



State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
 Santa Fe, New Mexico 87505

STATE OF
 NEW MEXICO
 OIL
 CONSERVATION
 DIVISION

Denny L. Faust
 DEPUTY OIL & GAS INSPECTOR

MEMORANDUM OF MEETING OR CONVERSATION

JUL 22 1998

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time <i>1400</i>	Date <i>4/4/97</i>
<i>Approved</i>			
<u>Originating Party</u>		<u>Other Parties</u>	
<i>Denver Bearden - PNMI</i>		<i>Bill Olson - Envir. Bureau</i>	

Subject

*Sammons #2 Well Site Ground Water Notification
 (Burlington well site) Unit G, sec 32, T30N, R12W*

Discussion

*Ground water contamination found during pit closure
 Depth to water = 6'*

Benzene = 89 ppb

RECEIVED
 APR 15 1997

OIL CON. DIV.
 DIST. 3

Conclusions or Agreements

Will file subsequent written notice + address under GW management plan

Distribution

*file
 Denny Faust - OCD After*

Signed

Bill Olson

Public Service Company
of New Mexico
Alvarado Square MS. 0408
Albuquerque, NM 87158

April 8, 1997

Mr. William Olson
Hydrogeologist
Oil Conservation Division
2040 So. Pacheco
Santa Fe, New Mexico 87505

RECEIVED
APR 14 1997

OIL CON. DIV.
DIST. 3



RE: NOTIFICATION OF GROUNDWATER CONTAMINATION AT THE SAMMONS 2 WELL SITE

Dear Bill:

Pursuant to New Mexico Water Quality Control Commission (WQCC) Regulations, section 1-203, PNM hereby provides written notification of groundwater contamination at the Sammons 2 well site, located in section 32, township 30 North, range 12 West, unit letter G. A topographic map showing the location of the site is provided as an attachment. The operator is Burlington Resources. This letter follows verbal notification provided to you on Monday, April 7, 1997 (M. Gannon, PNM to B. Olson, OCD, 4/7/97).

On April 2, 1997, field personnel collected a sample from groundwater in an excavation approximately 6 feet below ground surface. The groundwater sample was delivered to OnSite Technologies, Ltd., in Farmington, New Mexico, for laboratory analysis. A hardcopy of the analytical results is attached. A summary of the analytical results is provided below:

Component	Units	WQCC Stds.	Pit Excavation Water Sample
Benzene	ppb	10	89
Toluene	ppb	750	415
Ethylbenzene	ppb	750	192
Xylenes	ppb	620	1373
Total BTEX	ppb		2069

Bold type indicates a WQCC exceedance.

This letter serves as written notification of groundwater impact at the Sammons 2. PNM will conduct future activities at the site pursuant to PNM's Groundwater Management Plan. If you have any questions, please call me at (505) 241-2974. Thank you.

Sincerely,
PNM

A handwritten signature in cursive script that reads "Maureen Gannon".

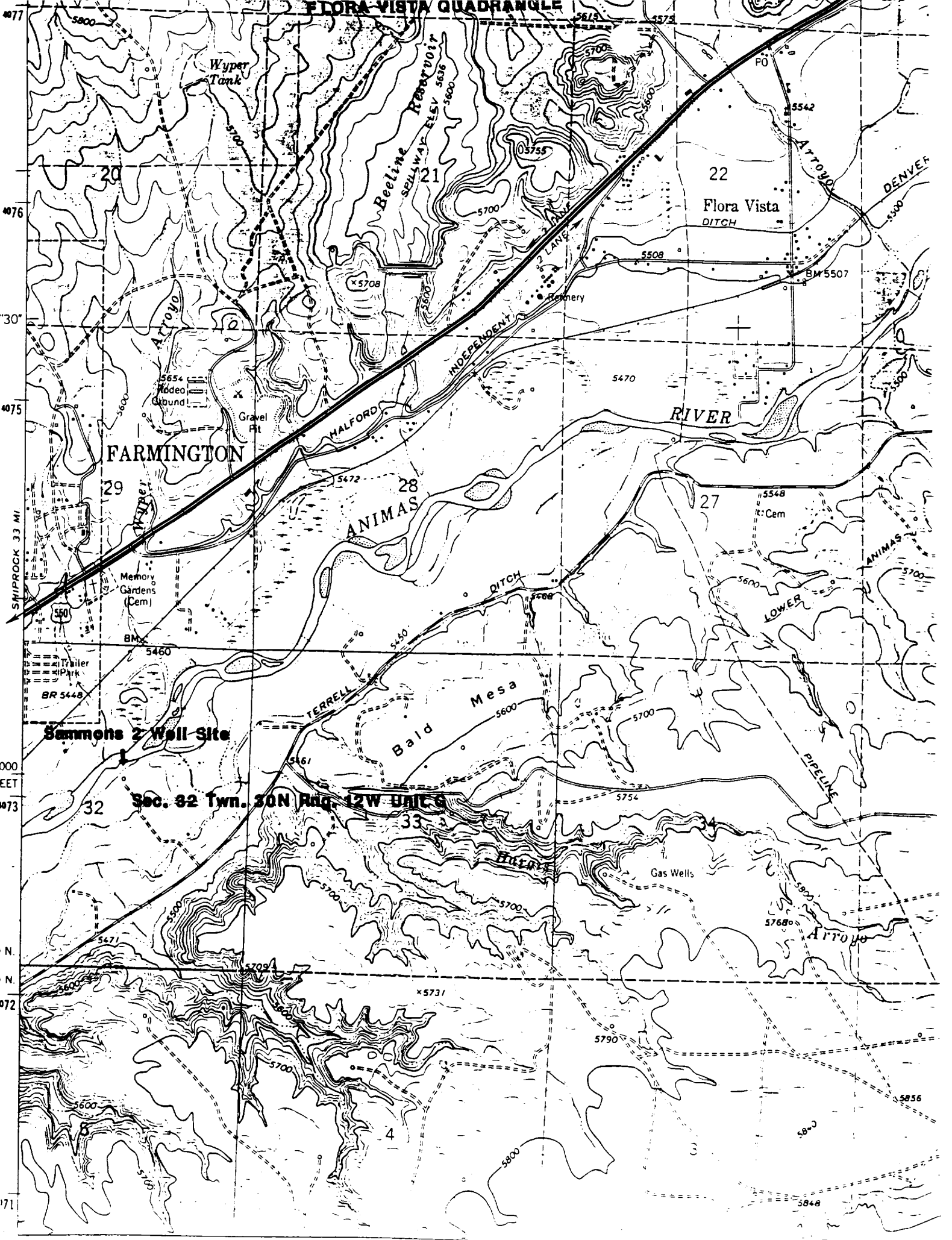
Maureen Gannon
Project Manager

s:\Gaspits\Sammltr.doc

Attachment

cc: Colin Adams, PNM
Denver Bearden, PNMGS
Denny Foust, OCD-Aztec Office
Robin Prisk, WFS
Toni Ristau, PNM
Craig Bock, Burlington Resources

FLORA VISTA QUADRANGLE



4077
4076
730'
4075
SWIPROCK 33 MI
000
EET
4073
1 N.
1 N.
072
171

FARMINGTON

Flora Vista
DITCH

ANIMAS

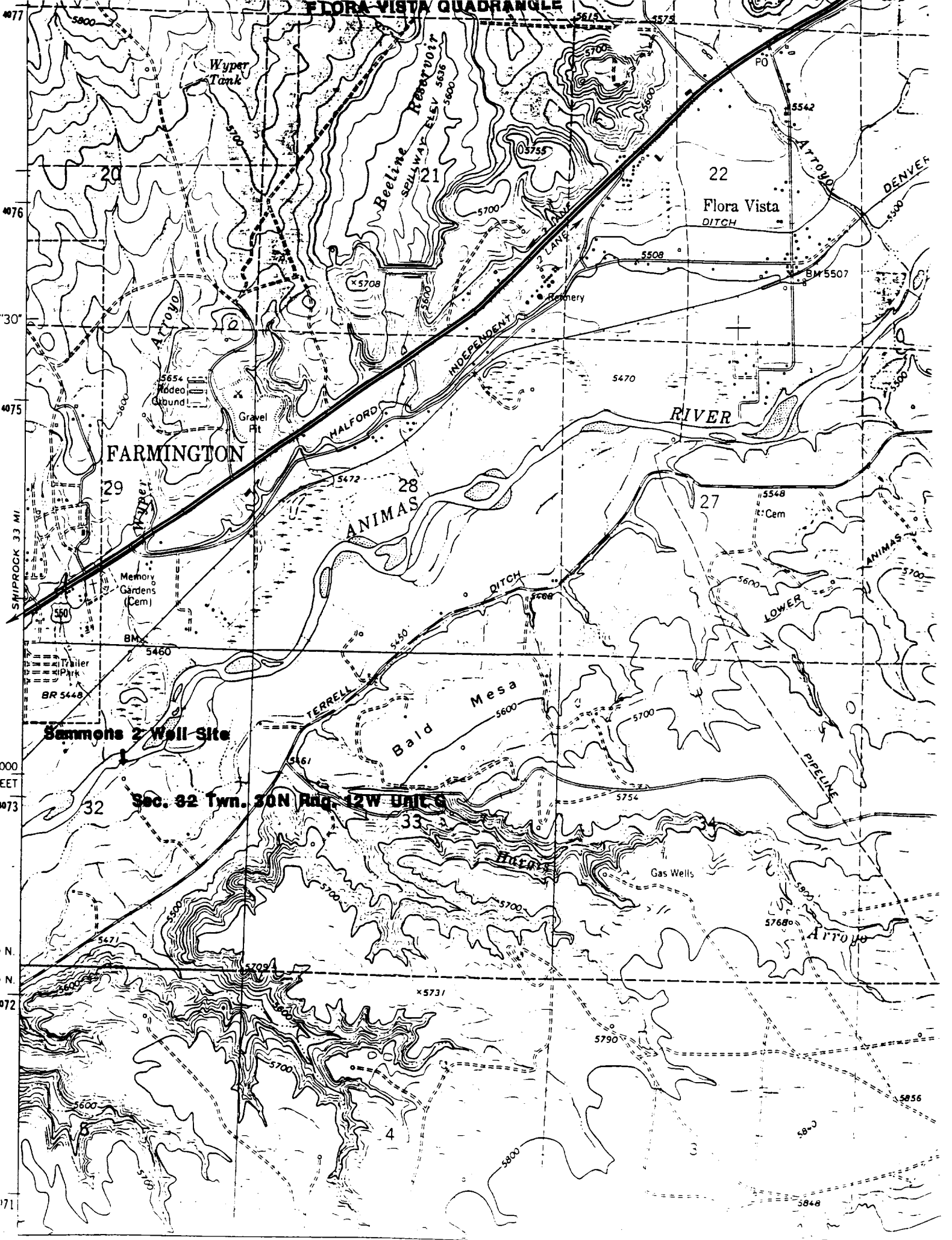
RIVER

DITCH

Bald Mesa

Sec. 32 Twp. 30N Rng. 12W Unit 6

Sammons 2 Well Site



4077
4076
730'
4075
SWIPROCK 33 MI
000
EET
4073
1 N.
1 N.
072
171

FARMINGTON

Flora Vista
DITCH

ANIMAS

RIVER

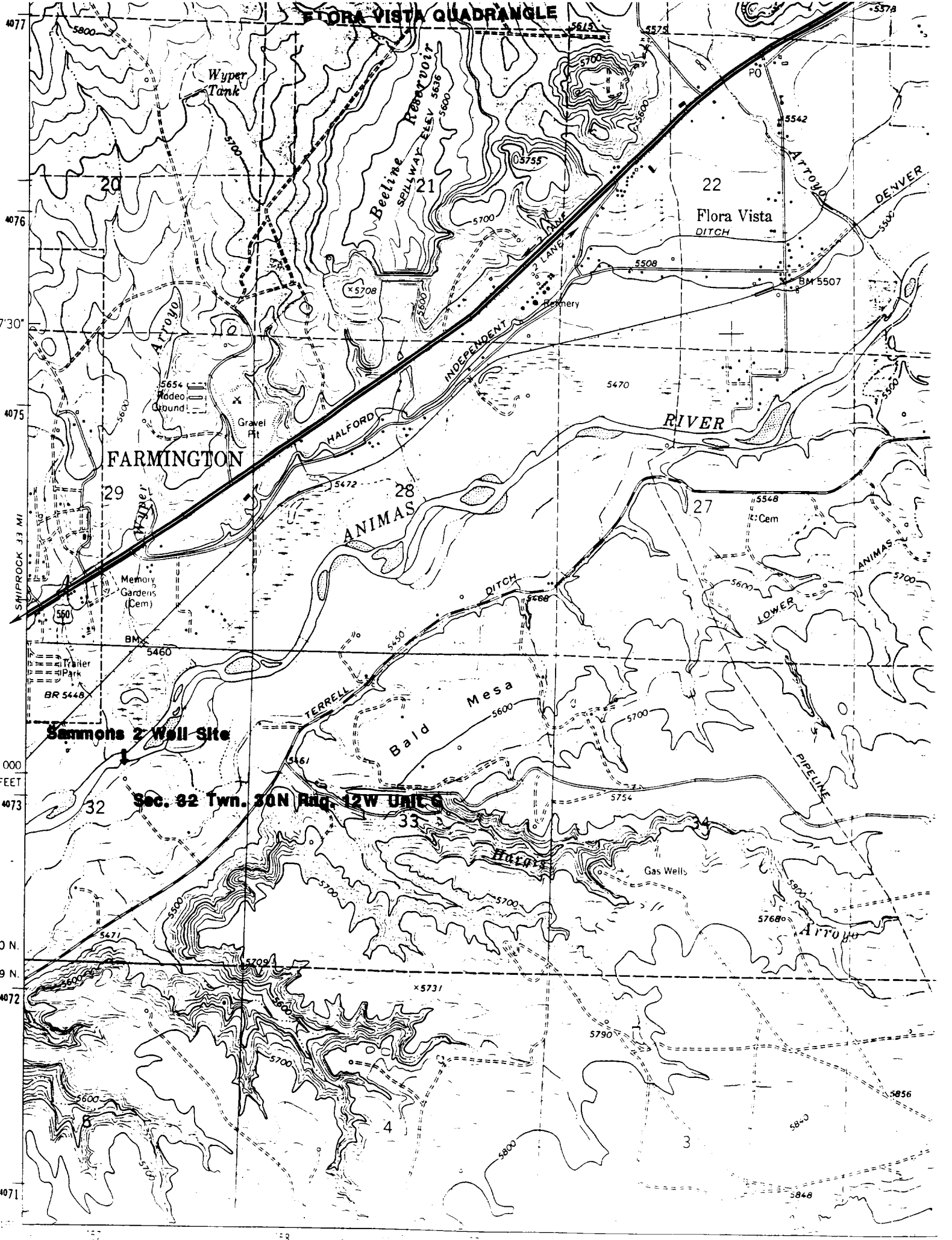
DITCH

Bald Mesa

Sec. 32 Twp. 30N Rng. 12W Unit 6

Sammons 2 Well Site

FLORA VISTA QUADRANGLE



4077
4076
730'
4075
1000 FEET
4073
0 N.
9 N.
4072
4071

FARMINGTON

Flora Vista DITCH

RIVER

ANIMAS

Bald Mesa

Sammons 2 Well Site

Sec. 32 Twn. 30N Rng. 12W UNIT 9

Gas Wells

SNIPROCK 3.3 MI

4071

5378

5615

5573

5542

BM 5507

5654

5700

5508

5470

5548

5460

5472

5488

5600

5700

5461

5700

5754

1000

4073

0 N.

9 N.

4072

4071

5731

5790

5856

5800

5848

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: *2-Apr-97*
COC No.: *5140*
Sample No.: *14072*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon #2*
Project Location: *9704020715; Pit Excavation Groundwater Sample*
Sampled by: *RH* Date: *2-Apr-97* Time: *7:15*
Analyzed by: *DC* Date: *2-Apr-97*
Sample Matrix: *Liquid*

<i>Parameter</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Benzene</i>	<i>89</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Toluene</i>	<i>415</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Ethylbenzene</i>	<i>192</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>m,p-Xylene</i>	<i>1260</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>o-Xylene</i>	<i>113</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>TOTAL</i>	<i>2069</i>	<i>ug/L</i>		

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

Approved By: *[Signature]*
Date: *4/2/97*

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

RECEIVED
JUL 22 1998

PIT REMEDIATION AND CLOSURE REPORT

OIL CON. DIV.
DIST. 3

Operator: PNM Gas Services (Burlington)		Telephone: 324-3764	
Address: 603 W. Elm Street Farmington, NM 87401			
Facility or Well Name: Sammons #2			
Location:	Unit <u> G </u>	Sec <u> 32 </u>	T <u> 30N </u> R <u> 12W </u> County <u> San Juan </u>
Pit Type:	Separator <input checked="" type="checkbox"/>	Dehydrator <input type="checkbox"/>	Other <input type="checkbox"/>
Land Type:	BLM <input type="checkbox"/>	State <input type="checkbox"/>	Fee <input checked="" type="checkbox"/> Other <input type="checkbox"/> Private <input type="checkbox"/>
Pit Location:	Pit dimensions:	length <u> 15 </u> width <u> 15 </u> depth <u> 3 </u>	
(Attach diagram)	Reference:	wellhead <input checked="" type="checkbox"/> other <input type="checkbox"/>	
	Footage from reference:	<u> 80' </u>	
	Direction from reference:	<u> 70 </u> Degrees <input type="checkbox"/> East <input checked="" type="checkbox"/> West	North <input checked="" type="checkbox"/> South <input type="checkbox"/>
			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> 20 </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> 20 </u>
<small>(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)</small>			
RANKING SCORE (TOTAL POINTS) :			<u> 40 </u>

Sammons #2

Date Remediation Started: 3/31/97 Date Completed: 4/15/97

Remediation Method: Excavation Approx. Cubic Yard 2644

(Check all appropriate sections) Landfarmed Amount Landfarmed (cubic yds) 1520

Other _____

Remediation Location: Onsite Offsite Hauled 780 cu yds to Tierra Environmental.

(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 170' X 70' X 6' and landfarmed 2644 cu. yds. onsite. Soil was aerated by disking/plowing until soil met regulatory levels. Transported 780 cu. yds. to Tierra Environmental.

*** Groundwater encountered at 6'. Lab analysis showed results below WQCC standards. See attached laboratory analysis.

Ground Water Encountered: No Yes Depth _____

Final Pit Closure Sampling: Sample Location Not Taken***

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

Sample depth _____

Sample date _____ Sample time _____

Sample Results

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) _____

TPH (ppm) _____ Method _____

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

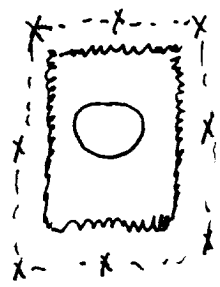
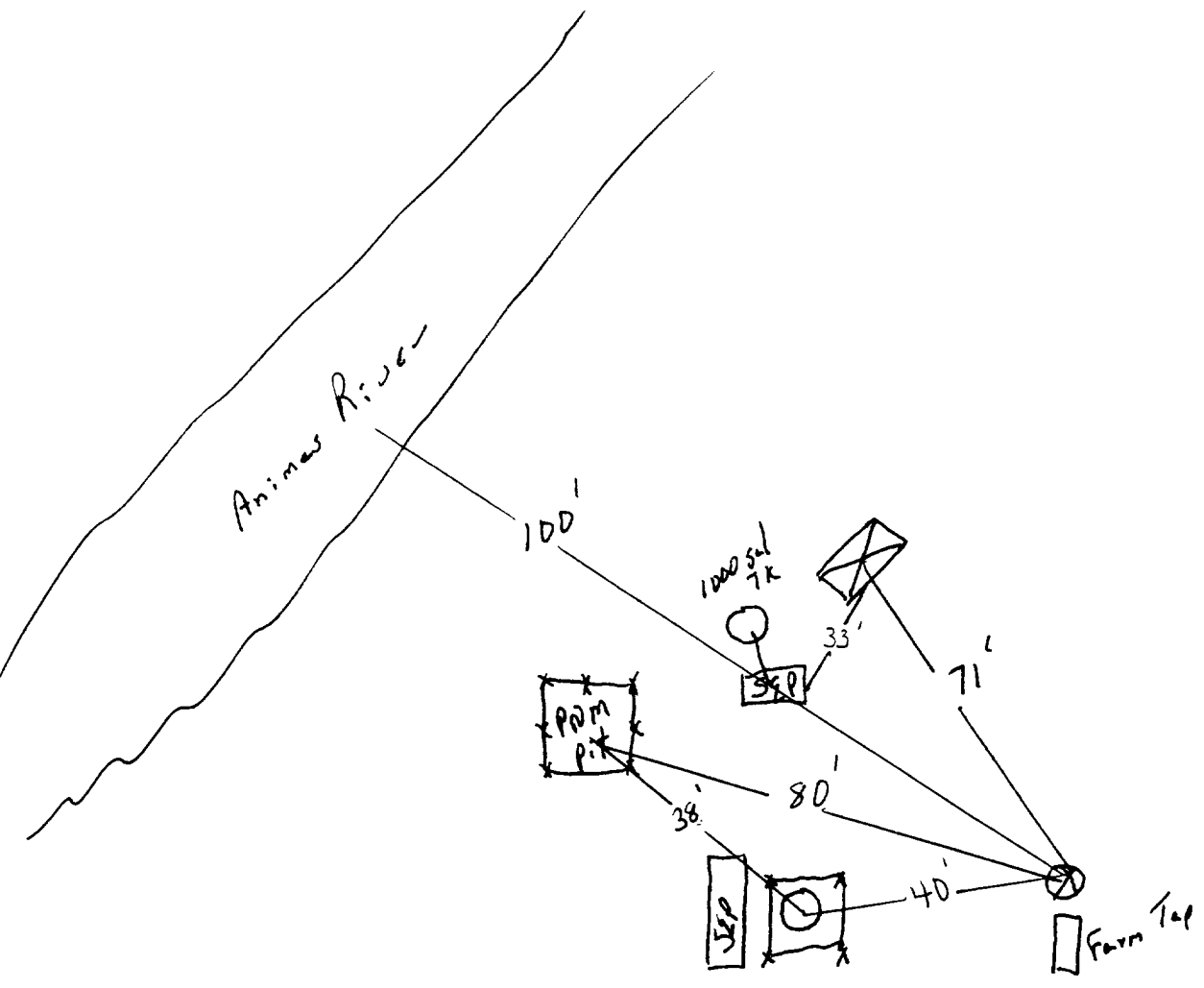
SIGNATURE Maureen Gannon

PRINTED NAME AND TITLE Maureen Gannon Project Manager

by Kathy Fuchs

Sammon #2
Barlington Resources
Sec. 32, 30N, 12W, G
elev. 5423

3-31-97



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: *2-Apr-97*
 COC No.: *5140*
 Sample No.: *14072*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon #2*
 Project Location: *9704020715; Pit Excavation Groundwater Sample*
 Sampled by: *RH* Date: *2-Apr-97* Time: *7:15*
 Analyzed by: *DC* Date: *2-Apr-97*
 Sample Matrix: *Liquid*

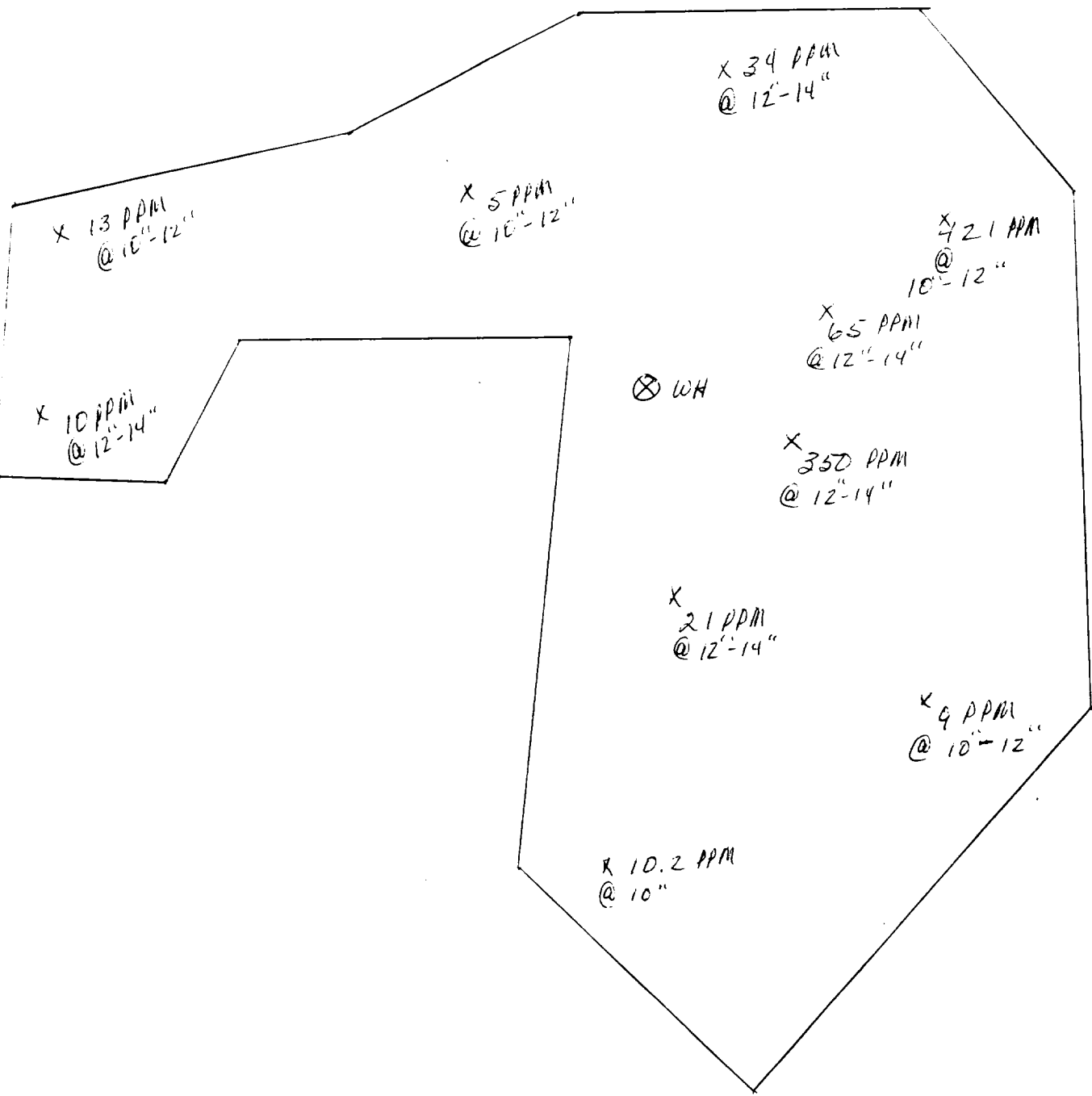
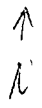
<i>Parameter</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Benzene</i>	89	ug/L	0.2	ug/L
<i>Toluene</i>	415	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	192	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	1260	ug/L	0.2	ug/L
<i>o-Xylene</i>	113	ug/L	0.2	ug/L
<i>TOTAL</i>	2069	ug/L		

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

Approved By: *[Signature]*
 Date: *4/2/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



SUMMON # 2
6-16-97

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: *19-Jun-97*
 COC No.: *5151*
 Sample No.: *14954*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon #2 Landfarm*
 Project Location: *9706160820; 10pt. Composite*
 Sampled by: *RH* Date: *16-Jun-97* Time: *8:20*
 Analyzed by: *HR* Date: *18-Jun-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	ug/kg
<i>Toluene</i>	33	ug/kg	1	ug/kg
<i>Ethylbenzene</i>	19	ug/kg	1	ug/kg
<i>m,p-Xylene</i>	79	ug/kg	1	ug/kg
<i>o-Xylene</i>	72	ug/kg	1	ug/kg
	<i>TOTAL</i>	202		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: *6/19/97*

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: *20-Jun-97*
 COC No.: *5151*
 Sample No.: *14954*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon #2 Landfarm*
 Project Location: *9706160820; 10pt. Composite*
 Sampled by: *RH* Date: *16-Jun-97* Time: *8:20*
 Analyzed by: *DC/HR* Date: *19-Jun-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>7</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.: 0548-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>195</i>	<i>2.5</i>	<i>15%</i>

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>88</i>	<i>95</i>	<i>(70-130)</i>	<i>9</i>	<i>20%</i>

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

Approved by: *[Signature]*
 Date: *[Date]*

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY RESISTIVE KILNS WITH THE FUTURE IN MIND

PNMGS Well Site: **Sammons 2**

Groundwater Site Summary Report

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

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

Operator: Burlington Resources
Sec: 32 **Twn:** 30N **Rng:** 12W **Unit:** G
Canyon: Animas River

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

Topo Map: previously submitted

Well Completion Diagram: Figure 1

Site Map with Analytical Results: Figure 2

Groundwater Contour Map: Figure 3 (June 1997), Figure 4 (September 1997), Figure 5 (December 1997) & Figure 6 (March 1998)

Hydrograph: Figure 7

Full suite-Groundwater Sampling Results: Table 1

Analytical Results: attached

Activities for Previous Year:

PNM installed five groundwater monitoring wells at the Sammons 2 well site on May 15, 1997. Figure 1 provides a typical groundwater monitoring well diagram for each well installation. On June 25, September 26 and December 23, 1997 and again on March 4, 1998, PNM performed quarterly sampling of groundwater monitoring wells at the site. PNM measured water levels and conducted groundwater sampling in each well for chemical analyses of benzene, toluene, ethylbenzene, and xylenes (BTEX). In addition, on September 17, 1997, MW-1 and MW-2 were sampled for Water Quality Control Commission (WQCC) dissolved metals and major cations/anions. Sampling was performed in strict compliance with EPA protocol.

In all instances, PNM delivered the samples to OnSite Technologies, Farmington, New Mexico. The samples were analyzed using the following methods:

- BTEX using EPA Method 8020
- major cations/anions using various EPA methods
- WQCC metals- filtered (As, Ba, Cd, Cr, Pb, Se, and Ag using inductively coupled plasma (ICP) for heavy metals and atomic absorption spectroscopy (AAS) for Hg and Se).

Results:

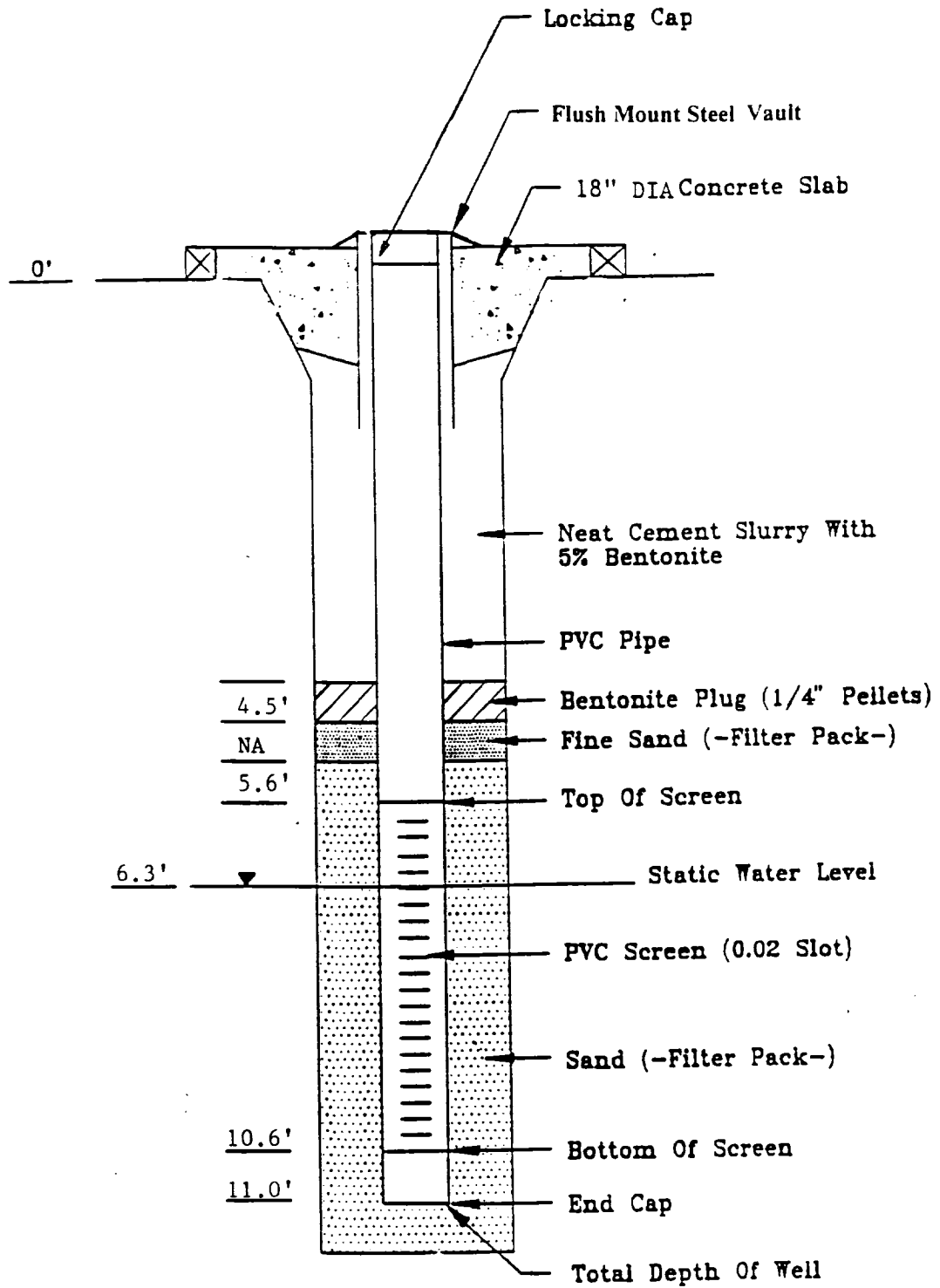
Figure 2 presents a site map showing BTEX for each monitoring well since groundwater contamination was discovered. Table 1 provides a summary of the full suite of analytical results collected during the June 25, 1997 sampling event. Since monitoring began four quarters ago, all five wells have shown BTEX concentrations below WQCC standards. Water quality analysis of MW-1 and -2 revealed elevated sulfate concentrations at the site. Metals in either well were below WQCC standards.

Figure(s) 3, 4, 5 and 6 provide groundwater contour maps for the months of June, September and December 1997 and March 1998, respectively. In June and September, the groundwater flow was southwesterly in direction beneath the site. In December and March, the groundwater direction shifted to the west. Figure 7 shows the historical groundwater elevations at the site. The groundwater gradient and elevations are strongly influenced by the Animas River which runs along the northern border of the site. With the exception of September 1997, groundwater levels, in general, have risen over the last four quarters. The drop in elevation in MW-3, -4, and -5 in September is probably due to a decrease in the water level of the Animas River during that time.

Further Action:

Consistent with PNM's San Juan Basin Groundwater Management Plan, PNM requests closure of the Sammons 2 former pit. BTEX concentrations in all wells surrounding our former pit have been consistently below WQCC standards for four calendar quarters.

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.

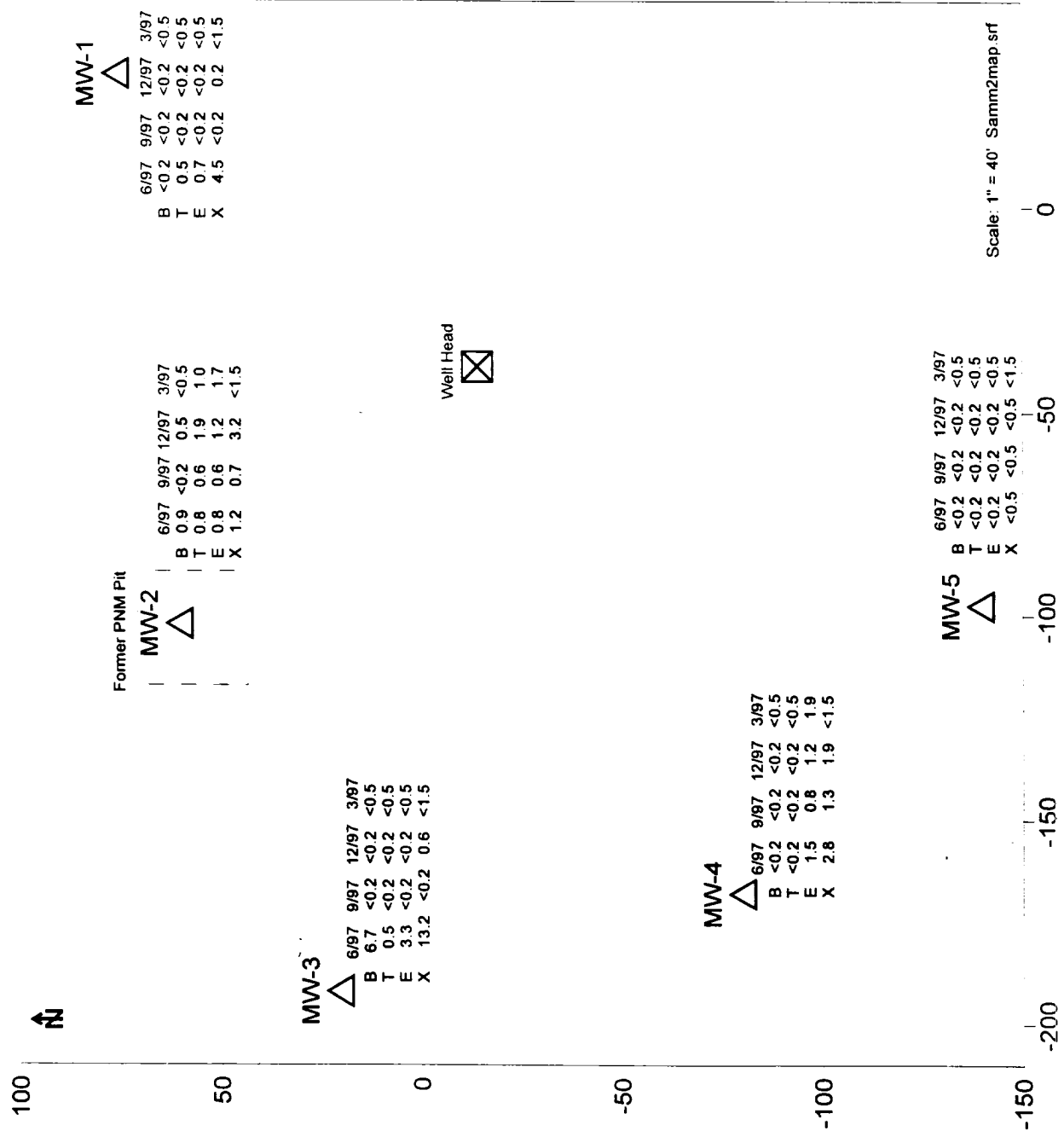


CLIENT: PNM	
DATE:	REV. NO.: 0
AUTHOR: M.D.G.	DRAWN BY: M.P.
CK'D BY: M.D.G.	FILE: DWG

Sammons 2
 Figure 1
 Well Completion Diagram

**Figure 2. Sammons 2 e Map & Analytical Results
(Concentrations in ppb)**

← Animas River



Scale: 1" = 40' Samm2map.srf

Figure 3. Sammons 2 Site Groundwater Map (June 25, 1997)

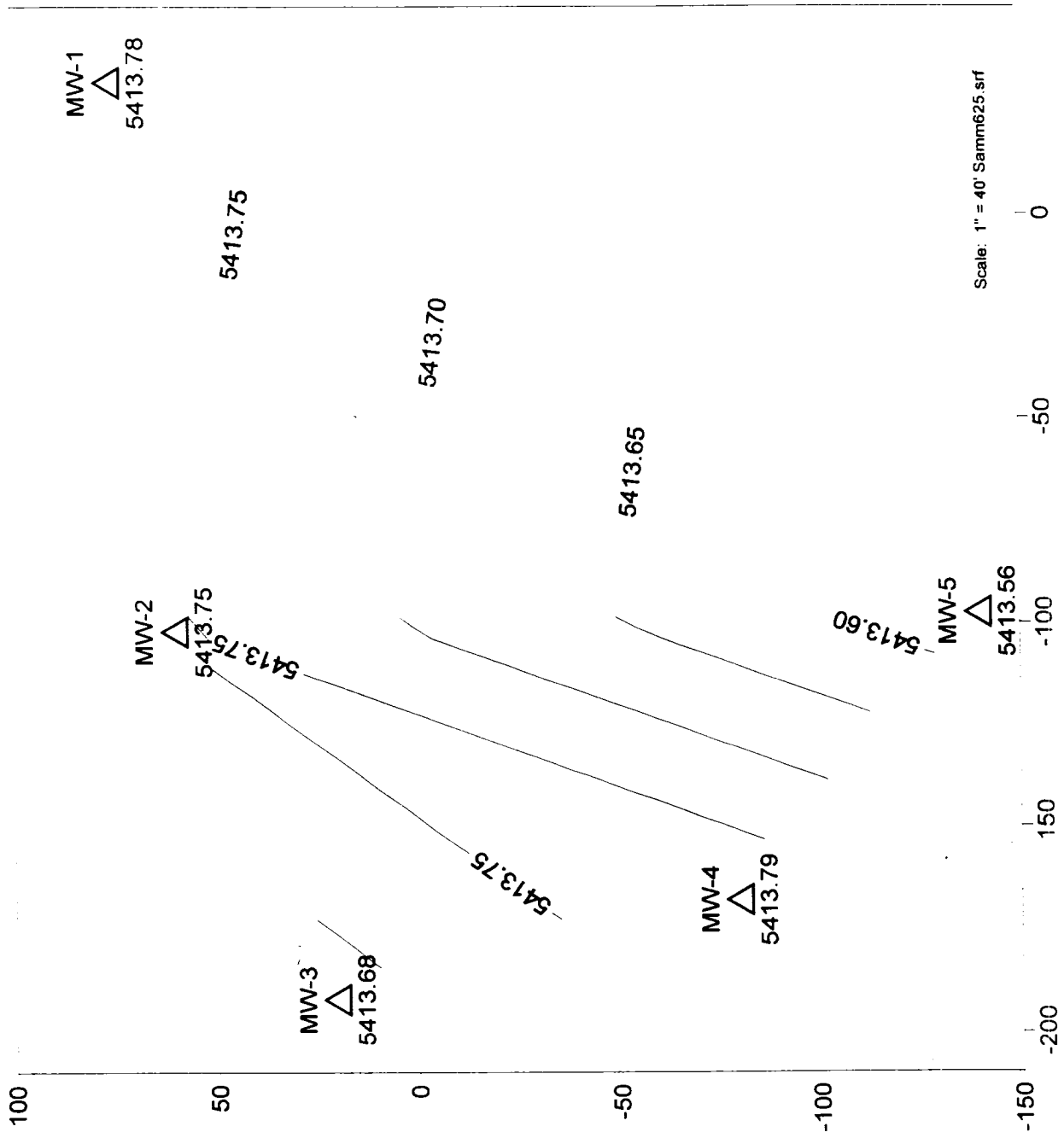


Figure 4. Sammons 2 Site Groundwater Map (September 26, 1997)

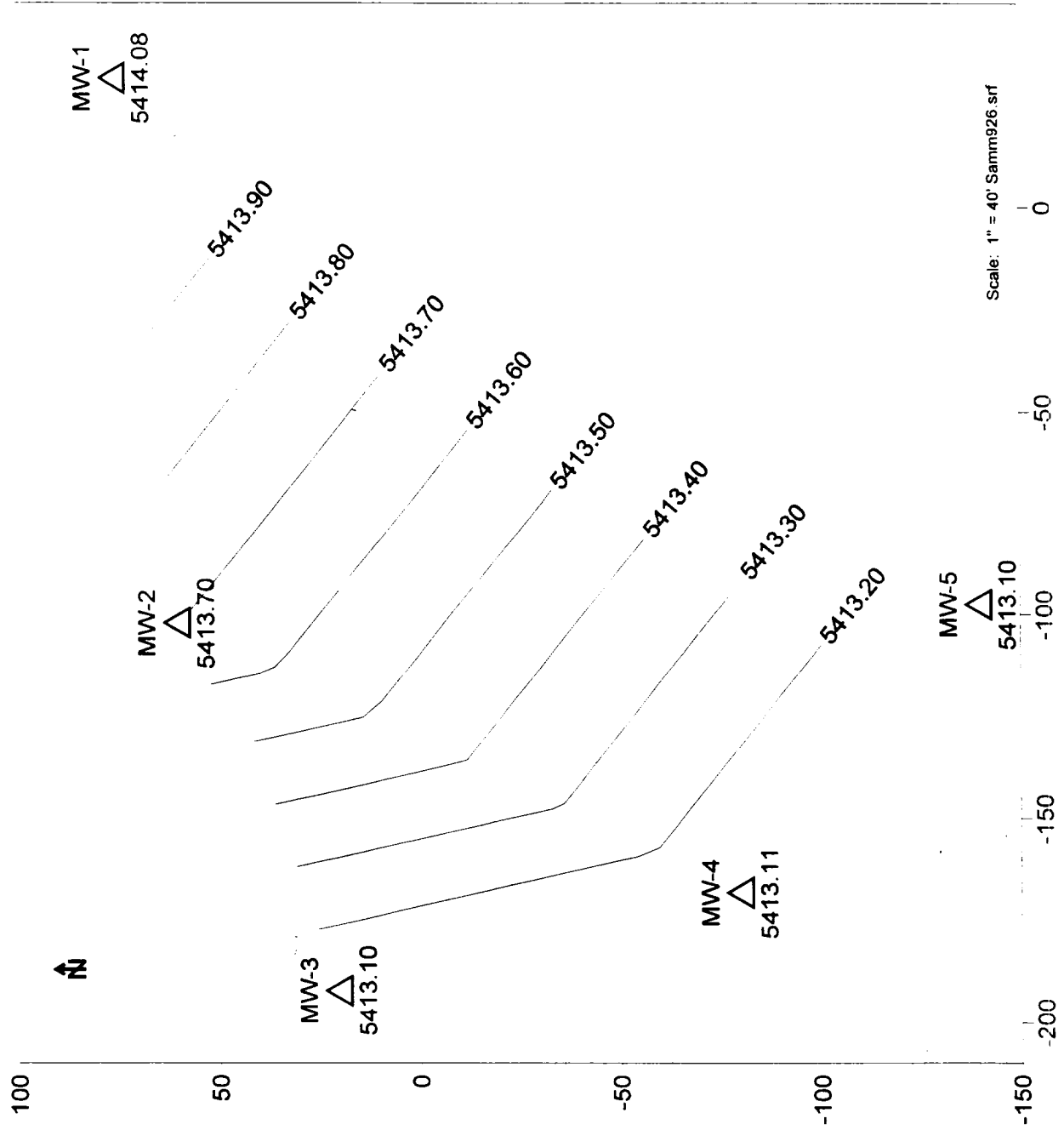


Figure 5. Sammons 2 Site Groundwater Map (December 23, 1997)

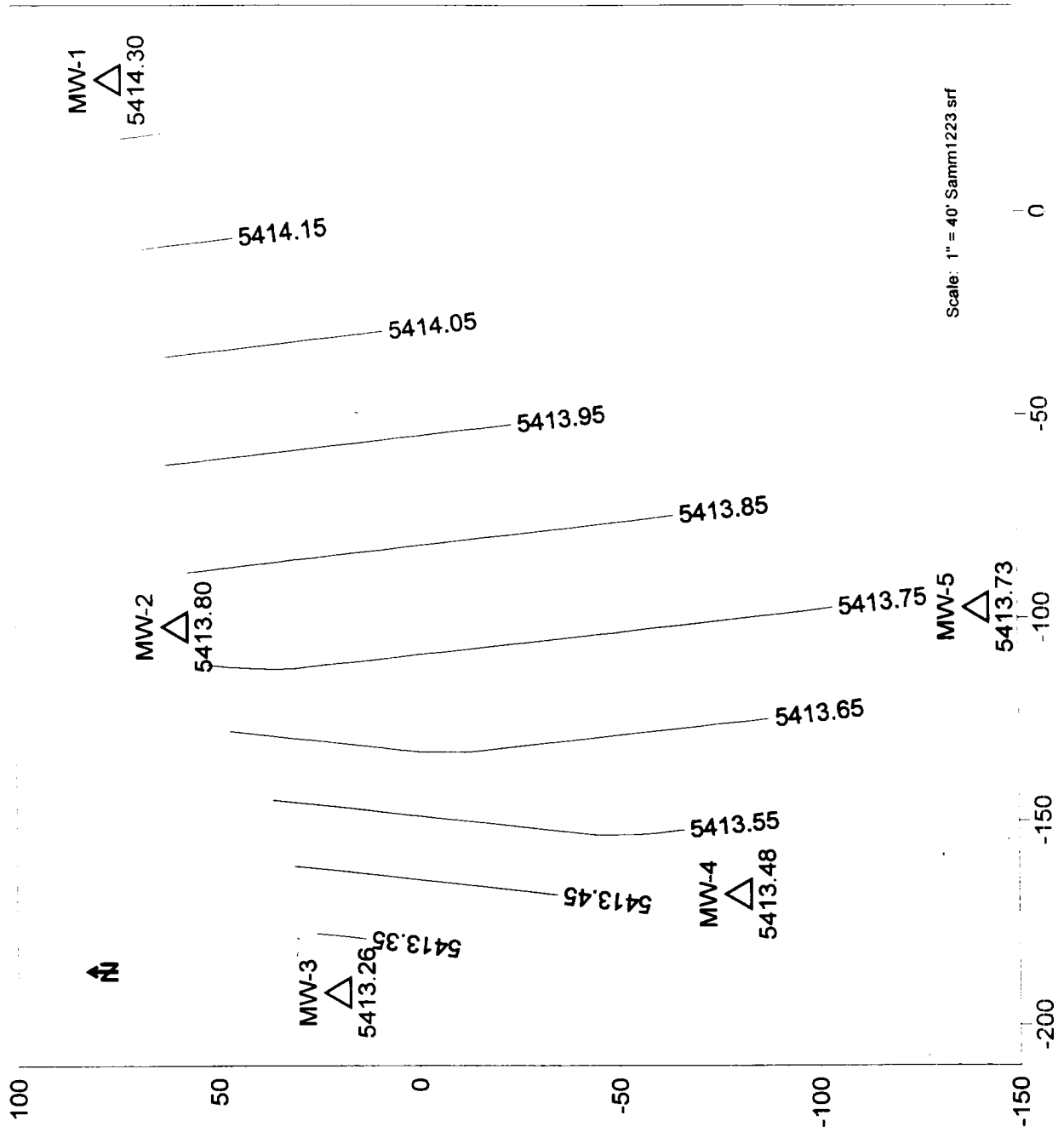


Figure 6. Sammons 2 Site Groundwater Map (March 4, 1998)

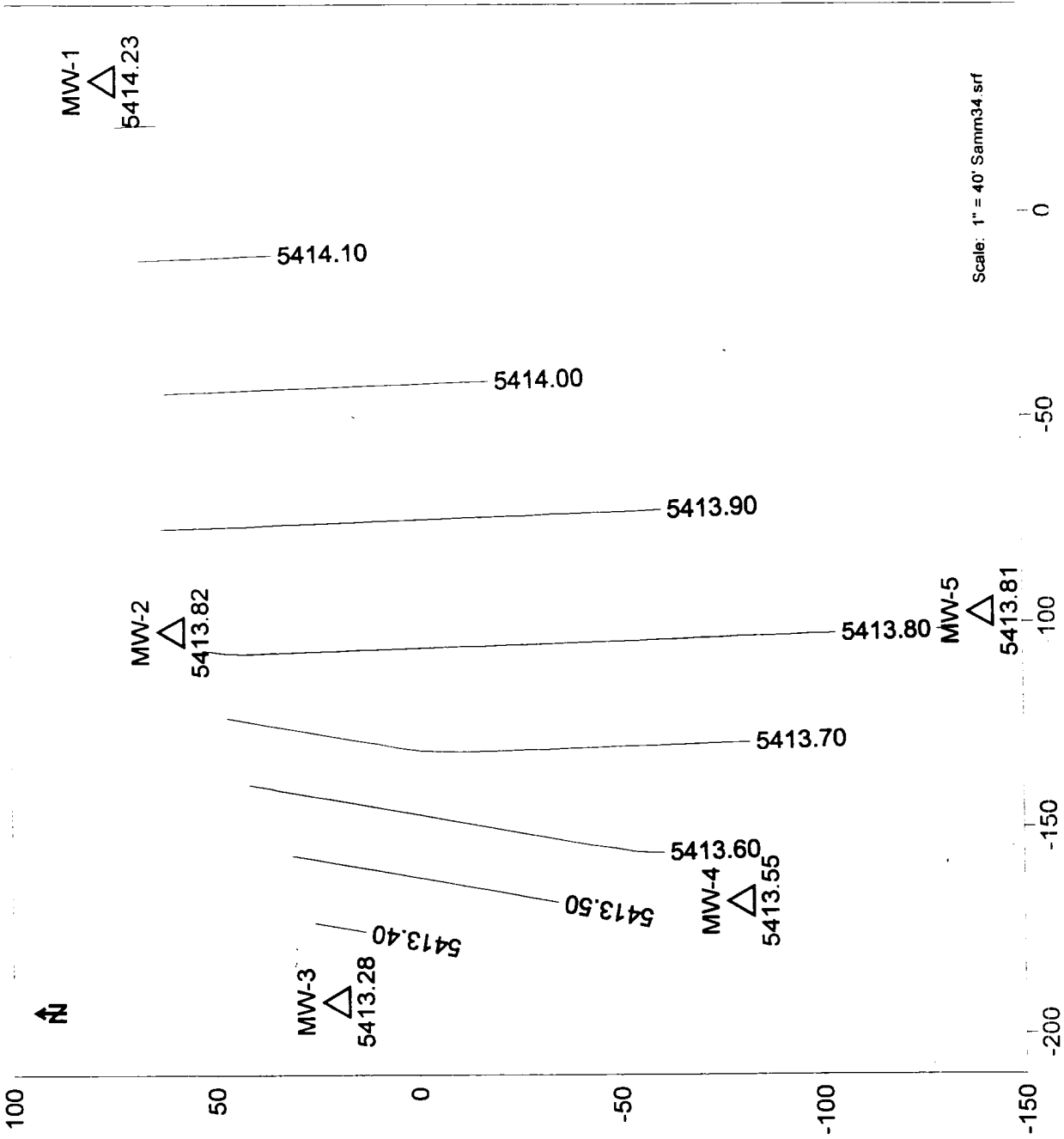


Figure 7. Sammon 2 Hydrograph

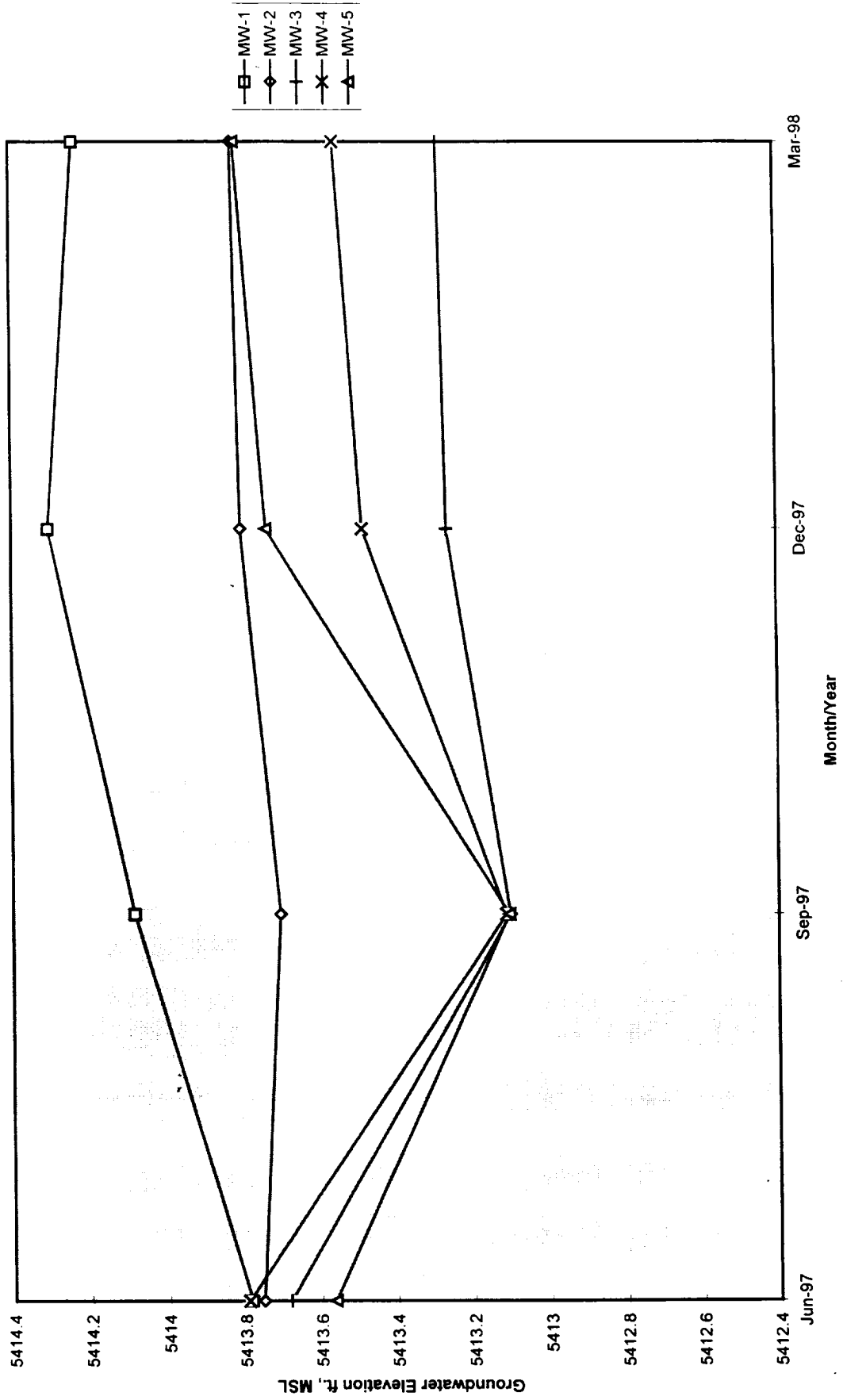


Table 1. SAMMONS 2 GROUNDWATER SAMPLING RESULTS, mg/l (6/25/97)

Constituent	WQCC Stds.	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6 (MW-3 duplicate)
B	0.01	<0.0002	0.0009	0.0067	<0.0002	<0.0002	0.0066
T	0.75	0.0005	0.0008	0.0005	<0.0002	<0.0002	0.0005
E	0.75	0.0007	0.0008	0.0033	0.0015	<0.0002	0.0030
X	0.62	0.0045	0.0012	0.0132	0.0028	0.0002	0.0120
PAHs	0.03	NA	NA	NA	NA	NA	NA
<i>Metals</i>							
As	0.1	<0.030	<0.030	NA	NA	NA	NA
Ba	1	0.120	0.154	NA	NA	NA	NA
Cd	0.01	<0.004	<0.004	NA	NA	NA	NA
Cr	0.05	<0.010	<0.010	NA	NA	NA	NA
Pb	0.05	<0.040	<0.040	NA	NA	NA	NA
Se	0.05	<0.006	<0.006	NA	NA	NA	NA
Ag	0.05	<0.006	<0.006	NA	NA	NA	NA
Hg	0.002	<0.0001	<0.0001	NA	NA	NA	NA
<i>Cations/Anions</i>							
Na	NA	812	365	NA	NA	NA	NA
Ca	NA	440	450	NA	NA	NA	NA
Mg	NA	125	46.2	NA	NA	NA	NA
K	NA	10.9	15.1	NA	NA	NA	NA
Cl	NA	303	94.5	NA	NA	NA	NA
SO4	NA	2681	1558	NA	NA	NA	NA
CO3	NA	<1	<1	NA	NA	NA	NA
HCO3	NA	751	823	NA	NA	NA	NA
OH	NA	<1	<1	NA	NA	NA	NA
<i>Cation/Anion Balance</i>							
Difference Cation-Anion	NA	8.83	6.07	NA	NA	NA	NA
Total Cation-Anion	NA	144.51	91.11	NA	NA	NA	NA
% Difference	NA	6.1	6.7	NA	NA	NA	NA
TDS, calc	NA	5123	3352	NA	NA	NA	NA
TDS, meas	NA	5164	3246	NA	NA	NA	NA
Hardness as CaCO3	NA	1613	1314	NA	NA	NA	NA

NA: Not Applicable
 BDL: Below Detection Limit
 NS: Not Sampled
 **: Out of Acceptable Range, % Diff. +/-5
 P: Free Product



24 July 1997

Denver Bearden
PNM Gas Services
603 W. Elm Street
Farmington, NM 87401

Reference:

Project Name: Sammons 2
Project Loc.: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6
On Site ID: COC Record No. 5567

Dear Denver,

Enclosed please find the analytical results for your project referenced above. This includes the parameters sub-contracted to Mountain States Analytical for dissolved metals.

We trust you will find all in order and should you have any questions regarding these results please contact me at any time, (505) 325-2432.

Thank you once again for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Cox", is written over the typed name.

On Site Technologies, Ltd.
David Cox
Laboratory Manager

cc: Maureen Gannon, PNM Gas Services



ANALYTICAL REPORT

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

Date: *13-Jul-97*
 COC No.: *5567*
 Sample No.: *15120*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammons 2*
 Project Location: *9706251600; MW-1*
 Sampled by: *MS/MG/BK* Date: *25-Jun-97* Time: *16:00*
 Analyzed by: *DC* Date: *7-Jul-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>	0.5	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	0.7	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	4.1	ug/L	0.2	ug/L
<i>o-Xylene</i>	0.4	ug/L	0.2	ug/L
<i>TOTAL</i>	5.7	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *DAG*
 Date: *7/14/97*



ANALYTICAL REPORT

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

Date: *13-Jul-97*
 COC No.: *5567*
 Sample No.: *15121*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammons 2*
 Project Location: *9706251630; MW-2*
 Sampled by: *MS/MG/BK* Date: *25-Jun-97* Time: *16:30*
 Analyzed by: *DC* Date: *7-Jul-97*
 Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	0.9	ug/L	0.2	ug/L
<i>Toluene</i>	0.8	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	0.8	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	0.9	ug/L	0.2	ug/L
<i>o-Xylene</i>	0.3	ug/L	0.2	ug/L
<i>TOTAL</i>	3.7	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: *7/14/97*



ANALYTICAL REPORT

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

Date: *13-Jul-97*
 COC No.: *5567*
 Sample No.: *15122*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammons 2*
 Project Location: *9706251700; MW-3*
 Sampled by: *MS/MG/BK* Date: *25-Jun-97* Time: *17:00*
 Analyzed by: *DC* Date: *7-Jul-97*
 Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	6.7	ug/L	0.2	ug/L
<i>Toluene</i>	0.5	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	3.3	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	12.8	ug/L	0.2	ug/L
<i>o-Xylene</i>	0.4	ug/L	0.2	ug/L
<i>TOTAL</i>	23.7	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: *7/14/97*



ANALYTICAL REPORT

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

Date: *13-Jul-97*
 COC No.: *5567*
 Sample No.: *15123*
 Job No.: *2-1000*

Project Name: ***PNM Gas Services - Sammons 2***
 Project Location: ***9706251730; MW-4***
 Sampled by: *MS/MG/BK* Date: *25-Jun-97* Time: *17:30*
 Analyzed by: *DC* Date: *7-Jul-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>	1.5	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	2.1	ug/L	0.2	ug/L
<i>o-Xylene</i>	0.7	ug/L	0.2	ug/L
<i>TOTAL</i>	4.3	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: *7/14/97*



ANALYTICAL REPORT

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

Date: *13-Jul-97*
 COC No.: *5567*
 Sample No.: *15124*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammons 2*
 Project Location: *9706251800; MW-5*
 Sampled by: *MS/MG/BK* Date: *25-Jun-97* Time: *18:00*
 Analyzed by: *DC* Date: *7-Jul-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: *DAG*
 Date: *7/14/97*



ANALYTICAL REPORT

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

Date: *13-Jul-97*
 COC No.: *5567*
 Sample No.: *15125*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammons 2*
 Project Location: *9706251830; MW-6*
 Sampled by: *MS/MG/BK* Date: *25-Jun-97* Time: *18:30*
 Analyzed by: *DC* Date: *7-Jul-97*
 Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	6.6	ug/L	0.2	ug/L
<i>Toluene</i>	0.5	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	3.0	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	11.6	ug/L	0.2	ug/L
<i>o-Xylene</i>	0.4	ug/L	0.2	ug/L
<i>TOTAL</i>	22.0	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: *7/14/97*



ANALYTICAL REPORT

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

Date: *21-Jul-97*
 COC No.: *5567*
 Sample ID.: *15120*
 Job No.: *2-1000*

Project Name: ***PNM Gas Services - Sammons 2***
 Project Location: ***9706251600; MW-1***
 Sampled by: *MS/MG/BK* Date: *25-Jun-97* Time: *16:00*
 Analyzed by: *HR* Date: *7-Jul-97*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Results as Received	Unit of Measure										
<i>Cations</i>														
<i>Sodium Na</i>	812	mg/L	35.32	me/L										
<i>Calcium Ca</i>	440	mg/L	21.96	me/L										
<i>Magnesium Mg</i>	125	mg/L	10.29	me/L										
<i>Potassium K</i>	10.9	mg/L	0.28	me/L										
<i>Anions</i>														
<i>Chloride Cl</i>	303	mg/L	8.55	me/L										
<i>Sulfate SO4</i>	2681	mg/L	55.82	me/L										
<i>Carbonate CO3 as CaCO3</i>	< 1	mg/L	< 0.01	me/L										
<i>Bicarbonate HCO3 as CaCO3</i>	751	mg/L	12.31	me/L										
<i>Hydroxide OH as CaCO3</i>	< 1	mg/L	< 0.01	me/L										
<i>Total Dissolved Solids Calculated, Sum of Cation/Anion</i>	5123	mg/L	<table style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"><u><i>Cation-Anion Balance</i></u></td> </tr> <tr> <td style="text-align: center;">8.83</td> <td style="text-align: center;"><i>Difference Cation-Anion, me L</i></td> </tr> <tr> <td style="text-align: center;">144.51</td> <td style="text-align: center;"><i>Total Cation-Anion, me L</i></td> </tr> <tr> <td style="text-align: center;">6.1</td> <td style="text-align: center;"><i>% Difference Cation-Anion</i></td> </tr> <tr> <td colspan="2" style="text-align: center;"><u><i>Comments</i></u></td> </tr> </table>		<u><i>Cation-Anion Balance</i></u>		8.83	<i>Difference Cation-Anion, me L</i>	144.51	<i>Total Cation-Anion, me L</i>	6.1	<i>% Difference Cation-Anion</i>	<u><i>Comments</i></u>	
<u><i>Cation-Anion Balance</i></u>														
8.83	<i>Difference Cation-Anion, me L</i>													
144.51	<i>Total Cation-Anion, me L</i>													
6.1	<i>% Difference Cation-Anion</i>													
<u><i>Comments</i></u>														
<i>Total Dissolved Solids Dried @ 180 C</i>	5164	mg/L												
<i>pH</i>	7.23													
<i>Conductivity @ 25 C</i>	5730	uS/cm												
<i>Total Hardness as CaCO3</i>	1613	mg/L												

Approved by: *[Signature]*
 Date: *7/21/97*



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: *21-Jul-97*
 COC No.: *5567*
 Sample ID.: *15121*
 Job No.: *2-1000*

Project Name: ***PNM Gas Services - Sammons 2***
 Project Location: ***9706251630; MW-2***
 Sampled by: *MS/MG/BK* Date: *25-Jun-97* Time: *16:30*
 Analyzed by: *HR* Date: *7-Jul-97*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Results as Received	Unit of Measure										
<i>Cations</i>														
<i>Sodium Na</i>	<i>365</i>	<i>mg/L</i>	<i>15.88</i>	<i>me/L</i>										
<i>Calcium Ca</i>	<i>450</i>	<i>mg/L</i>	<i>22.46</i>	<i>me/L</i>										
<i>Magnesium Mg</i>	<i>46.2</i>	<i>mg/L</i>	<i>3.80</i>	<i>me/L</i>										
<i>Potassium K</i>	<i>15.1</i>	<i>mg/L</i>	<i>0.39</i>	<i>me/L</i>										
<i>Anions</i>														
<i>Chloride Cl</i>	<i>94.5</i>	<i>mg/L</i>	<i>2.67</i>	<i>me/L</i>										
<i>Sulfate SO4</i>	<i>1558</i>	<i>mg/L</i>	<i>32.44</i>	<i>me/L</i>										
<i>Carbonate CO3 as CaCO3</i>	<i>< 1</i>	<i>mg/L</i>	<i>< 0.01</i>	<i>me/L</i>										
<i>Bicarbonate HCO3 as CaCO3</i>	<i>823</i>	<i>mg/L</i>	<i>13.49</i>	<i>me/L</i>										
<i>Hydroxide OH as CaCO3</i>	<i>< 1</i>	<i>mg/L</i>	<i>< 0.01</i>	<i>me/L</i>										
<i>Total Dissolved Solids Calculated, Sum of Cation/Anion</i>	<i>3352</i>	<i>mg/L</i>	<table border="0"> <tr> <td colspan="2"><i>Cation-Anion Balance</i></td> </tr> <tr> <td><i>6.07</i></td> <td><i>Difference Cation-Anion. me/L</i></td> </tr> <tr> <td><i>91.11</i></td> <td><i>Total Cation-Anion. me/L</i></td> </tr> <tr> <td><i>6.7</i></td> <td><i>% Difference Cation-Anion</i></td> </tr> <tr> <td colspan="2"><i>Comments</i></td> </tr> </table>		<i>Cation-Anion Balance</i>		<i>6.07</i>	<i>Difference Cation-Anion. me/L</i>	<i>91.11</i>	<i>Total Cation-Anion. me/L</i>	<i>6.7</i>	<i>% Difference Cation-Anion</i>	<i>Comments</i>	
<i>Cation-Anion Balance</i>														
<i>6.07</i>	<i>Difference Cation-Anion. me/L</i>													
<i>91.11</i>	<i>Total Cation-Anion. me/L</i>													
<i>6.7</i>	<i>% Difference Cation-Anion</i>													
<i>Comments</i>														
<i>Total Dissolved Solids Dried @ 180 C</i>	<i>3246</i>	<i>mg/L</i>												
<i>pH</i>	<i>7.12</i>													
<i>Conductivity @ 25 C</i>	<i>3650</i>	<i>uS/cm</i>												
<i>Total Hardness as CaCO3</i>	<i>1314</i>	<i>mg/L</i>												

Approved by: *[Signature]*
 Date: *7/21/97*



Mountain States Analytical, Inc.

July 16, 1997

Mr. David Cox
On Site Technologies, Ltd.
610 E Murray Drive
Farmington, NM 87401

Reference:

Project: Sammons 2
MSAI Group: 16924

Dear Mr. Cox:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

15120-5567 Dissolved

15121-5567 Dissolved

All holding times were met for the tests performed on these samples.

If the report is acceptable, please approve the enclosed invoice and forward it for payment.

Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

Rolf E. Larsen
Project Manager

RECEIVED JUL 21 1997



Mountain States Analytical, Inc.

The Quality Solution

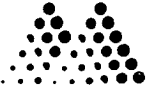
On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: Sammons 2

MSAI Sample: 65259
MSAI Group: 16924
Date Reported: 07/16/97
Discard Date: 08/15/97
Date Submitted: 07/01/97
Date Sampled: 06/25/97
Collected by:
Purchase Order: 5567
Project No.:

Sample ID: 15120-5567 Dissolved *970625/600 ml - 1*
Matrix: Waste Water

Test Analysis	Results as Received	Units	Method Detection Limit
0259B Mercury by CVAA, w/ww, 7470 Method: SW-846 7470	ND	mg/l	0.0001
0392I Flame/ICP Prep, w/ww, 3005A Method: SW-846 3005A	Completed		
0392M Mercury Prep CVAA, w/ww, 7470 Method: SW-846 7470	Complete		
1 Prep for HAA, w/ww, 7062/7742 Method: SW-846 7062/7742	Complete		
7245 Selenium by HAA, w/ww, 7742 Method: SW-846 7742	ND	mg/l	0.006
7245 Arsenic by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.030
7246 Barium by ICP, w/ww, 6010A Method: SW-846 6010A	0.120	mg/l	0.003
7249 Cadmium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.004
7251 Chromium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.010
7255 Lead by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.040
7266 Silver by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.006



Mountain States Analytical, Inc.

Page 2

On Site Technologies, Ltd.

The Quality Solution

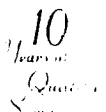
MSAI Sample: 65259
MSAI Group: 16924

Sample ID: 15120-5567 Dissolved 9206751600 ⁽¹²⁾ ~~MSAI~~

Test	Analysis	Results as Received	Units	Method Detection Limit
-----	-----	-----	-----	-----
0939	Sample Filtering, ww, MSAI Method: IN HOUSE MSAI	Complete		

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



RECEIVED JUL 21 1997



Mountain States Analytical, Inc.

The Quality Solution

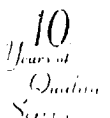
On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

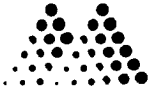
Attn: Mr. David Cox
Project: Sammons 2

Sample ID: 15121-5567 Dissolved 9706251630 MWL-2
Matrix: Waste Water

MSAI Sample: 65260
MSAI Group: 16924
Date Reported: 07/16/97
Discard Date: 08/15/97
Date Submitted: 07/01/97
Date Sampled: 06/25/97
Collected by:
Purchase Order: 5567
Project No.:

Table with 4 columns: Test Analysis, Results as Received, Units, Method Detection Limit. Rows include Mercury by CVAA, Flame/ICP Prep, Mercury Prep CVAA, Prep for HAA, Selenium by HAA, Arsenic by ICP, Barium by ICP, Cadmium by ICP, Chromium by ICP, Lead by ICP, Silver by ICP.





Mountain States Analytical, Inc.

Page 2

On Site Technologies, Ltd.

The Quality Solution

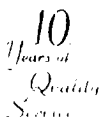
Sample ID: 15121-5567 Dissolved 9206251630 MW-2

MSAI Sample: 65260
MSAI Group: 16924

Test	Analysis	Results as Received	Units	Method Detection Limit
----	-----	-----	-----	-----
0939	Sample Filtering, ww, MSAI Method: IN HOUSE MSAI	Complete		

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager



CHAIN OF CUSTODY RECORD

Date: 6/20/97

Page 1 of 1

ON SITE

TECHNOLOGIES, LTD. 657 W. Maple • P.O. Box 2606 • Farmington, NM 87409
LAB (505) 325-5067 • FAX (505) 325-6256

Purchase Order No. 5567		Job No.													
Name ACCORATS REF.		Title													
Company ON SITE		Company ON SITE													
Address		Mailing Address													
City, State, Zip		City, State, Zip													
Sampling Location: SAMMONS 2		Telephone No. 505 325 2137													
Sampler: MGS/MS		Teletax No. 325-6786													
SEND INVOICE TO		ANALYSIS REQUESTED													
REPORT RESULTS TO		Number of Containers													
<table border="1"> <thead> <tr> <th>SAMPLE DATE</th> <th>SAMPLE TIME</th> <th>MATRIX</th> <th>PRES</th> </tr> </thead> <tbody> <tr> <td>6/17/97</td> <td>1600</td> <td>HTO</td> <td>COX</td> </tr> <tr> <td>6/17/97</td> <td>1630</td> <td>HTO</td> <td>COX</td> </tr> </tbody> </table>		SAMPLE DATE	SAMPLE TIME	MATRIX	PRES	6/17/97	1600	HTO	COX	6/17/97	1630	HTO	COX	<p>LAB ID: 5567</p> <p>505-325-2137</p> <p>5567-12151</p>	
SAMPLE DATE	SAMPLE TIME	MATRIX	PRES												
6/17/97	1600	HTO	COX												
6/17/97	1630	HTO	COX												
Relinquished by		Received by													
Relinquished by		Received by													
Relinquished by		Received by													
Method of Shipment		Rush													
Authorized by		24-48 Hours													
		10 Working Days													
		Special Instructions													



CHAIN OF CUS JDY RECORD

567

Page 1 of 1

Date: 6/26/97

657 W. Maple • P. O. Box 2686 • Farmington NM 87499
 LAB: (505) 325-5667 • FAX: (505) 325-6256

Purchase Order No.:		Job No.	
Name: Denver Bearden		Name: Maureen Gannon	
Company: PNM Gas Services		Company: PNM Gas Services	
Address: 603 W. Elm Street		Mailing Address: Alverado Square, Mail Stop 0408	
City, State, Zip: Farmington, NM 87401		City, State, Zip: Albuquerque, NM 87158	
Title:		Title:	
Telephone No.:		Telephone No.:	
Telefax No.:		Telefax No.:	

Purchase Order No.	Job No.	SAMPLE IDENTIFICATION		DATE	TIME	MATRIX	PRES	Number of Containers	RESULTS TO REPORT	Name	Company	Mailing Address	City, State, Zip	Telephone No.	Telefax No.	Title
		9706251600	MW-1													
		9706251630	MW-2	6/26/97	1800	AZD	HC	3								
		9706251700	MW-3	↓	↓	↓	↓	3								
		9706251730	MW-4	↓	↓	↓	↓	2								
		9706251800	MW-5	↓	↓	↓	↓	2								
		9706251830	MW-6	6/26/97	1800	AZD	HC	2								

Sampler: M.S. MG. B.K.

Sampling Location: Sammons 2

ANALYSIS REQUESTED

LAB ID: 15120-5547, 15121, 15122, 15123, 15124, 15125

Received by: [Signature] Date/Time: 6/26/97 1800

Received by: [Signature] Date/Time: [Blank]

Received by: [Signature] Date/Time: [Blank]

Special Instructions: Results to be sent to both parties.

24-48 Hours: [Blank]

10 Working Days: [Blank]

Rush: [Blank]

Date: 6/26/97 1800

(Client Signature Must Accompany Request)

ANALYTICAL REPORT

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


Date: *1-Oct-97*
 COC No.: *5840*
 Sample No.: *16355*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon 2*
 Project Location: *9709261200; MW-1*
 Sampled by: *MS/MG* Date: *26-Sep-97* Time: *12:00*
 Analyzed by: *DC* Date: *29-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>	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: 
 Date: *10/1/97*



ANALYTICAL REPORT

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

Date: *1-Oct-97*
 COC No.: *5840*
 Sample No.: *16356*
 Job No.: *2-1000*

Project Name: ***PNM Gas Services - Sammon 2***
 Project Location: ***9709261230; MW-2***
 Sampled by: *MS/MG* Date: *26-Sep-97* Time: *12:30*
 Analyzed by: *DC* Date: *29-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>	0.6	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	0.6	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	0.2	ug/L	0.2	ug/L
<i>o-Xylene</i>	0.5	ug/L	0.2	ug/L
<i>TOTAL</i>	1.9	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*
 Date: *10/1/97*



ANALYTICAL REPORT

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

Date: *1-Oct-97*
 COC No.: *5840*
 Sample No.: *16357*
 Job No.: *2-1000*

Project Name: ***PNM Gas Services - Sammon 2***
 Project Location: ***9709261300; MW-3***
 Sampled by: *MS.MG* Date: *26-Sep-97* Time: *13:00*
 Analyzed by: *DC* Date: *29-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>	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: *10/1/97*



ANALYTICAL REPORT

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

Date: *1-Oct-97*
 COC No.: *5840*
 Sample No.: *16358*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon 2*
 Project Location: *9709261330; MW-4*
 Sampled by: *MS/MG* Date: *26-Sep-97* Time: *13:30*
 Analyzed by: *DC* Date: *29-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>	0.8	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	1.0	ug/L	0.2	ug/L
<i>o-Xylene</i>	0.3	ug/L	0.2	ug/L
<i>TOTAL</i>	2.0	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: *10/1/97*

ANALYTICAL REPORT

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

Date: *1-Oct-97*
 COC No.: *5840*
 Sample No.: *16359*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon 2*

Project Location: *9709261400; MW-5*

Sampled by: *MS/MG* Date: *26-Sep-97* Time: *14:00*

Analyzed by: *DC* Date: *29-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>	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: *Dale*
 Date: *10/1/97*



ANALYTICAL REPORT

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

Date: *1-Oct-97*
 COC No.: *5840*
 Sample No.: *16360*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammon 2*
 Project Location: *9709261430; MW-6*
 Sampled by: *MS/MG* Date: *26-Sep-97* Time: *14:30*
 Analyzed by: *DC* Date: *29-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>	0.9	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	1.1	ug/L	0.2	ug/L
<i>o-Xylene</i>	0.3	ug/L	0.2	ug/L
<i>TOTAL</i>	2.3	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*
 Date: *10/11/97*



ANALYTICAL REPORT

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

Date: *6-Jan-98*
 COC No.: *7168*
 Sample No.: *17235*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammons 2*
 Project Location: *9712231300; MW-1*
 Sampled by: *MS/RD/MG* Date: *23-Dec-97* Time: *13:00*
 Analyzed by: *DC* Date: *5-Jan-98*
 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: *1/6/98*



ANALYTICAL REPORT

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

Date: *6-Jan-98*
 COC No.: *7168*
 Sample No.: *17236*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammons 2*
 Project Location: *9712231330; MW-2*
 Sampled by: *MS/RD/MG* Date: *23-Dec-97* Time: *13:30*
 Analyzed by: *DC* Date: *5-Jan-98*
 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>	1.9	ug/L	0.2	ug/L
<i>Ethylbenzene</i>	1.2	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	2.3	ug/L	0.2	ug/L
<i>o-Xylene</i>	0.9	ug/L	0.2	ug/L
<i>TOTAL</i>	6.7	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: *1/6/98*



ANALYTICAL REPORT

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

Date: *6-Jan-98*
 COC No.: *7168*
 Sample No.: *17237*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammons 2*
 Project Location: *9712231400; MW-3*
 Sampled by: *MS/RD/MG* Date: *23-Dec-97* Time: *14:00*
 Analyzed by: *DC* Date: *5-Jan-98*
 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>	0.4	ug/L	0.2	ug/L
<i>TOTAL</i>	0.6	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: *1/6/98*



ANALYTICAL REPORT

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

Date: *6-Jan-98*
 COC No.: *7168*
 Sample No.: *17238*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammons 2*

Project Location: *9712231430; MW-4*

Sampled by: *MS/RD/MG* Date: *23-Dec-97* Time: *14:30*

Analyzed by: *DC* Date: *5-Jan-98*

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>	1.2	ug/L	0.2	ug/L
<i>m,p-Xylene</i>	1.5	ug/L	0.2	ug/L
<i>o-Xylene</i>	0.4	ug/L	0.2	ug/L
<i>TOTAL</i>	3.1	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*
 Date: *1/6/98*



ANALYTICAL REPORT

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

Date: *6-Jan-98*
 COC No.: *7168*
 Sample No.: *17239*
 Job No.: *2-1000*

Project Name: ***PNM Gas Services - Sammons 2***

Project Location: ***9712231500; MW-5***

Sampled by: *MS:RD/MG* Date: *23-Dec-97* Time: *15:00*

Analyzed by: *DC* Date: *5-Jan-98*

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: *1/6/98*



ANALYTICAL REPORT

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

Date: *6-Jan-98*
 COC No.: *7168*
 Sample No.: *17240*
 Job No.: *2-1000*

Project Name: *PNM Gas Services - Sammons 2*
 Project Location: *9712231530; MW-6*
 Sampled by: *MS/RD/MG* Date: *23-Dec-97* Time: *15:30*
 Analyzed by: *DC* Date: *5-Jan-98*
 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>	0.4	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: *1/6/98*

ON SITE

OFF: 505-227-1757

LAB: 505-227-1754

TECHNOLOGIES, LTD.

March 18, 1998

Maureen Gannon
PNM - Public Service Company of NM
Alvarado Square Mail Stop 0408
Albuquerque, NM 87401
TEL: (505) 241-2974
FAX: (505) 241-2340

RE: Sammons 2

Order No.: 9803013

Dear Maureen Gannon,

On Site Technologies, LTD. received 6 samples on 3/4/98 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Aromatic Volatiles by GC-PID (SW8021A)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



David Cox

ON SITE

LABORATORY

LABORATORY

TECHNOLOGIES, LTD.

Date: 18-Mar-98

CLIENT: PNM - Public Service Company of NM
Project: Sammons 2
Lab Order: 9803013

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.

ON SITE

TECHNOLOGIES, LTD.

LAB: 55-125-10

ANALYTICAL REPORT

Date: 18-Mar-98

Client: PNM - Public Service Company of NM **Client Sample Info:** Sammons 2
Work Order: 9803013 **Client Sample ID:** 9803040945: MW-1
Lab ID: 9803013-01A **Matrix:** AQUEOUS **Collection Date:** 3/4/98 9:45:00 AM
Project: Sammons 2 **COC#:** 7141

Parameter	Result	Limit	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC-PID						Analyst: DC
		SW8021A				
Benzene	ND	0.5		µg/L	1	3/9/98
Toluene	ND	0.5		µg/L	1	3/9/98
Ethylbenzene	ND	0.5		µg/L	1	3/9/98
m,p-Xylene	ND	0.5		µg/L	1	3/9/98
o-Xylene	ND	0.5		µg/L	1	3/9/98
Surr: Fluorobenzene	94.1	70-130		%REC	1	3/9/98
Surr: 1,4-Difluorobenzene	94.9	70-130		%REC	1	3/9/98
Surr: 4-Bromochlorobenzene	92.2	70-130		%REC	1	3/9/98

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

ON SITE

TEL: 505-225-5500

FAX: 505-225-5500

TECHNOLOGIES, LTD.

ANALYTICAL REPORT

Date: 18-Mar-98

Client: PNM - Public Service Company of NM **Client Sample Info:** Sammons 2
Work Order: 9803013 **Client Sample ID:** 9803041000: MW-2
Lab ID: 9803013-02A **Matrix:** AQUEOUS **Collection Date:** 3-4-98 10:00:00 AM
Project: Sammons 2 **COC#:** 7141

Parameter	Result	Limit	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC-PID						Analyst: DC
		SW8021A				
Benzene	ND	0.5		µg/L	1	3/9/98
Toluene	1	0.5		µg/L	1	3/9/98
Ethylbenzene	1.7	0.5		µg/L	1	3/9/98
m,p-Xylene	ND	1		µg/L	1	3/9/98
o-Xylene	ND	0.5		µg/L	1	3/9/98
Surr: Fluorobenzene	93.8	70-130		%REC	1	3/9/98
Surr: 1,4-Difluorobenzene	94.6	70-130		%REC	1	3/9/98
Surr: 4-Bromochlorobenzene	91.6	70-130		%REC	1	3/9/98

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

ON SITE

TEL: 505-825-5947

FAX: 505-827-1779

TECHNOLOGIES, LTD.

ANALYTICAL REPORT

Date: 18-Mar-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Sammons 2
Work Order:	9803013	Client Sample ID:	9803041015: MW-3
Lab ID:	9803013-03A	Matrix:	AQUEOUS
Project:	Sammons 2	Collection Date:	3/4/98 10:15:00 AM
		COC#:	7141

Parameter	Result	Limit	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC-PID		SW8021A				Analyst: DC
Benzene	ND	0.5		µg/L	1	3/6/98
Toluene	ND	0.5		µg/L	1	3/6/98
Ethylbenzene	ND	0.5		µg/L	1	3/6/98
m-p-Xylene	ND	1		µg/L	1	3/6/98
o-Xylene	ND	0.5		µg/L	1	3/6/98
Surr: Fluorobenzene	92.3	70-130		%REC	1	3/6/98
Surr: 1,4-Difluorobenzene	93.7	70-130		%REC	1	3/6/98
Surr: 4-Bromochlorobenzene	93.0	70-130		%REC	1	3/6/98

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

ON SITE

0111 5 11 27 5007

LAB: 5 11 27 5007

TECHNOLOGIES, LTD.

ANALYTICAL REPORT

Date: 18-Mar-98

Client: PNM - Public Service Company of NM **Client Sample Info:** Sammons 2
Work Order: 9803013 **Client Sample ID:** 9803041030: MW-4
Lab ID: 9803013-04A **Matrix:** AQUEOUS **Collection Date:** 3/4/98 10:30:00 AM
Project: Sammons 2 **COC#:** 7141

Parameter	Result	Limit	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC-PID		SW8021A				Analyst: DC
Benzene	ND	0.5		µg/L	1	3/6/98
Toluene	ND	0.5		µg/L	1	3/6/98
Ethylbenzene	1.9	0.5		µg/L	1	3/6/98
m,p-Xylene	ND	1		µg/L	1	3/6/98
o-Xylene	0.6	0.5		µg/L	1	3/6/98
Surr: Fluorobenzene	91.1	70-130		%REC	1	3/6/98
Surr: 1,4-Difluorobenzene	92.1	70-130		%REC	1	3/6/98
Surr: 4-Bromochlorobenzene	92.2	70-130		%REC	1	3/6/98

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank I - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

1 of 1

ON SITE

401-371-2255 ext 7

LAB: 513-225-177

TECHNOLOGIES, LTD.

ANALYTICAL REPORT

Date: 18-Mar-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Sammons 2
Work Order:	9803013	Client Sample ID:	9803041045: MW-5
Lab ID:	9803013-05A	Matrix:	AQUEOUS
Project:	Sammons 2	Collection Date:	3-4-98 10:45:00 AM
		COC#:	7141

Parameter	Result	Limit	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC-PID		SW8021A				Analyst: DC
Benzene	ND	0.5		µg/L	1	3/6/98
Toluene	ND	0.5		µg/L	1	3/6/98
Ethylbenzene	ND	0.5		µg/L	1	3/6/98
m,p-Xylene	ND	1		µg/L	1	3/6/98
o-Xylene	ND	0.5		µg/L	1	3/6/98
Surr: Fluorobenzene	92.1	70-130		%REC	1	3/6/98
Surr: 1,4-Difluorobenzene	93.8	70-130		%REC	1	3/6/98
Surr: 4-Bromochlorobenzene	93.6	70-130		%REC	1	3/6/98

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

ON SITE

LAB # 5 8 125 5007

LAB # 5 8 125 5007

TECHNOLOGIES, LTD.

ANALYTICAL REPORT

Date: 18-Mar-98

Client: PNM - Public Service Company of NM	Client Sample Info: Sammons 2	
Work Order: 9803013	Client Sample ID: 9803041100; MW-6	
Lab ID: 9803013-06A	Matrix: AQUEOUS	Collection Date: 3/4/98 11:00:00 AM
Project: Sammons 2	COC#: 7141	

Parameter	Result	Limit	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC-PID		SW8021A				Analyst: DC
Benzene	ND	0.5		µg/L	1	3/6/98
Toluene	ND	0.5		µg/L	1	3/6/98
Ethylbenzene	ND	0.5		µg/L	1	3/6/98
m,p-Xylene	ND	1		µg/L	1	3/6/98
o-Xylene	ND	0.5		µg/L	1	3/6/98
Surr: Fluorobenzene	92.2	70-130		%REC	1	3/6/98
Surr: 1,4-Difluorobenzene	93.9	70-130		%REC	1	3/6/98
Surr: 4-Bromochlorobenzene	92.4	70-130		%REC	1	3/6/98

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CHAIN OF CUSTODY RECORD

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		Title: Maureen Gannon	
Company: PNM Gas Services		Company: PNM Gas Services	
Address: 603 W. Elm Street		Mailing Address: Alverado Square, Mail Stop 0408	
City, State, Zip: Farmington, NM 87401		City, State, Zip: Albuquerque, NM 87158	
Telephone No.:		Telephone No.:	
Telefax No.:		Telefax No.:	
Sampling Location:		ANALYSIS REQUESTED	
Stations 2 Sampler: K. Dedrick		RESULTS TO REPORT	
SAMPLE IDENTIFICATION 1803040976 1803041000 1803041015 1803041030 1803041045 1803041100		Number of Containers 1 1 1 1 1 1	
SAMPLE DATE 1/11/01 1/11/01 1/11/01 1/11/01 1/11/01 1/11/01		MATRIX PRES. 1 1 1 1 1 1	
Relinquished by: Maureen Gannon Date/Time: 1/11/01 1547		Received by: [Signature] Date/Time: 1/11/01 1547	
Relinquished by: Date/Time:		Received by: Date/Time:	
Relinquished by: Date/Time:		Received by: Date/Time:	
Method of Shipment:		10 Working Days Special Instructions:	
Authorized by: [Signature] (Client Signature Must Accompany Request)		Results to be sent to both parties.	