

HIP - 82

**GENERAL
CORRESPONDENCE**

YEAR(S):

2003

Kieling, Martyne

From: Kieling, Martyne
Sent: Tuesday, March 25, 2003 7:32 AM
To: 'DeLapp, Robin'
Subject: RE: Hydrostatic Test Permit HI-082

Robin,

The OCD does not have any concerns in the collection and retention of Albuquerque city water prior to the tests.

Sincerely
Martyne Kieling
Environmental Geologist
Oil Conservation Division

-----Original Message-----

From: DeLapp, Robin [mailto:RDELAPP@pnm.com]
Sent: Thursday, March 20, 2003 3:22 PM
To: Kieling, Martyne
Cc: Ford, Peter; Fink, Dan; Rice, Joseph
Subject: FW: Hydrostatic Test Permit HI-082

Martyne,

On February 11, 2003, the OCD issued permit ~~HI-082~~ for the discharge of approximately 1,000,000 gallons of hydrostatic test water on PNM's Rio Puerco Natural Gas Pipeline project. If you recall, the PNM contractor was to obtain water from a City of Albuquerque hydrant and discharge to an unlined pond on private land. As described below, it appears the hydrant will not produce water at an acceptable rate to conduct the hydrostatic test. PNM proposes to construct a lined retention pond to collect enough water from the well to be used in the test. This should not change any factors in conducting the test or discharging the water. Does the OCD have any concerns regarding the construction or use of pond to retain pre-test water? Thanks,

Robin DeLapp
Public Service Company of New Mexico
Alvarado Square, Mail Stop 2104
Albuquerque, New Mexico 87158
phone: (505) 241-2016/ fax: (505) 241-2376
cell: (505) 362-0730/ email: rdelapp@pnm.com

-----Original Message-----

From: Rice, Joseph
Sent: Thursday, March 20, 2003 11:04 AM
To: DeLapp, Robin
Cc: Ford, Peter; Fink, Dan
Subject: Rio Puerco Mainline Retention Pond on COA's Soils Amendment Facility

Robin,

In order to obtain the volume of water we need for the hydrostatic testing of our new Rio Puerco Mainline without interfering with the City of Albuquerque's (COA's) fire protection reserves, it was decided by both PNM and the COA that the best solution to this dilemma would be to construct a lined retention pond or use an existing lined pond at the COA's Soils Amendment Facility (SAF). This would allow us to draw from the existing system at a slow enough rate (no more than

3/25/2003

400 gallons/minute) and maintain it without interfering with the COA system and eventually obtain enough volume to do our test. We are guesing that we would need a 400x400 area similar to the one we obtained for our discharge pond. The exact size and location details are being worked out between Mateo Abeyta, COA's SAF Manager, and Dan Fink. Once that location is determined and once I receive a sketch of it, I will then ask the COA to grant us a temporary use agreement for that pond. In the meantime, would you contact the OCD, or whoever you feel would be appropriate, and let them know about this to see if they have a concerns or require any additional permits? We would like to get this secured ASAP and would need it no later than the second week of April.

Thanks,
Joseph Rice
PNM Right of Way Department
MS 2101
(505) 241-4448 [office]
(505) 239-9826 [cell]

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: Range: Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic All

WATER COLUMN REPORT 02/11/2003

(quarters are 1=NW 2=NE 3=SW 4=SE)
 (quarters are biggest to smallest)

Well Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column
RG 20342 -X	09N	01W	04	3						115	75	40
RG 20342 -X-NEW	09N	01W	04	3						115	75	40
RG 20342	09N	01W	04	3						450	200	250

Record Count: 3

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: Range: Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic All

WELL / SURFACE DATA REPORT 02/11/2003

DB File Nbr	(acre ft per annum) Use	Diversion	Owner	Well Number	(quarters are) Source
RG 20342	COM	9	PUEBLO OF LAGUNA	RG 20342	Shallow
				RG 20342 -X	Shallow
				RG 20342 -X-NEW	Shallow
RG 21661	SAN		EVER READY OIL CO. INC.	RG 21661	

Record Count: 4

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: Range: Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic All

AVERAGE DEPTH OF WATER REPORT 02/11/2003

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
RG	09N	01W	04				3	75	200	117

Record Count: 3

ENERGY, MINERAL AND NATURAL RESOURCES DEPT.

-521-

NO. 128163

Official Receipt

Date: 2/11/03 19 2003

Received from: RC PNM

Dollar Amount \$ 500.⁰⁰

DR CR.	AMOUNT NUMBER	CENTER NUMBER	CREDIT AMOUNT	DEPOSIT NUMBER	WORK ORDER NO.
60	4290				
60	4291				
60	3450				
60	3451				
60	3410				
60	4210				
60	4240				
60			\$ 500. ⁰⁰		
60					
60					
60					

TOTAL

\$ 500.⁰⁰

By Wanda G. G. G.



If you have any questions about this payment please contact:

Public Service Company of New Mexico
Accounts Payable, MS 0720
Alvarado Square
Albuquerque, New Mexico 87158
(505) 241-2120

RECEIVED

FEB 06 2003

OIL CONSERVATION
DIVISION

CO	BANK #	CK DATE	VENDOR NO.	CK NO.
WA	606	013103	WAT456731101	114036

INVOICE #	DATE	GROSS AMT	DISC.	DED	NET AMT	SOURCE REF	REMARKS	A
WQMGMT030184547	01/27/03	250.00	0.00	0.00	250.00	030184547	PERMIT FEE	
WQMGMT030184548	01/27/03	250.00	0.00	0.00	250.00	030184548	PERMIT FEE	

TOTAL

\$500.00

**NEW MEXICO ENVIRONMENT DEPARTMENT
REVENUE TRANSMITTAL FORM**

Description	FUND	CEB	DFA ORG	DFA ACCT	ED ORG	ED ACCT	AMOUNT
1 CY Reimbursement Project Tax	064	01					
6 Gross Receipt Tax	064	01		2329	900000	2329134	
3 Air Quality Title V	092	13	1300	1696	900000	4169134	
4 PRP Prepayments	248	14	1400	9696	900000	4989014	
2 Climax Chemical Co.	248	14	1400	9696	900000	4989016	
8 Circle K Reimbursements	248	14	1400	9696	900000	4989248	
7 Hazardous Waste Permits	339	27	2700	1696	900000	4169027	
8 Hazardous Waste Annual Generator Fees	339	27	2700	1696	900000	4169339	
10 (6) Water Quality - Oil Conservation Division	341	29		2329	900000	2329029	\$ 500.00
11 Water Quality - GW Discharge Permit	341	29	2900	1696	900000	4169029	
12 Air Quality Permits	631	31	2500	1696	900000	4169031	
13 Payments under Protest	651	33		2919	900000	2919033	
*14 Xerox Copies	652	34		2349	900000	2349001	
15 Ground Water Penalties	652	34		2349	900000	2349002	
16 Witness Fees	652	34		2349	900000	2439003	
17 Air Quality Penalties	652	34		2349	900000	2349004	
18 OSHA Penalties	652	34		2349	900000	2349005	
19 Prior Year Reimbursement	652	34		2349	900000	2349006	
20 Surface Water Quality Certification	652	34		2349	900000	2349009	
21 Jury Duty	652	34		2349	900000	2349012	
22 CY Reimbursements (i.e. telephones)	652	34		2349	900000	2349014	
*23 UST Owner's List	783	24	2500	9696	900000	4989201	
*24 Hazardous Waste Notifiers List	783	24	2500	9696	900000	4989202	
*25 UST Maps	783	24	2500	9696	900000	4989203	
*26 UST Owner's Update	783	24	2500	9696	900000	4989205	
*28 Hazardous Waste Regulations	783	24	2500	9696	900000	4989207	
*29 Radiologic Tech. Regulations	783	24	2500	9696	900000	4989208	
*30 Superfund CERLIS List	783	24	2500	9696	900000	4989211	
31 Solid Waste Permit Fees	783	24	2500	9696	900000	4989213	
32 Smoking School	783	24	2500	9696	900000	4989214	
*33 SWQB - NPS Publications	783	24	2500	9696	900000	4989222	
*34 Radiation Licensing Regulation	783	24	2500	9696	900000	4989228	
*35 Sale of Equipment	783	24	2500	9696	900000	4989301	
*36 Sale of Automobile	783	24	2500	9696	900000	4989302	
*37 Lost Recoveries	783	24	2500	9696	900000	4989814	
*38 Lost Repayments	783	24	2500	9696	900000	4989815	
39 Surface Water Publication	783	24	2500	9696	900000	4989801	
40 Exxon Raese Drive Ruidoso - CAF	783	24	2500	9696	900000	4989242	
41 Emerg. Hazardous Waste Penalties NOV	957	32	9600	1696	900000	4164032	
42 Radiologic Tech. Certification	987	05	0500	1696	900000	4169005	
44 Ust Permit Fees	989	20	3100	1696	900000	4169020	
45 UST Tank Installers Fees	989	20	3100	1696	900000	4169021	
48 Food Permit Fees	991	28	2600	1696	900000	4169026	
43 Other							

TOTAL \$ 500.00

* Gross Receipt Tax Required

-- Site Name & Project Code Required

Contact Person: Roger C. Anderson

Phone: 476-3490

Date: 2-11-03

Received in ASD By: _____

Date: _____

RT #: _____

ST #: _____

**ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH**

I hereby acknowledge receipt of check No. 114036 dated 01-31-03
or cash received on 2-11-03 in the amount of \$ 500.00
from PNM

for HI-082 And HI-083

Submitted by: Martynne Kieling (Facility Name) Date: 2-11-03 (DP No.)

Submitted to ASD by: Martynne Kieling Date: 2-11-03

Received in ASD by: _____ Date: _____

Filing Fee New Facility _____ Renewal _____

Modification _____ Other Temp Auth. HI-082 & HI-083
(Agency)

Organization Code 521.07 Applicable FY 2003

To be deposited in the Water Quality Management Fund.

Full Payment or Annual Increment _____

THE FACE OF THIS DOCUMENT HAS A MULTICOLORED BACKGROUND ON WHITE PAPER



606 114036



93-477/929

General Fund Account

CHECK NO.	DATE	AMOUNT
114036	013103	*****500.00

WATER QUALITY MANAGEMENT FUND
PAY C/O OIL CONSERVATION DIVISION
TO THE 1220 NORTH ST. FRANCIS DRIVE
ORDER SANTA FE, NM 87505
OF

[Signature]
Authorized Signature

⑈ 114036 ⑈ ⑆092904774⑆ 4800364⑈

PNM
Alvarado Square
Albuquerque, NM 87158-2104
Fax 505 241-2376
www.pnm.com

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

February 6, 2003

Martyne Kieling
State of New Mexico, Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RECEIVED
FEB 10 2003
Environmental Bureau
Oil Conservation Division



*A personal commitment
to New Mexico*

RE: PNM Rio Puerco Loop Natural Gas Pipeline, Notice of Intent to Hydrostatically Test and Discharge

Dear Ms. Kieling:

The Public Service Company of New Mexico (PNM) proposes to construct 20.8 miles of 24-inch diameter new natural gas pipeline known as the Rio Puerco Loop Natural Gas Pipeline. The pipeline extends from PNM's West Mesa Take-off (north of I-40) to PNM's Santa Fe Junction (see attached maps). This project will be located on private and City of Albuquerque property west of Albuquerque in Sandoval and Bernalillo Counties, New Mexico.

Construction of the Rio Puerco Loop Pipeline is scheduled to begin on March 3, 2003 and be completed by May 2, 2003. After the installation of the new pipeline, the 24-inch pipe and fabricated block valve installations will be hydrostatically tested. The test duration will be a minimum of 8 hours and will likely be conducted in mid- to late-April, 2003

PNM proposes to use approximately 1,000,000 gallons of water from a nearby City of Albuquerque well (SAF well) located near the Double Eagle Airport. The water will be tapped from a hydrant near the City of Albuquerque Soil Amendment Facility (see map). This water is considered non-potable because of high levels of naturally occurring arsenic. I have enclosed a table from a City of Albuquerque report that summarizes laboratory analysis results from 1988 - 2000 of water from this well.

PNM proposes to discharge the test water into an unlined pond to be constructed on the property owned by Orlando Sanchez. Attached is a letter from Mr. Sanchez that gives PNM permission to use his property for the discharge. The pond will be located north of Interstate 40 and in projected Township 9 North, Range 1 West, Section 3 (NW quarter) and Township 10 North, Range 1 West, Section 34 (SW quarter). The pond will be approximately 400 by 400 feet in size and constructed within the larger area indicated on the attached maps. This area was selected to avoid impact to waters of the United States or any archaeological or historical resources. PNM estimates the water may be retained in this pond for up to six months before it completely evaporates.

The discharge will occur over a 24-hour period. According to State Engineer well records, the recorded depth to water near the point of discharge averages between 100 and 117 feet below ground surface.

Check number 114036 for \$500 was sent to your office on 1/31/03. This amount covers \$250.00 (\$100 for the filing fee and \$150 for temporary permission) for this project. Thank you in advance for your assistance. Please call me at (505) 241-2016 if you have any questions.

Sincerely,

Robin DeLapp
Senior Environmental Scientist

Attachment: Location maps, Property owner permission letter, Well information

1.2.1.3 Water Quality Summary

The significant water quality issues are arsenic and total dissolved solids. Table 1-4 below summarizes data for the components of concern. A complete table of data collected by the City of Albuquerque is located in Appendix A.

**TABLE 1-4
SAF WELL WATER QUALITY**

Component	Average	Range	Unit
Arsenic	11	7.0 to 15.6	ug/L
Silicate	18	13.2 to 20.0	mg/L
TDS	459	440 to 480	mg/L
Total Toxic Organics	1.9	1.0 to 3.6	ug/L
pH, field	8.32	7.9 to 8.6	--
Conductivity	678	553 to 734	umho/cm

Compared to the DE II, water quality yielded by the SAF well is of considerably of higher quality.

12 years average From 1988-2000

1.2.1.4 Pump Capacity

The existing submersible pump (installed in the year 2001) is rated at 195-gpm capacity with a 75 HP motor. With a 10 3/4-inch casing, the well is estimated to yield at 300 gpm.

1.2.1.5 Permitted Capacity

The permitted capacity of the SAF well is included as a supplemental well to the entire City groundwater diversion of 132,000 AF/Y. The permitted capacity of SAF well is tied to the citywide calculated groundwater withdrawal and recharge allotment. The SAF well permit filed in 1988 identified an intended maximum withdrawal of 125 acre-feet/year.

Public Service Company
of New Mexico
Right of Way
Alvarado Square
MS 2101
Albuquerque, NM 87158
505 241-4425
Fax 505 241-2376



February 4, 2003

Orlando Sanchez
1326 Isleta SW
Albuquerque, NM 87105

Subject: Permission to Use Property for Hydrostatic Test Water Discharge Pond
Property of Orlando Sanchez
(PNM Project: Rio Puerco Natural Gas Transmission Loop)

Dear Mr. Sanchez:

Public Service Company of New Mexico (PNM) proposes to construct 20.7 miles of 24-inch diameter new natural gas pipeline known as the Rio Puerco Loop Natural Gas Pipeline located west of Albuquerque in Sandoval and Bernalillo Counties, New Mexico. Upon completion of the installation of the new pipe and associated fittings, the new system will be integrity tested using water. PNM proposes to use approximately 1,000,000 gallons of water from a nearby City of Albuquerque (COA) well (SAF well) located at the COA's Soils Amendment Facility near the Double Eagle Airport. This water contains high levels of naturally occurring arsenic. The new drinking water standard for arsenic is 10 parts per billion (ppb). According to a COA report that summarizes laboratory analysis results dated from 1988 – 2000, this well has arsenic levels averaging 11 ppb.

PNM proposes to construct an unlined pond to discharge the test water on property owned by Orlando Eli Sanchez. The pond will be located north of Interstate 40 and within the NW Quarter of Projected Section 3, Township 9 North, Range 1 West, NMPM. The pond will be approximately 400 by 400 feet in size and constructed within the larger area indicated on the attached map. This area was selected to avoid impact to waters of the United States or any archaeological or historical resources. PNM estimates the water may be retained in this pond for up to six months before it completely evaporates.

Upon completion of the survey drawing showing the specific location of this pond, I will contact you to execute a Temporary Use Agreement for the six-month period PNM requests this pond for. In the meantime, PNM requests your written permission to allow us to construct this proposed hydrostatic test water discharge pond in order to present it to the Oil Conservation Division and obtain their approval.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph A. Rice".

Joseph A. Rice
Right of Way Agent

I have reviewed the information provided by PNM to me and do hereby grant PNM permission to temporarily use my property to construct a pond for the discharge of hydrostatic test water.

A handwritten signature in black ink, appearing to read "Orlando Eli Sanchez".

Orlando Eli Sanchez

4 Feb 2003
Date

LANDS

TRACT 14
2,873.22 FEET
0.54 MILES

P.L. 1008+1

ETAL LANDS

TRACT 13
3,902.36 FEET
0.74 MILES

P.L. 969+86

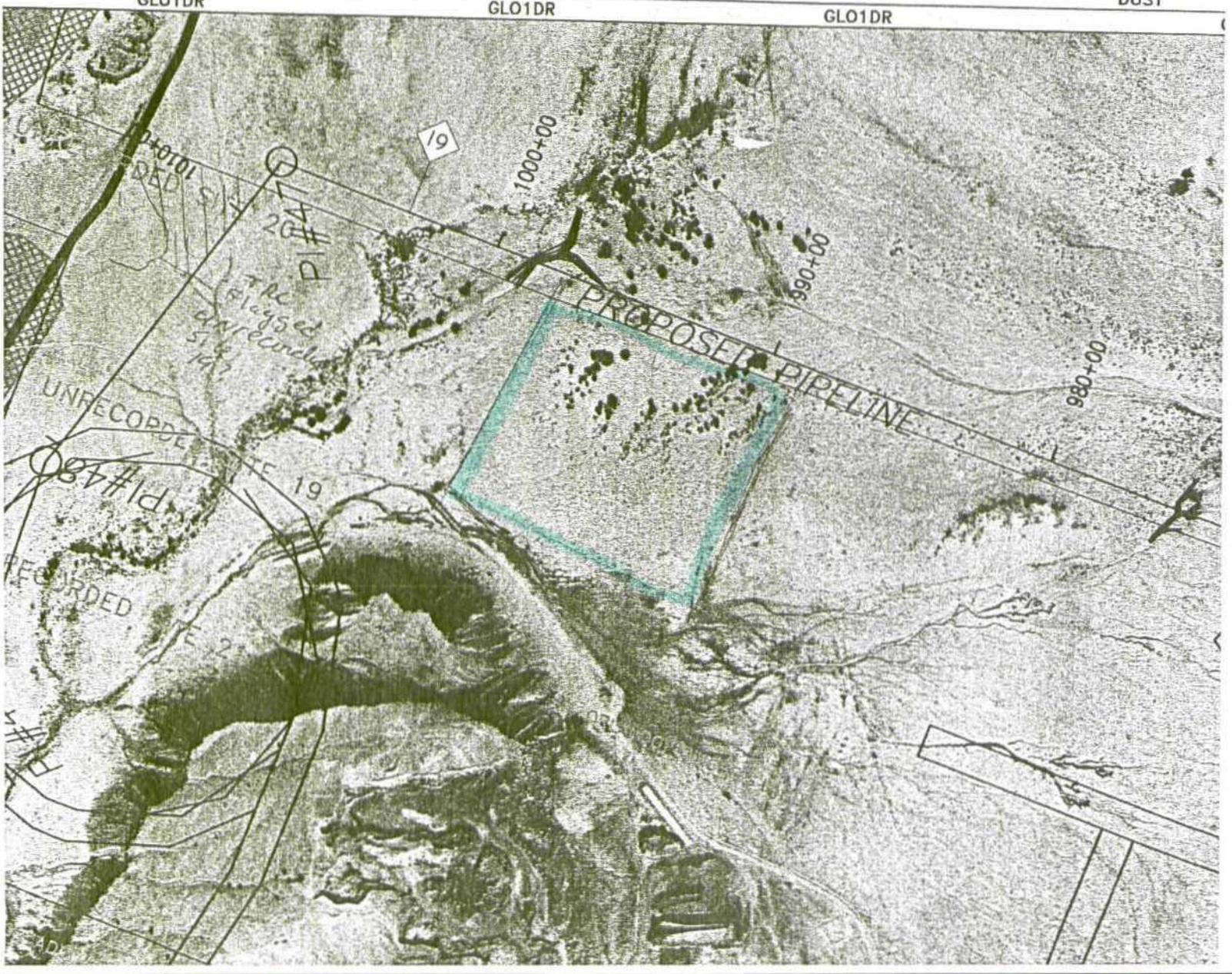
- 452'40'47" RT.
- S03°16'53"E
- PI#48 STA.1020+70.81
- 419°03'41" LT.
- 1016+25.34 EDGE OF ROAD
- 1016+16.58 CL ROAD
- 1016+09.01 EDGE OF ROAD
- S15°46'48"W
- 1010+81.63 EDGE OF ROAD
- 1010+68.23 CL ROAD
- 1010+54.39 EDGE OF ROAD
- PI#47 STA.1007+83.48
- 473°55'00" LT.

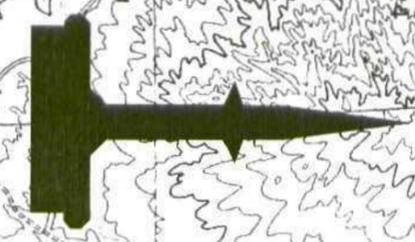
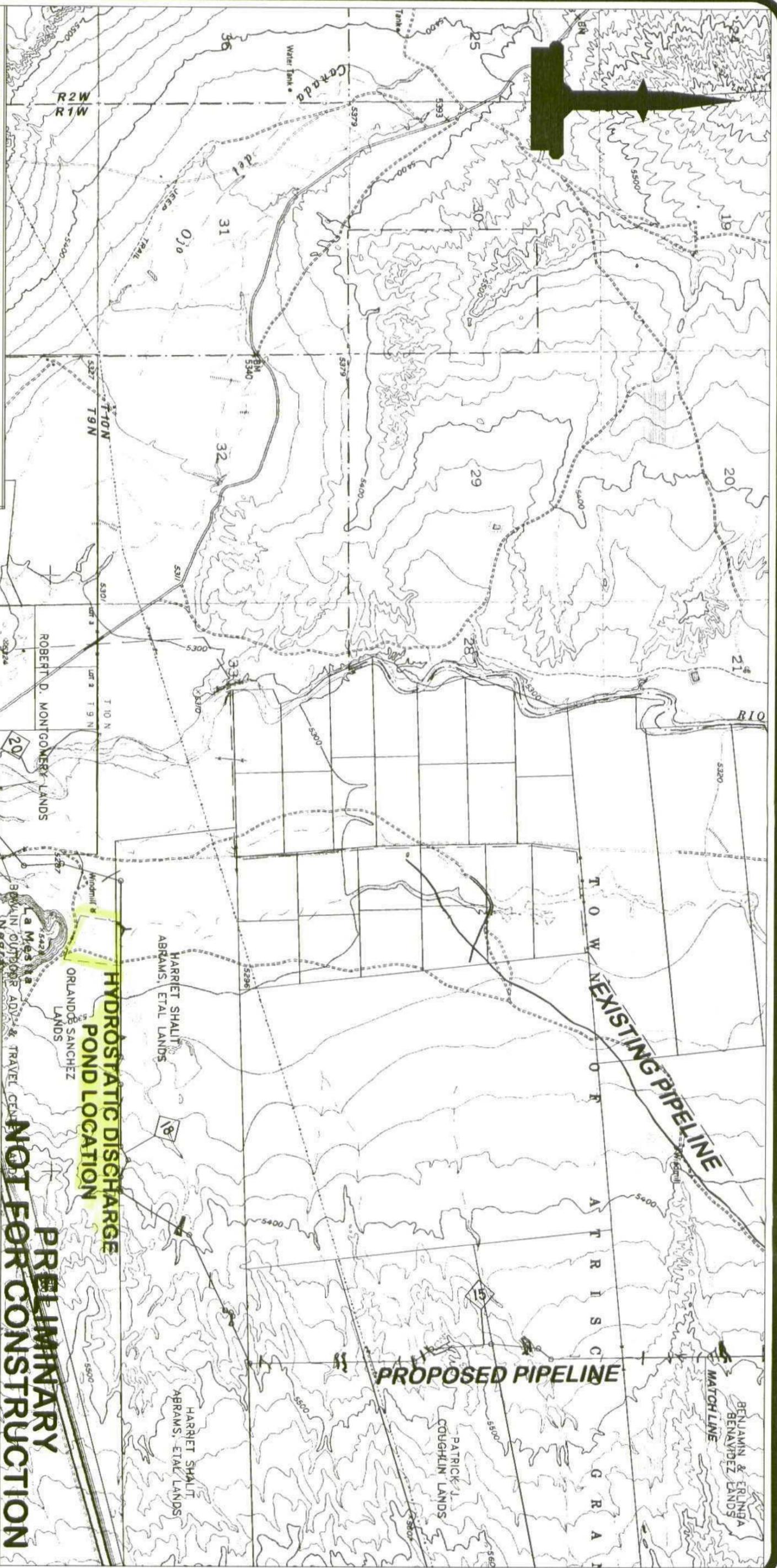
- 998+83.79 TOP OF BANK
- 998+76.31 BOTTOM OF BANK
- 998+68.73 CL ARROYO 62
- 998+63.39 BOTTOM OF BANK
- 998+54.41 TOP OF BANK

S89°41'48"W

- 975+53.85 TOP OF BANK
- 975+47.38 CL ARROYO 61
- 975+39.80 TOP OF BANK

DUST GLO1DR C4 GLO1DR GLO1DR DUST





PROPRIETARY STATEMENT

THIS DOCUMENT AND ALL PREVIOUS ISSUES ARE THE PROPERTY OF PUBLIC SERVICE COMPANY OF NEW MEXICO ("PNM") AND NEITHER RECEIPT NOR POSSESSION THEREOF INFERS OR TRANSFERS ANY RIGHT IN OR LICENSE TO USE THIS DOCUMENT THE SUBJECT MATTER THEREOF OR ANY DESIGN OR TECHNICAL INFORMATION SHOWN THEREON OR ANY RIGHT TO REPRODUCE THIS DOCUMENT OR ANY PART THEREOF. NEITHER THIS DOCUMENT NOR ANY INFORMATION CONTAINED THEREIN MAY BE COPIED, REPRODUCED, OR OTHERWISE USED OR DISCLOSED TO ANY OTHER PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION OF PNM. THIS DOCUMENT IS PROVIDED UNDER THE EXPRESS CONDITION THAT IT WILL BE HELD IN CONFIDENCE BY THE RECIPIENT, THAT IT IS SUBJECT TO RETURN UPON DEMAND, AND THAT IT WILL NOT BE USED IN ANY WAY DETRIMENTAL TO PNM.

END

DRS
 RIFFIN & ASSOCIATES, INC.
 1444 ELK ST., SUITE 202
 ROCK SPRINGS, WY 82901
 (307) 382-5028

MISC.

**PRELIMINARY
 NOT FOR CONSTRUCTION**

**24" RIO PUERCO LOOP
 PLAN OF DEVELOPMENT
 AREA MAPS**

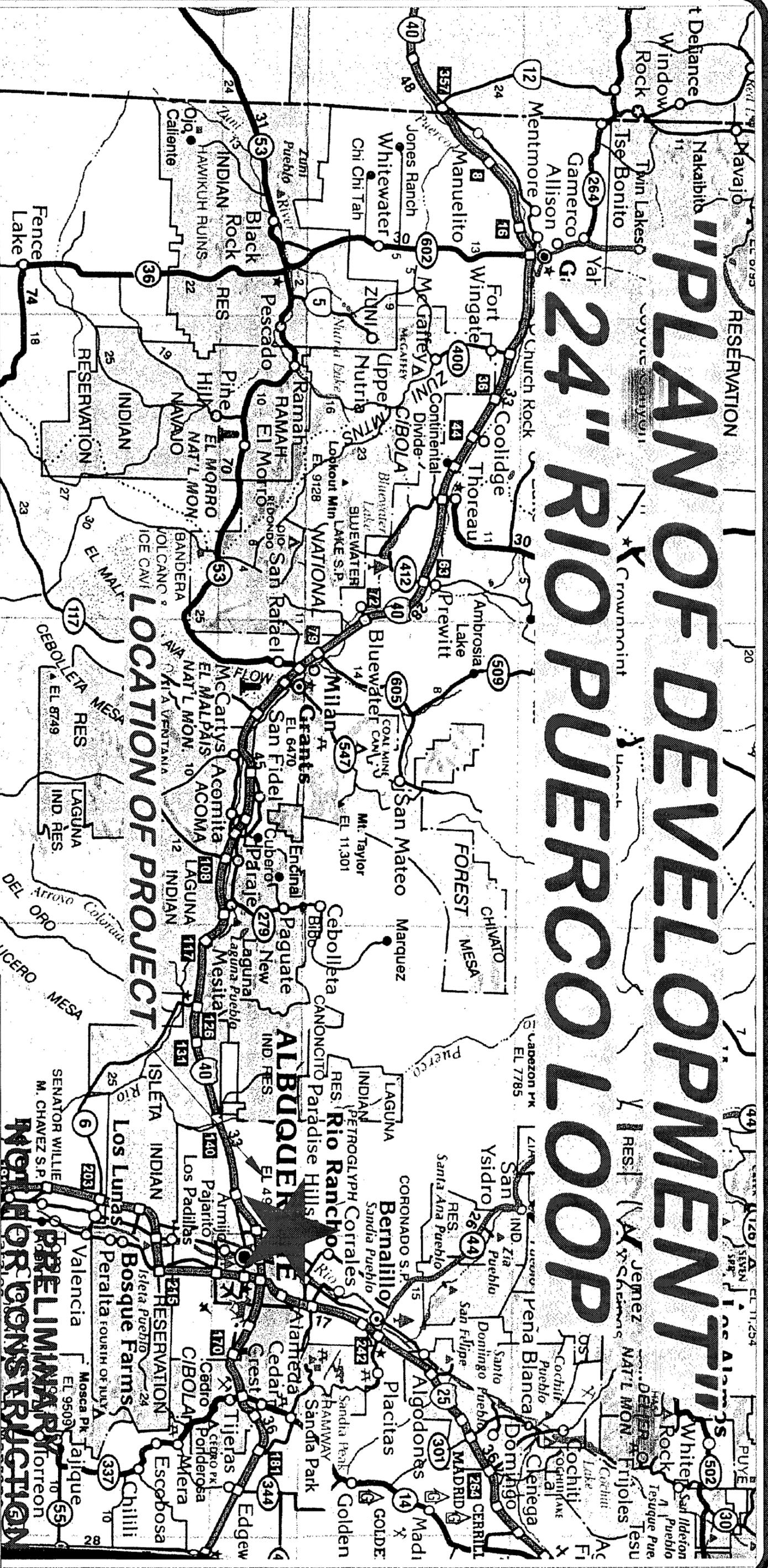


Gas Engineering
 414 Silver Ave Sw
 Albuquerque, New Mexico
 87102

SCALE: 1" = 2000'

DRAWN BY: K.R. HARDESTY
 DATE: 10/17/02
 REVISED BY: K.R. HARDESTY
 LAST REVISION DATE: 1/08/03
 ACAD: RP24-CONS1

PLAN OF DEVELOPMENT 24" RIO PUERCO LOOP



LOCATION OF PROJECT

PROPRIETARY STATEMENT

THIS DOCUMENT AND ALL PREVIOUS ISSUES ARE THE PROPERTY OF PUBLIC SERVICE COMPANY OF NEW MEXICO ("PNM") AND NEITHER RECEIPT NOR POSSESSION THEREOF INFERS OR TRANSFERS ANY RIGHT IN OR LICENSE TO USE THIS DOCUMENT THE SUBJECT MATTER THEREOF OR ANY TECHNICAL INFORMATION SHOWN THEREON OR ANY RIGHT TO REPRODUCE THIS DOCUMENT OR ANY PART THEREOF. NEITHER THIS DOCUMENT NOR ANY INFORMATION CONTAINED THEREIN MAY BE COPIED, REPRODUCED, OR OTHERWISE USED OR DISCLOSED TO ANY OTHER PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION OF PNM. THIS DOCUMENT IS PROVIDED UNDER THE EXPRESS CONDITION THAT IT WILL BE HELD IN CONFIDENCE BY THE RECIPIENT, THAT IT IS SUBJECT TO RETURN UPON DEMAND, AND THAT IT WILL NOT BE USED IN ANY WAY DETRIMENTAL TO PNM.

IRIS
RIFKIN & ASSOCIATES, INC.
1414 ELK ST., SUITE 202
ROCK SPRINGS, WY 82901
(307) 962-5088



Gas Engineering
414 Silver Ave Sw
Albuquerque, New Mexico
87102

SCALE: N.T.S.

DRAWN BY: K. RHARDESTY
DATE: 10/17/02
REVISED BY: K. RHARDESTY
LAST REVISION DATE: 7/08/03

ACAD: RP24-CONSI

**LEGEND FOR MAPS
TO ACCOMPANY P.O.D.
PREPARED FOR:
PUBLIC SERVICE COMPANY OF NEW MEXICO
24" RIO PUERCO LOOP**

LEGEND:

- PROPOSED PIPELINE: 
- EXISTING PIPELINE: 
- IMPROVED ACCESS ROADS: 
- UNIMPROVED ACCESS ROADS: 
- COMPRESSOR STATIONS: 
- VALVE SITES: 
- STATION EQUATION: 
- BOMB IMPACT AREAS: 

SHEET #	REVISION #	DESCRIPTION	BY
1	1	ISSUED FOR BID	KRH
2	1	ISSUED FOR BID	KRH
3	1	ISSUED FOR BID	KRH
4	1	ISSUED FOR BID	KRH
5	1	ISSUED FOR BID	KRH
6	1	ISSUED FOR BID	KRH

PROPRIETARY STATEMENT

THIS DOCUMENT AND ALL PREVIOUS ISSUES ARE THE PROPERTY OF PUBLIC SERVICE COMPANY OF NEW MEXICO ("PNM") AND NEITHER RECEIPT NOR POSSESSION THEREOF INFERS OR TRANSFERS: ANY RIGHT IN OR LICENSE TO USE THIS DOCUMENT THE SUBJECT MATTER THEREOF OR ANY DESIGN OR TECHNICAL INFORMATION SHOWN THEREON OR ANY RIGHT TO REPRODUCE THIS DOCUMENT OR ANY PART THEREOF. NEITHER THIS DOCUMENT NOR ANY INFORMATION CONTAINED THEREIN MAY BE COPIED, REPRODUCED, OR OTHERWISE USED OR DISCLOSED TO ANY OTHER PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION OF PNM. THIS DOCUMENT IS PROVIDED UNDER THE EXPRESS CONDITION THAT IT WILL BE HELD IN CONFIDENCE BY THE RECIPIENT, THAT IT IS SUBJECT TO RETURN UPON DEMAND, AND THAT IT WILL NOT BE USED IN ANY WAY DETRIMENTAL TO PNM.

**PRELIMINARY
NOT FOR CONSTRUCTION**

MISC.
DRS RIFFIN & ASSOCIATES, INC.
1434 ELK ST., SUITE 202
ROCK SPRINGS, WY 82901
(307) 382-5028

**24" RIO PUERCO LOOP
PLAN OF DEVELOPMENT
AREA MAPS**



Gas Engineering
414 Silver Ave Sw
Albuquerque, New Mexico
87102

SCALE: N.T.S.
DRAWN BY: K.R.HARDESTY
DATE: 10/17/02
REVISED BY: K.R.HARDESTY
LAST REVISION DATE: 1/08/03

ACAD: RP24-CONSI
2 OF 6



PROPRIETARY STATEMENT

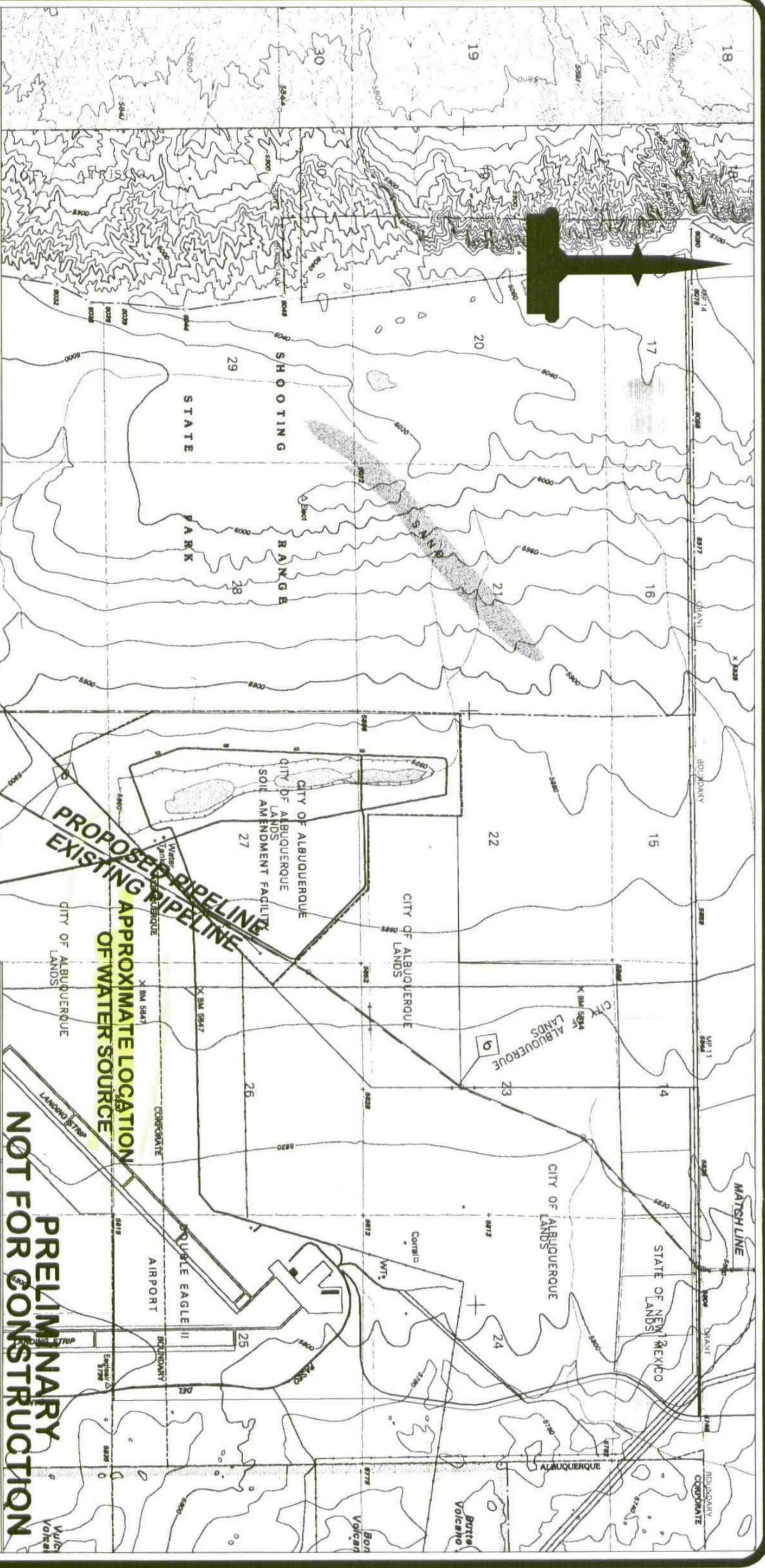
THIS DOCUMENT AND ALL PREVIOUS ISSUES ARE THE PROPERTY OF PUBLIC SERVICE COMPANY OF NEW MEXICO ("PNM") AND NEITHER RECEIPT NOR POSSESSION THEREOF INFERS OR TRANSFERS ANY RIGHT IN OR LICENSE TO USE THIS DOCUMENT THE SUBJECT MATTER THEREOF OR ANY DESIGN OR TECHNICAL INFORMATION SHOWN THEREON OR ANY RIGHT TO REPRODUCE THIS DOCUMENT OR ANY PART THEREOF. NEITHER THIS DOCUMENT NOR ANY INFORMATION CONTAINED THEREIN MAY BE COPIED, REPRODUCED, OR OTHERWISE USED OR DISCLOSED TO ANY OTHER PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION OF PNM. THIS DOCUMENT IS PROVIDED UNDER THE EXPRESS CONDITION THAT IT WILL BE HELD IN CONFIDENCE BY THE RECIPIENT, THAT IT IS SUBJECT TO RETURN UPON DEMAND, AND THAT IT WILL NOT BE USED IN ANY WAY DETRIMENTAL TO PNM.

**PRELIMINARY
NOT FOR CONSTRUCTION**

DRS
RIEFIN & ASSOCIATES, INC.
1414 ELK ST., SUITE 202
ROCK SPRINGS WY 82901
(307) 868-8622

PNM
Gas Engineering
414 Silver Ave Sw
Albuquerque, New Mexico
87102

SCALE: 1" = 2000'
DRAWN BY: K. RHARDESTY
DATE: 10/17/02
REVISED BY: K. RHARDESTY
LAST REVISION DATE: 1/08/03
ACAD: RP24-CONSI



PROPRIETARY STATEMENT

THIS DOCUMENT AND ALL PREVIOUS ISSUES ARE THE PROPERTY OF PUBLIC SERVICE COMPANY OF NEW MEXICO ("PNM") AND NEITHER RECEIPT NOR POSSESSION THEREOF INFERS OR TRANSFERS ANY RIGHT IN OR LICENSE TO USE THIS DOCUMENT THE SUBJECT MATTER THEREOF OR ANY DESIGN OR TECHNICAL INFORMATION SHOWN THEREON OR ANY RIGHT TO REPRODUCE THIS DOCUMENT OR ANY PART THEREOF. NEITHER THIS DOCUMENT NOR ANY INFORMATION CONTAINED THEREIN MAY BE COPIED, REPRODUCED, OR OTHERWISE USED OR DISCLOSED TO ANY OTHER PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION OF PNM. THIS DOCUMENT IS PROVIDED UNDER THE EXPRESS CONDITION THAT IT WILL BE HELD IN CONFIDENCE BY THE RECIPIENT, THAT IT IS SUBJECT TO RETURN UPON DEMAND, AND THAT IT WILL NOT BE USED IN ANY WAY DETRIMENTAL TO PNM.

**PRELIMINARY
NOT FOR CONSTRUCTION**

DRS
RIFKIN & ASSOCIATES, INC.
1414 ELK ST., SUITE 202
ROCK SPRINGS, WY 82801
(307) 382-5028



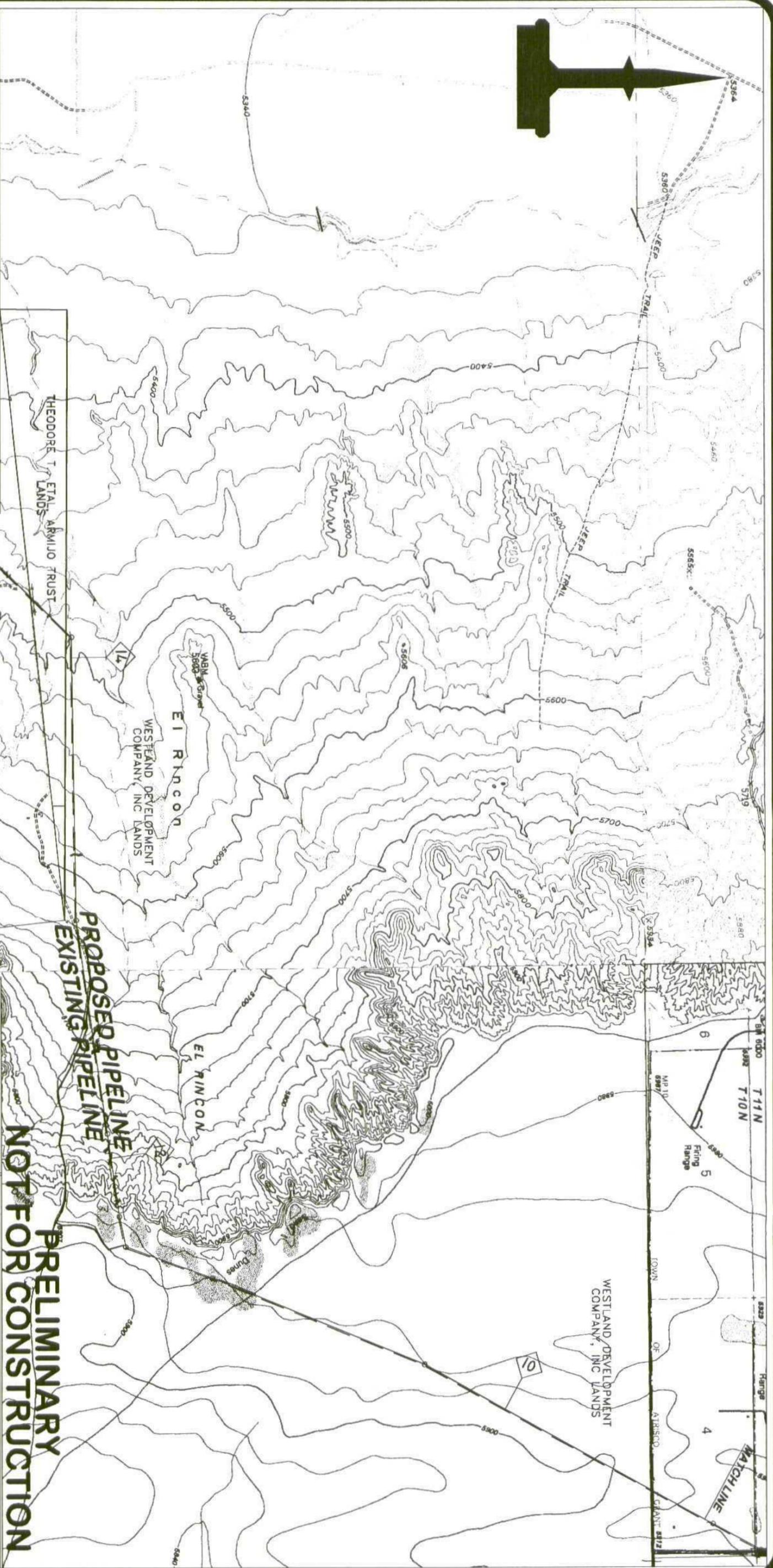
Gas Engineering
414 Silver Ave SW
Albuquerque, New Mexico
87102

**24" RIO PUERCO LOOP
PLAN OF DEVELOPMENT
AREA MAPS**

SCALE: 1" = 2000'

DRAWN BY: K. RHARDESTY
DATE: 10/17/02
REVISED BY: K. RHARDESTY
LAST REVISION DATE: 1/08/03

ACAD: RP24-CONS1
4 OF 6



PROPRIETARY STATEMENT

THIS DOCUMENT AND ALL PREVIOUS ISSUES ARE THE PROPERTY OF PUBLIC SERVICE COMPANY OF NEW MEXICO ("PNM") AND NEITHER RECEIPT NOR POSSESSION THEREOF INFERS OR TRANSFERS ANY RIGHT IN OR LICENSE TO USE THIS DOCUMENT THE SUBJECT MATTER THEREOF OR ANY DESIGN OR TECHNICAL INFORMATION SHOWN THEREON OR ANY RIGHT TO REPRODUCE THIS DOCUMENT OR ANY PART THEREOF. NEITHER THIS DOCUMENT NOR ANY INFORMATION CONTAINED THEREIN MAY BE COPIED, REPRODUCED, OR OTHERWISE USED OR DISCLOSED TO ANY OTHER PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION OF PNM. THIS DOCUMENT IS PROVIDED UNDER THE EXPRESS CONDITION THAT IT WILL BE HELD IN CONFIDENCE BY THE RECIPIENT, THAT IT IS SUBJECT TO RETURN UPON DEMAND, AND THAT IT WILL NOT BE USED IN ANY WAY DETRIMENTAL TO PNM.

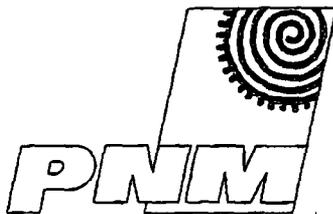
PROPOSED PIPELINE
EXISTING PIPELINE
PRELIMINARY
NOT FOR CONSTRUCTION

DRS
 RIFFIN & ASSOCIATES, INC.
 1444 ELK ST., SUITE 202
 ROCK SPRINGS, WY 82801
 (307) 382-8028



Gas Engineering
 414 Silver Ave Sw
 Albuquerque, New Mexico
 87102

SCALE: 1" = 2000'
 DRAWN BY: K. R. HARDESTY
 DATE: 10/17/02
 REVISED BY: K. R. HARDESTY
 LAST REVISION DATE: 1/08/03
 ACAD: RP24-CONSI



PUBLIC SERVICE COMPANY OF NEW MEXICO

Company

Environmental Services

Department/Mailstop

Mail Stop 2104 - Alvarado Square

Address

Albuquerque

New Mexico

87158

City

State

Zip Code

DATE: 12/16/02

TO: Martynne Kieling
FAX TELEPHONE NO: 476-3462

FROM: ROBIN Delapp
TELEPHONE: 241-2016 FAX TELEPHONE NO. 241-2376
NUMBER OF PAGES BEING TRANSMITTED INCLUDING COVER SHEET:
MESSAGE:
Water Analysis For SAF well -
Water From the well to be used
in hydrostatic.

The information contained in this facsimile message is confidential and solely for the use of the individual entity named above. If the recipient of this message is not the intended recipient, or the employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any dissemination, distribution, copying or unauthorized use of this communication is strictly prohibited. If you have received this facsimile in error, please notify the sender immediately by telephone.

1.2.1.3 Water Quality Summary

The significant water quality issues are arsenic and total dissolved solids. Table 1-4 below summarizes data for the components of concern. A complete table of data collected by the City of Albuquerque is located in Appendix A.

TABLE 1-4

SAF WELL WATER QUALITY

Component	Average	Range	Unit
Arsenic	11	7.0 to 15.6	µg/L
Silicate	18	13.2 to 20.0	mg/L
TDS	459	440 to 480	mg/L
Total Toxic Organics	1.9	1.0 to 3.6	µg/L
pH, field	8.32	7.9 to 8.6	--
Conductivity	678	553 to 734	µmho/cm

Compared to the DE II, water quality yielded by the SAF well is of considerably of higher quality.

1.2.1.4 Pump Capacity

The existing submersible pump (installed in the year 2001) is rated at 195-gpm capacity with a 75 HP motor. With a 10 3/4-inch casing, the well is estimated to yield at 300 gpm.

1.2.1.5 Permitted Capacity

The permitted capacity of the SAF well is included as a supplemental well to the entire City groundwater diversion of 132,000 AF/Y. The permitted capacity of SAF well is tied to the citywide calculated groundwater withdrawal and recharge allotment. The SAF well permit filed in 1988 identified an intended maximum withdrawal of 125 acre-feet/year.