan Basin Groundwater Management Plan, PNM requests closure of the Cozzens B1 former pit. This request is based upon the analytical data collected over the last two years at

the site. BTEX concentrations in upgradient and source wells at our former pit have been consistently below WQCC standards for over four calendar quarters. Sampling of MW-7 and MW-8 also indicated that BTEX concentrations in groundwater downgradient of our former pit area are non-detectable or below WQCC standards.

Upon completion of monitoring and remedial actions, PNM will plug and abandon the monitoring wells at the site. The concrete pad and metal vault surrounding the well will be removed. The well casing will be cut to ground surface with cement containing 5% bentonite.

Figure 1. Cozzens B1 Site Map With Analytical Results  
(Concentrations in ppb)

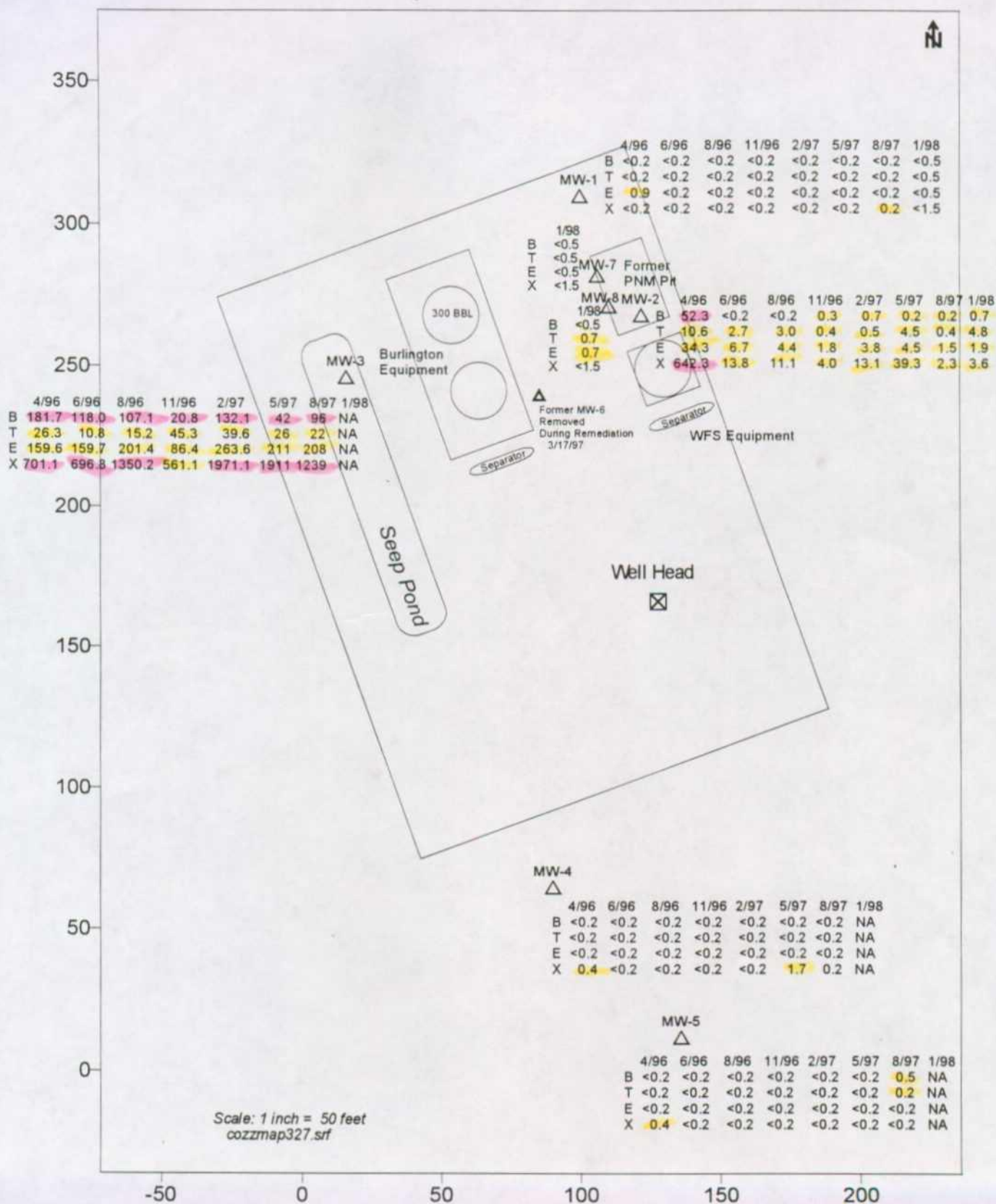


Figure 2. Cozzen B1 Groundwater Contour Map (May 29, 1997)

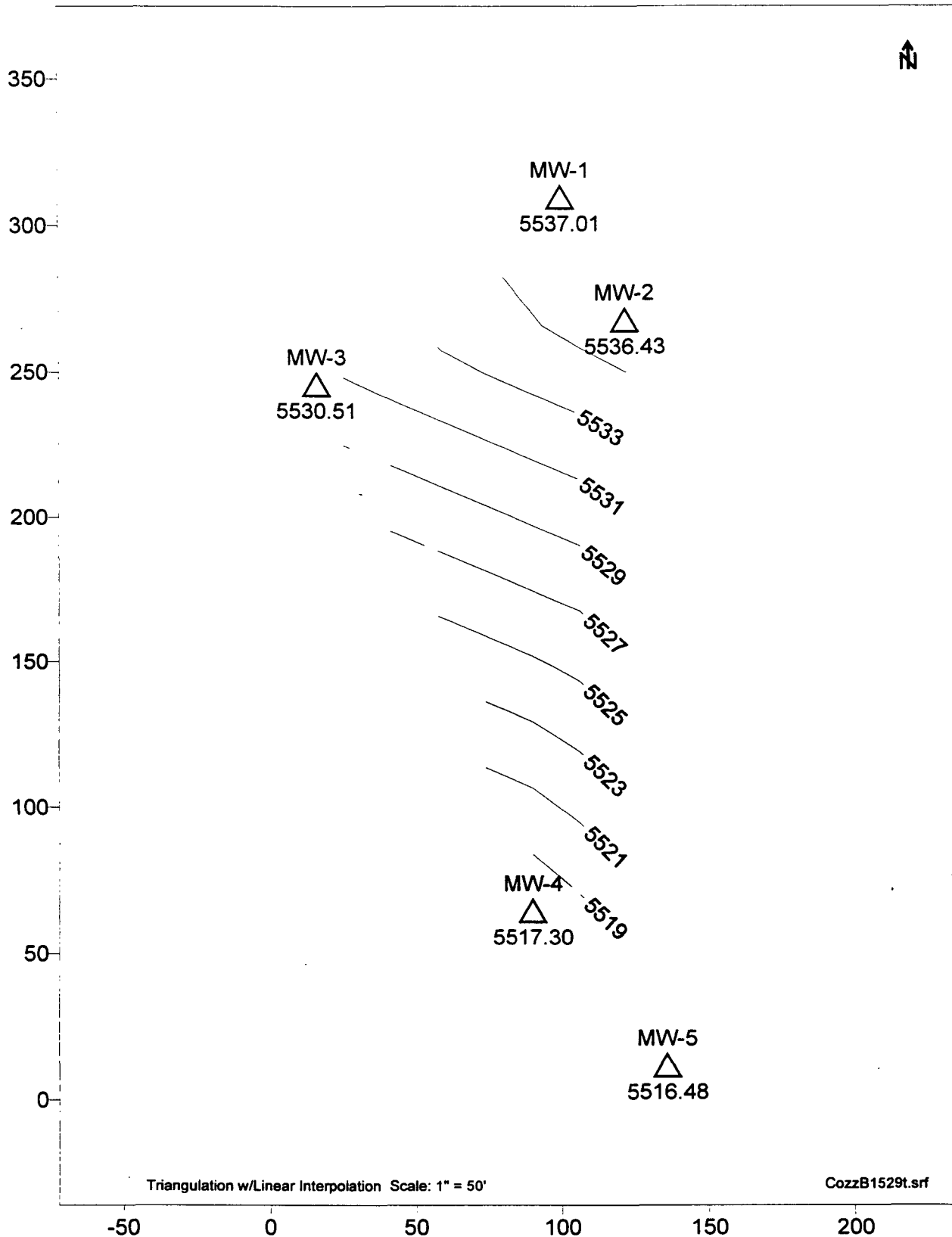


Figure 3. Cozzen B1 Groundwater Contour Map (August 28, 1997)

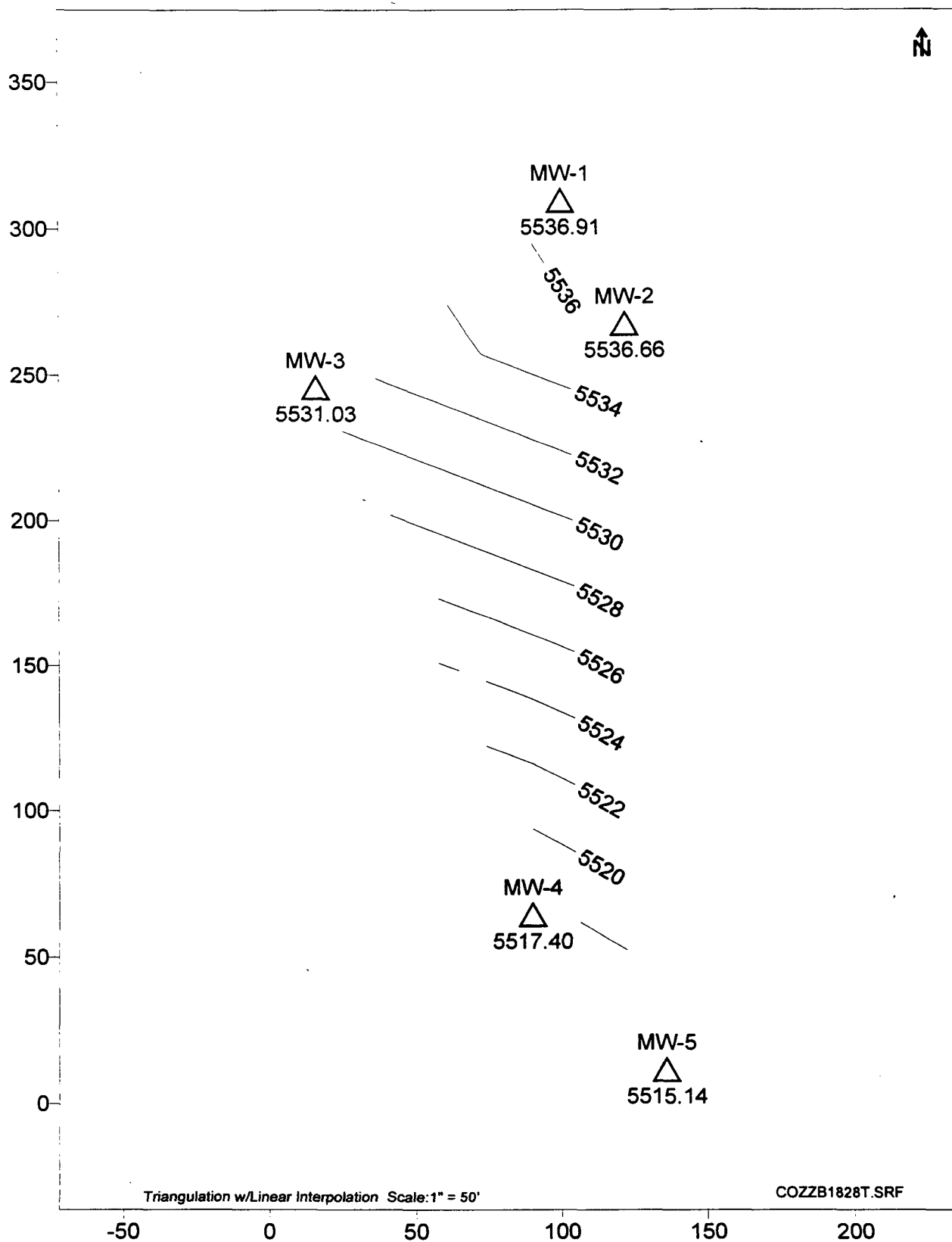
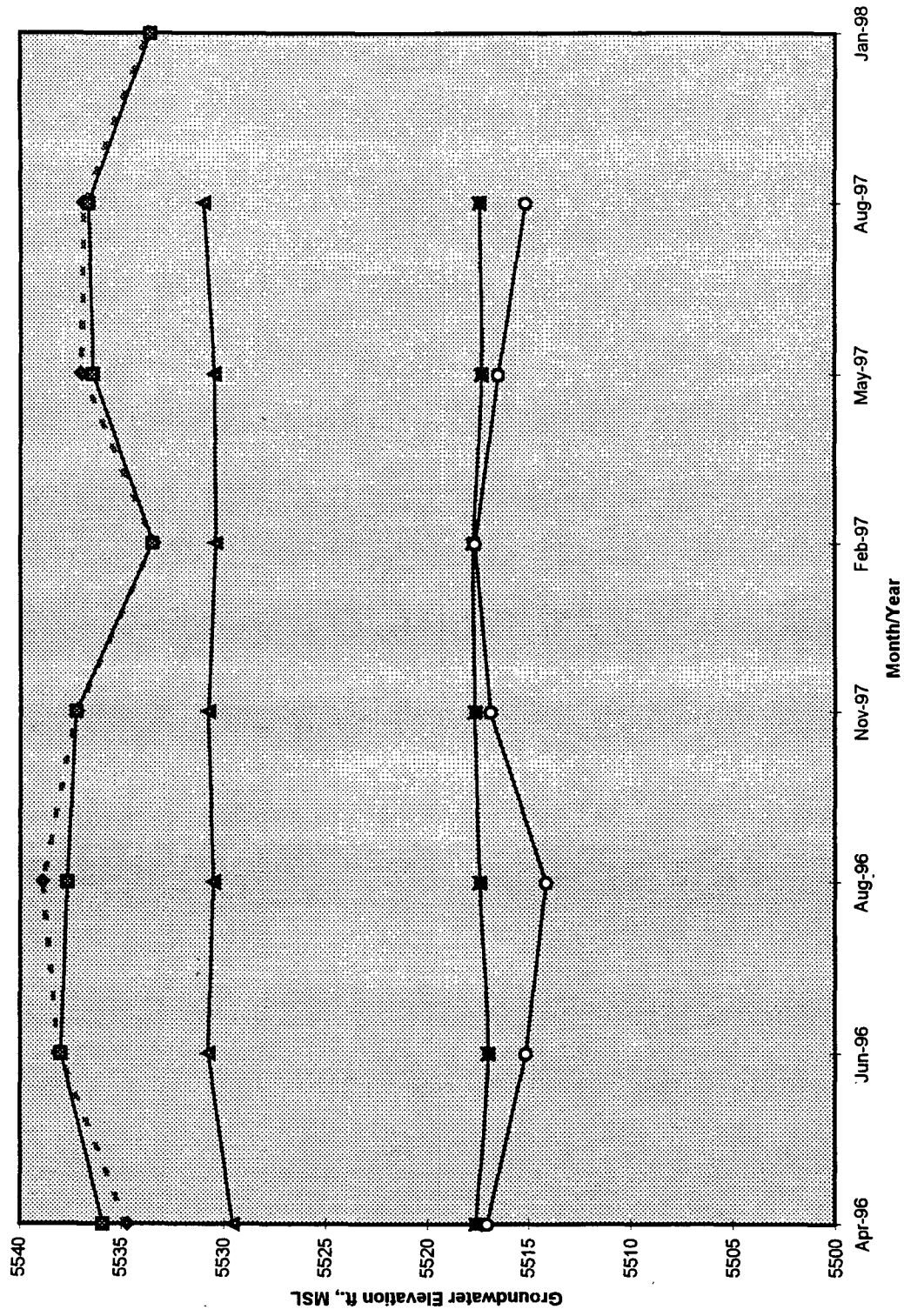




Figure 4. Cozzen B1 Hydrograph  
(Water Level vs. Time)





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: *10-Jun-97*  
COC No.: *5560*  
Sample No.: *14778*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*

Project Location: *9705291300; MW-1*

Sampled by: *MG/MS*

Date: *29-May-97* Time: *13:00*

Analyzed by: *DC*

Date: *4-Jun-97*

Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/L	0.2	ug/L
<i>Toluene</i>	ND	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	ND	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	ND	ug/L	0.2	ug/L
<i>o-Xylene</i>	ND	ug/L	0.2	ug/L
<i>TOTAL</i>	ND	ug/L		

ND - Not Detected at Limit of Quantitation

Method - SW-846 EPA Method 8202A Aromatic Volatile Organics by Gas Chromatography

Approved By: *[Signature]*

Date: *6/11/97*

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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: *11-Jun-97*  
COC No.: *5560*  
Sample No.: *14779*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*  
Project Location: *9705291330; MW-2*  
Sampled by: *MG/MS* Date: *29-May-97* Time: *13:30*  
Analyzed by: *DC* Date: *4-Jun-97*  
Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/L	0.2	ug/L
<i>Toluene</i>	4.5	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	4.5	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	30.7	ug/L	0.2	ug/L
<i>o-Xylene</i>	8.6	ug/L	0.2	ug/L
<i>TOTAL</i>	48.3	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*  
Date: *6/11/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

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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: *10-Jun-97*  
COC No.: *5560*  
Sample No.: *14780*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*  
Project Location: *9705291400; MW-3*  
Sampled by: *MG/MS*  
Analyzed by: *DC*  
Sample Matrix: *Liquid*

Date: *29-May-97* Time: *14:00*  
Date: *3-Jun-97*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	<i>42</i>	<i>ug/L</i>	<i>2</i>	<i>ug/L</i>
<i>Toluene</i>	<i>26</i>	<i>ug/L</i>	<i>2</i>	<i>ug/L</i>
<i>Ethylbenzene</i>	<i>211</i>	<i>ug/L</i>	<i>2</i>	<i>ug/L</i>
<i>m,p-Xylene</i>	<i>1906</i>	<i>ug/L</i>	<i>2</i>	<i>ug/L</i>
<i>o-Xylene</i>	<i>5</i>	<i>ug/L</i>	<i>2</i>	<i>ug/L</i>
<i>TOTAL</i>	<i>2191</i>	<i>ug/L</i>		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*  
Date: *6/11/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

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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: *10-Jun-97*  
COC No.: *5560*  
Sample No.: *14781*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*

Project Location: *9705291430; MW-4*

Sampled by: *MG/MS*

Date: *29-May-97* Time: *14:30*

Analyzed by: *DC*

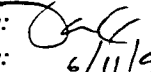
Date: *4-Jun-97*

Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/L	0.2	ug/L
<i>Toluene</i>	ND	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	ND	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	1.7	ug/L	0.2	ug/L
<i>o-Xylene</i>	ND	ug/L	0.2	ug/L
<i>TOTAL</i>	1.7	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By:   
Date: *6/11/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

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: *10-Jun-97*  
COC No.: *5560*  
Sample No.: *14782*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*  
Project Location: *9705291500; MW-5*  
Sampled by: *MG/MS* Date: *29-May-97* Time: *15:00*  
Analyzed by: *DC* Date: *3-Jun-97*  
Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/L	0.2	ug/L
<i>Toluene</i>	ND	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	ND	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	ND	ug/L	0.2	ug/L
<i>o-Xylene</i>	ND	ug/L	0.2	ug/L
<i>TOTAL</i>	ND	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*  
Date: *6/11/97*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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: *11-Jun-97*  
COC No.: *5560*  
Sample No.: *14783*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*  
Project Location: *9705291530; MW-6*  
Sampled by: *MG/MS*  
Analyzed by: *DC*  
Sample Matrix: *Liquid*

Date: *29-May-97* Time: *15:30*  
Date: *4-Jun-97*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/L	0.2	ug/L
<i>Toluene</i>	4.8	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	4.6	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	31.4	ug/L	0.2	ug/L
<i>o-Xylene</i>	8.7	ug/L	0.2	ug/L
<i>TOTAL</i>	49.5	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*  
Date: *6/11/97*

P.O. BOX 2606 • FARMINGTON, NM 87499







Distribution: White - On Site	Yellow - LAB	Pink - Sampler	Goldenrod - Client
-------------------------------	--------------	----------------	--------------------

OFF: (505) 325-5667

**ON SITE**  
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

**ANALYTICAL REPORT**

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

Date: *5-Sep-97*  
COC No.: *5680*  
Sample No.: *15998*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*  
Project Location: *9708281330; MW-1*  
Sampled by: *MG/MS* Date: *28-Aug-97* Time: *13:30*  
Analyzed by: *DC* Date: *3-Sep-97*  
Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/L	0.2	ug/L
<i>Toluene</i>	ND	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	ND	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	0.2	ug/L	0.2	ug/L
<i>o-Xylene</i>	ND	ug/L	0.2	ug/L
<i>TOTAL</i>	0.2	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*  
Date: *9/5/97*

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OFF: (505) 325-5667

# ON SITE

TECHNOLOGIES, LTD.

LAB: (505) 325-1556

## ANALYTICAL REPORT

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

Date: *5-Sep-97*  
COC No.: *5680*  
Sample No.: *15999*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*  
Project Location: *9708281400; MW-2*  
Sampled by: *MG/MS* Date: *28-Aug-97* Time: *14:00*  
Analyzed by: *DC* Date: *3-Sep-97*  
Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	<i>0.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Toluene</i>	<i>0.4</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Ethylbenzene</i>	<i>1.5</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>m,p-Xylene</i>	<i>2.0</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>o-Xylene</i>	<i>0.3</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>TOTAL</i>	<i>4.5</i>	<i>ug/L</i>		

*5/29*

*ND*

*4.5*

*4.5*

*30.7*

*0.6*

*48.3*

ND - Not Detected at Limit of Quantitation

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

Approved By: *JaC*

Date: *9/5/97*

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**ON SITE**  
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LAB: (505) 325-1556

**ANALYTICAL REPORT**

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

Date: *5-Sep-97*  
COC No.: *5680*  
Sample No.: *16000*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*

Project Location: *9708281430; MW-3*

Sampled by: *MG/MS*

Date: *28-Aug-97* Time: *14:30*

Analyzed by: *DC*

Date: *3-Sep-97*

Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	96	ug/L	2	ug/L
<i>Toluene</i>	22	ug/L	2	ug/L
<i>Ethylbenzene</i>	208	ug/L	2	ug/L
<i>m,p-Xylene</i>	1233	ug/L	2	ug/L
<i>o-Xylene</i>	6	ug/L	2	ug/L
<i>TOTAL</i>	1565	ug/L		

*5/29*

*42*

*26*

*211*

*1906*

*5*

*2191*

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*

Date: *9/5/97*

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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-Sep-97*  
COC No.: *5680*  
Sample No.: *16001*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*  
Project Location: *9708281500; MW-4*  
Sampled by: *MG/MS* Date: *28-Aug-97* Time: *15:00*  
Analyzed by: *DC* Date: *3-Sep-97*  
Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure	
<i>Benzene</i>	ND	ug/L	0.2	ug/L	ND
<i>Toluene</i>	ND	ug/L	0.2	ug/L	ND
<i>Ethylbenzene</i>	ND	ug/L	0.2	ug/L	ND
<i>m,p-Xylene</i>	0.4	ug/L	0.2	ug/L	1.7
<i>o-Xylene</i>	ND	ug/L	0.2	ug/L	ND
<i>TOTAL</i>	0.4	ug/L			1.7

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*  
Date: *9/5/97*

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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-Sep-97*  
COC No.: *5680*  
Sample No.: *16002*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*  
Project Location: *9708281530; MW-6*  
Sampled by: *MG/MS* Date: *28-Aug-97* Time: *15:30*  
Analyzed by: *DC* Date: *3-Sep-97*  
Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/L	0.2	ug/L
<i>Toluene</i>	0.2	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	1.7	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	3.0	ug/L	0.2	ug/L
<i>o-Xylene</i>	0.2	ug/L	0.2	ug/L
<i>TOTAL</i>	5.1	ug/L		

ND - Not Detected at Limit of Quantitation

*Dup of MW-2*

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

Approved By: *[Signature]*

Date: *9/5/97*

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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-Sep-97*  
COC No.: *5680*  
Sample No.: *16003*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*  
Project Location: *9708281600; MW-5*  
Sampled by: *MG/MS* Date: *28-Aug-97* Time: *16:00*  
Analyzed by: *DC* Date: *3-Sep-97*  
Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	0.5	ug/L	0.2	ug/L
<i>Toluene</i>	0.2	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	ND	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	ND	ug/L	0.2	ug/L
<i>o-Xylene</i>	ND	ug/L	0.2	ug/L
<i>TOTAL</i>	0.7	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*

Date: *9/5/97*

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LAB: (505) 325-1556

**QUALITY ASSURANCE REPORT***for EPA Method 8020*

Date Analyzed: 3-Sep-97

Internal QC No.: 0527-STD

Surrogate QC No.: 0528-STD

Reference Standard QC No.: 0529/30-QC

**Method Blank**

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

**Calibration Check**

Parameter	Unit of Measure	True Value	Analyzed Value	RPD	Limit
Benzene	ppb	20.0	19.4	3	15%
Toluene	ppb	20.0	20.3	1	15%
Ethylbenzene	ppb	20.0	20.4	2	15%
m,p-Xylene	ppb	40.0	39.6	1	15%
o-Xylene	ppb	20.0	20.4	2	15%

**Matrix Spike**

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	Limit
Benzene	93	88	(39-150)	5	20%
Toluene	97	92	(46-148)	5	20%
Ethylbenzene	97	93	(32-160)	4	20%
m,p-Xylene	94	90	(35-145)	5	20%
o-Xylene	96	92	(35-145)	4	20%

**Surrogate Recoveries**

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
15998-5680	97				
15999-5680	95				
16000-5680	96				
16001-5680	97				
16002-5680	95			95	(92)
16003-5680	97			95/97	95/97

S1: Fluorobenzene

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNICAL REPORT NUMBER: 15998-5680



# CHAIN OF CUSTODY RECORD

580

Date: 8/22/97

Page 1 of 1

TECHNOLOGIES, LTD. 657 W. Maple • P. O. Box 2606 • Farmington NM 87499  
LAB: (505) 325-5667 • FAX: (505) 325-6256

Purchase Order No.:		Job No.	
Name		Maureen Gannon	
Company		PNM Gas Services	
Address		Alverado Square, Mail Stop 0408	
City, State, Zip		Albuquerque, NM 87158	
Telephone No.		505-848-2974	
Telefax No.			
SEND INVOICE TO		Title	
Name		Maureen Gannon	
Company		PNM Gas Services	
Address		Alverado Square, Mail Stop 0408	
City, State, Zip		Albuquerque, NM 87158	
Telephone No.		505-848-2974	
Telefax No.			
Sampling Location:		ANALYSIS REQUESTED	
Correns B1			
Sampler:		Maureen Gannon / Mark Sklaros	
SAMPLE IDENTIFICATION		LAB ID	
DATE		TIME	
9708281330	mw1	8-28-97	15998-5680
9708281400	mw2		15999-
9708281430	mw3		16000-
9708281500	mw4		16001-
9708281530	mw6		16002-
9708281600	mw5		16003-
Relinquished by: Mark Sklaros		Date/Time: 8/28/97 1600	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Method of Shipment:		Special Instructions:	
Authorized by: Maureen Gannon		Results to be sent to both parties.	
(Client Signature Must Accompany Request)		Date: 8/28/97	

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

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-Oct-97*  
COC No.: *5848*  
Sample No.: *16598*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzens B1*  
Project Location: *9710151030; Seep Pond*  
Sampled by: *MG/MS* Date: *15-Oct-97* Time: *10:30*  
Analyzed by: *DC* Date: *20-Oct-97*  
Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	<i>972</i>	<i>ug/L</i>	<i>10</i>	<i>ug/L</i>
<i>Toluene</i>	<i>461</i>	<i>ug/L</i>	<i>10</i>	<i>ug/L</i>
<i>Ethylbenzene</i>	<i>233</i>	<i>ug/L</i>	<i>10</i>	<i>ug/L</i>
<i>m,p-Xylene</i>	<i>1592</i>	<i>ug/L</i>	<i>10</i>	<i>ug/L</i>
<i>o-Xylene</i>	<i>443</i>	<i>ug/L</i>	<i>10</i>	<i>ug/L</i>
<i>TOTAL</i>	<i>3700</i>	<i>ug/L</i>		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*  
Date: *10/22/97*

P.O. BOX 2606 • FARMINGTON, NM 87499



657 W. Maple • P. O. Box 2606 • Farmington NM 87499  
LAB: (505) 325-5667 • FAX: (505) 325-6256

Distribution	White - On Site	Yellow - LAB	Pink - Sampler	Goldenrod - Client
--------------	-----------------	--------------	----------------	--------------------

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: *3-Feb-98*  
COC No.: *7169*  
Sample No.: *17415*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzen B-1*  
Project Location: *9801271015; MW-1*  
Sampled by: *MS/RD*  
Analyzed by: *DC*  
Sample Matrix: *Liquid*

Date: *27-Jan-98* Time: *10:15*  
Date: *30-Jan-98*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/L	0.5	ug/L
<i>Toluene</i>	ND	ug/L	0.5	ug/L
<i>Ethylbenzene</i>	ND	ug/L	0.5	ug/L
<i>m,p-Xylene</i>	ND	ug/L	1.0	ug/L
<i>o-Xylene</i>	ND	ug/L	0.5	ug/L
<i>TOTAL</i>	ND	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*  
Date: *2/3/98*

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OFF: (505) 325-5667

**ON SITE**  
**TECHNOLOGIES, LTD.**

LAB: (505) 325-1556

**ANALYTICAL REPORT**

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

Date: *3-Feb-98*  
COC No.: *7169*  
Sample No.: *17416*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzen B-1*  
Project Location: *9801271030; MW-2*  
Sampled by: *MS/RD* Date: *27-Jan-98* Time: *10:30*  
Analyzed by: *DC* Date: *30-Jan-98*  
Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	0.7	ug/L	0.5	ug/L
<i>Toluene</i>	4.8	ug/L	0.5	ug/L
<i>Ethylbenzene</i>	1.9	ug/L	0.5	ug/L
<i>m,p-Xylene</i>	3.0	ug/L	1.0	ug/L
<i>o-Xylene</i>	0.6	ug/L	0.5	ug/L
<i>TOTAL</i>	10.9	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *DC*  
Date: *2/3/98*

P.O. BOX 2606 • FARMINGTON, NM 87499



OFF: (505) 325-5667

**ON SITE**  
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

**ANALYTICAL REPORT**

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

Date: *3-Feb-98*  
COC No.: *7169*  
Sample No.: *17417*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzen B-1*  
Project Location: *9801271045; MW-7*  
Sampled by: *MS/RD*  
Analyzed by: *DC*  
Sample Matrix: *Liquid*

Date: *27-Jan-98* Time: *10:45*  
Date: *30-Jan-98*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/L	0.5	ug/L
<i>Toluene</i>	ND	ug/L	0.5	ug/L
<i>Ethylbenzene</i>	ND	ug/L	0.5	ug/L
<i>m,p-Xylene</i>	ND	ug/L	1.0	ug/L
<i>o-Xylene</i>	ND	ug/L	0.5	ug/L
<i>TOTAL</i>	ND	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*  
Date: *2/3/98*

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: *3-Feb-98*  
COC No.: *7169*  
Sample No.: *17418*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzen B-1*  
Project Location: *9801271100; MW-8*  
Sampled by: *MS/RD*  
Analyzed by: *DC*  
Sample Matrix: *Liquid*

Date: *27-Jan-98* Time: *11:00*  
Date: *30-Jan-98*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/L	0.5	ug/L
<i>Toluene</i>	0.7	ug/L	0.5	ug/L
<i>Ethylbenzene</i>	0.7	ug/L	0.5	ug/L
<i>m,p-Xylene</i>	ND	ug/L	1.0	ug/L
<i>o-Xylene</i>	ND	ug/L	0.5	ug/L
<i>TOTAL</i>	1.4	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*  
Date: *2/3/98*

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: *3-Feb-98*  
COC No.: *7169*  
Sample No.: *17419*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Cozzen B-1*  
Project Location: *9801271115; MW-9*  
Sampled by: *MS/RD*  
Analyzed by: *DC*  
Sample Matrix: *Liquid*

Date: *27-Jan-98* Time: *11:15*  
Date: *30-Jan-98*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/L	0.5	ug/L
<i>Toluene</i>	0.8	ug/L	0.5	ug/L
<i>Ethylbenzene</i>	0.7	ug/L	0.5	ug/L
<i>m,p-Xylene</i>	ND	ug/L	1.0	ug/L
<i>o-Xylene</i>	ND	ug/L	0.5	ug/L
<i>TOTAL</i>	1.5	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *Jack*  
Date: *2/3/98*

P.O. BOX 2606 • FARMINGTON, NM 87499

**QUALITY ASSURANCE REPORT**

for EPA Method 8020

Date Analyzed: 30-Jan-98

Internal QC No.: 0559-STD

Surrogate QC No.: 0567-STD

Reference Standard QC No.: 0529/30-QC

**Method Blank**

Parameter	Result	Unit of Measure
Average Amount of All Analytes in Blank	< 0.2	ppb

**Calibration Check**

Parameter	Unit of Measure	True Value	Analyzed Value	RPD	Limit
Benzene	ppb	20.0	21.7	8	15%
Toluene	ppb	20.0	21.9	9	15%
Ethylbenzene	ppb	20.0	22.9	13	15%
m,p-Xylene	ppb	40.0	42.8	7	15%
o-Xylene	ppb	20.0	22.1	10	15%

**Matrix Spike**

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	Limit
Benzene	108	95	(39-150)	12	20%
Toluene	106	97	(46-148)	9	20%
Ethylbenzene	110	100	(32-160)	9	20%
m,p-Xylene	103	94	(35-145)	8	20%
o-Xylene	108	99	(35-145)	8	20%

**Surrogate Recoveries**

Laboratory Identification	S1. Percent Recovered	S2 Percent Recovered	Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
17415-7169	100				
17416-7169	99				
17417-7169	100				
17418-7169	100				
17419-7169	100				
				HK 2/3/98	(pc) 2/3/98

S1: Fluorobenzene



# CHAIN OF CUSTODY RECORD

7 9

Date: 1/27/98

Page: 1 of 1

612 E. Murphy Dr. • P.O. Box 2606 • Farmington, NM 87499  
LAB: (505) 325-5667 • FAX: (505) 325-6256

Purchase Order No.:		Job No.	
Name		Denver Bearden	
Company		PNM Gas Services	
Address		603 W. Elm Street	
City, State, Zip		Farmington, NM 87401	
SEND INVOICE TO		Name: Maureen Gannon	
		Title:	
		Company: PNM Gas Services	
		Mailing Address: Alverado Square, Mail Stop 0408	
		City, State, Zip: Albuquerque, NM 87158	
		Telephone No.: 505-848-2974	
		Telefax No.:	
Sampling Location: Cozen B1		ANALYSIS REQUESTED	
Sampler: M.S. R.D.		Containers	
SAMPLE IDENTIFICATION		LAB ID	
9801271015 MW-1		17415-7169	
9801271030 MW-2		17416-	
9801271045 MW-7		17417-	
9801271100 MW-8		17418-	
9801271115 MW-9		17419-	
RELINQUISHED BY: [Signature]		Date/Time: 1/27/98 11:50	
RELINQUISHED BY: [Signature]		Date/Time:	
RELINQUISHED BY: [Signature]		Date/Time:	
Method of Shipment: Acid Delivered		10 Working Days	
Authorized by: [Signature]		Special Instructions:	
(Client Signature Must Accompany Request)		Results to be sent to both parties.	