

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-21287

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Northwest Pipeline Corporation

3. ADDRESS OF OPERATOR

P.O. Box 90, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

940' FNL & 790' FWL

D At proposed prod. zone

As above

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any) unit line

790' from drilling

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1/2 mile

16. NO. OF ACRES IN LEASE

19. PROPOSED DEPTH

5674'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6383' GR

22. APPROX. DATE WORK WILL START*

October 20, 1976

23.

PROPOSED CASING AND CEMENTING PROGRAM

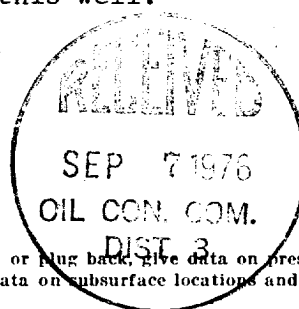
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	9 5/8"	36	200'	180 sxS.
8 3/4"	7"	20	3662'	160 sxS.
6 1/4"	4 1/2" Liner	10.5	3512' - 5674'	215 sxS.

Selectively perforate and stimulate the Mesa Verde formation.

A BOP will be installed after the 9 5/8" surface casing has been run and cemented.
All subsequent work will be conducted through the BOP.

The W/2 of Section 27 is dedicated to this well.

Gas is dedicated.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

D. H. Maroncelli
D. H. Maroncelli

TITLE

Production Engineer

DATE

8-30-76

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Okal

DHM/ks

*See Instructions On Reverse Side

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

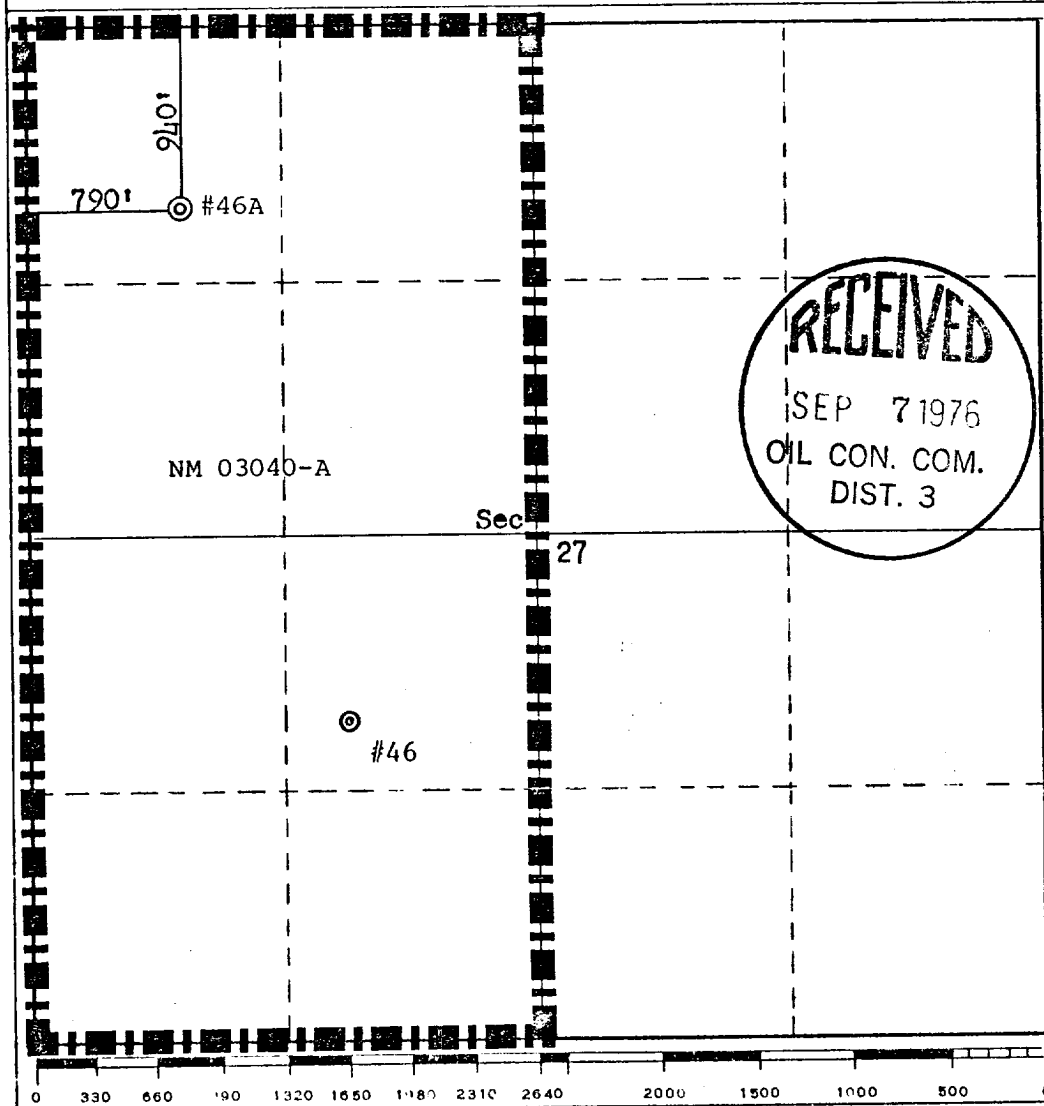
Operator Northwest Pipeline Corporation			Lease San Juan 29-6 Unit		Well No. 46A
Unit Letter D	Section 27	Township 29N	Range 6W	County Rio Arriba	
Actual Footage Location of Well: 940 feet from the North line and 790 feet from the West line					
Ground Level Elev. 6383	Producing Formation Mesa Verde		Pool Blanco	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

D. H. Maroncelli
Name

D. H. Maroncelli
Position
Production Engineer

Company
Northwest Pipeline Corp.

Date
8-24-76

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
August 23, 1976

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.
Fred B. Kerr Jr.

Certificate No.
3950

NORTHWEST PIPELINE CORPORATION

MULTI-POINT SURFACE USE PLAN

for the San Juan 29-6 Unit

Well Number 46A

1. Existing Roads: See attached topographic map. All existing roads used, shall be maintained in a serviceable condition at all times during the drilling operation.
2. Planned Access Roads: See attached topographic map. Maximum grade is approximately 1%. The road surface will not exceed twenty feet in width. Upon completion of drilling operations the access road will be adequately drained to control runoff and soil erosion. Drainage facilities may include ditches, water bars, or any other measure deemed necessary. All activities will be confined to the access road and drill pad.
3. Location of Existing Wells: See attached topographic map.
4. Location of Tank Batteries; Production Facilities; and Production, Gathering and Service Lines: See attached topographic map for locations of existing and proposed gas gathering lines.
5. Location and Type of Water Supply: Water needed for the drilling operation will be hauled from the San Juan 29-6 Unit Water Well located in the SW/4 28, T29N, R6W.
6. Source of Construction Materials: No additional materials will be needed.
7. Methods for Handling Waste Disposal: All garbage, debris, and trash will be buried at least three feet deep. A portable toilet will be supplied for human waste. After drilling operations have been completed the reserve pit will be fenced and the liquid portion will be allowed to evaporate before the location is cleaned up and leveled. The earthen pits will not be located on natural drainages and will be constructed in such a manner so that they will not leak. Any evaporator pit containing toxic liquids will be fenced.
8. Ancillary Facilities: There will be no camps or airstrips associated with the drilling of this well.
9. Well Site Layout: See attached location layout sheet. There will be a drainage ditch above the cut slope, draining east and west.
10. Plans for Restoration of the Surface: Upon completion of drilling, the location will be cleaned, and leveled so that no cut or fill banks will be steeper than 3:1.

All of the area disturbed in connection with the drill site will be seeded as close as possible for any above ground equipment while still allowing for access to the equipment. Seeding will be done within one year after drilling is completed and during the period from July 1 through September 15. Reseeding will be done with seed Mixture #1.

All equipment above ground will be painted a non-glare, non-reflective, non-chalking color that simulates the natural color of the site. For this well code number 595-34127, Green.

Con't on page 2

11. Other Information: If, during operations, any historic or prehistoric ruin, monument or site, or any object of antiquity is discovered, then work will be suspended and the discovery will be reported to the District Manager of the BLM.

When drilling with gas, the line used to discharge and burn off the gas will be located so as not to damage vegetation in the area, and if necessary an earthen screen will be constructed to protect the vegetation. All liquids from the line will be contained at the site unless otherwise specified by the surface agencies representative.

The area covered by the location and proposed access road is gently sloped with scattered brush, and trees.

12. Operator's Representative: D.H. Maroncelli, P.O. Box 90, Farmington, New Mexico 87401. Phone: 327-5351 Extension 54.

13. Certification:

I hereby certify that I have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Northwest Pipeline Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

9-2-76
Date


D.H. Maroncelli
Production Engineer

DHM/ks

OPERATIONS PLAN

San Juan 29-6 Unit #46A

1. LOCATION: NW/4 Sec. 27, T29N, R6W

LEASE NUMBER: NM 03040-A

FIELD: Blanco Mesa Verde

ELEVATION: 6383' GR

II. GEOLOGY:

A. Formation Tops:

San Jose:	Surface	Cliff House:	5043'
Ojo Alamo:	2430'	Menefee:	5128'
Kirtland:	2561'	Point Lookout:	5458'
Fruitland:	3012'	Total Depth:	5674'
Pictured Cliffs:	3307'		
Lewis:	3462'		

B. Logging Program: Gamma Ray-Induction and Density at T.D.

C. Coring Program: None

D. Testing Program: None

III. DRILLING:

A. Anticipated starting date and duration of activities: Drilling will start on or about October 20, 1976 and will last about two weeks.

B. BOP: Blind rams and pipe rams, 10", 900 series, double gate, rated at 300 PSI.

C. Mud Program:

(a) Spud Mud: Water, lime and gel.

(b) Surface to 3462'
Viscosity: 32-28 sec/qt.
Weight: 8.8-9.2 #/gal.
Water Loss: 8-20 cc.
Ph: 8.5-9.5

(c) From 3462' to 3662'
Viscosity: 36-45 sec/qt.
Weight: 8.5-9.5 #/gal.
Water Loss: 6-12 cc
Ph: 8.5-9.5

(d) From 3662' to total depth with gas.

IV. MATERIALS:

A. Casing Program:

<u>Hole Size</u>	<u>Depth O.H.</u>	<u>Casing Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>
13 3/4"	200'	9 5-8"	40# K-55	200'
8 3/4"	3662'	7"	20# K-55	3662'
6 1/4"	3662'-5674'	4 1/2"	10.5# K-55	3512'-5674'

B. Tubing Program:

5624' 2 3/8", 4.7#, K-55 tubing with seating nipple on top of bottom joint. Expendable check valve on bottom.

V. CEMENTING:

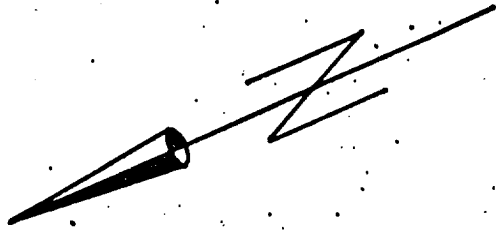
- A. Surface Casing 9 5/8" - Use 180 sacks of Class "B" with 1/4# gel flake per sack and 3% calcium chloride (100% excess to circulate). WOC 12 hours. Test surface casing to 600 PSI for 30 minutes.
- B. Intermediate Casing - Use 100 sacks of Class "B" 65/35 poz with 12% gel and 15.52 gal. water per sack. Tail in w/50 sacks Class "B" with 2% calcium chloride (65% excess to cover Ojo Alamo). WOC 12 hrs. Run temp. survey after 8 hours. Test casing to 600 PSI.
- C. Production Liner 4 1/2"-Use 215 sacks of Class "B" with 4% gel & 1/4 cu. ft. of fine Gilsonite per sack. Precede cement with 20 bbls. water mixed w/3 sxs. gel (70% excess to circulate liner.) Set liner pack off & reverse out excess cement. Run 6 1/4" bit to top of liner & pressure test. (test 12 hrs. after plug is down). Lay down DP and run 3 7/8" bit on and 2 3/8" EUE tubing to clean out liner. Perforate 18 hrs. after plug is down.

DHM/ks

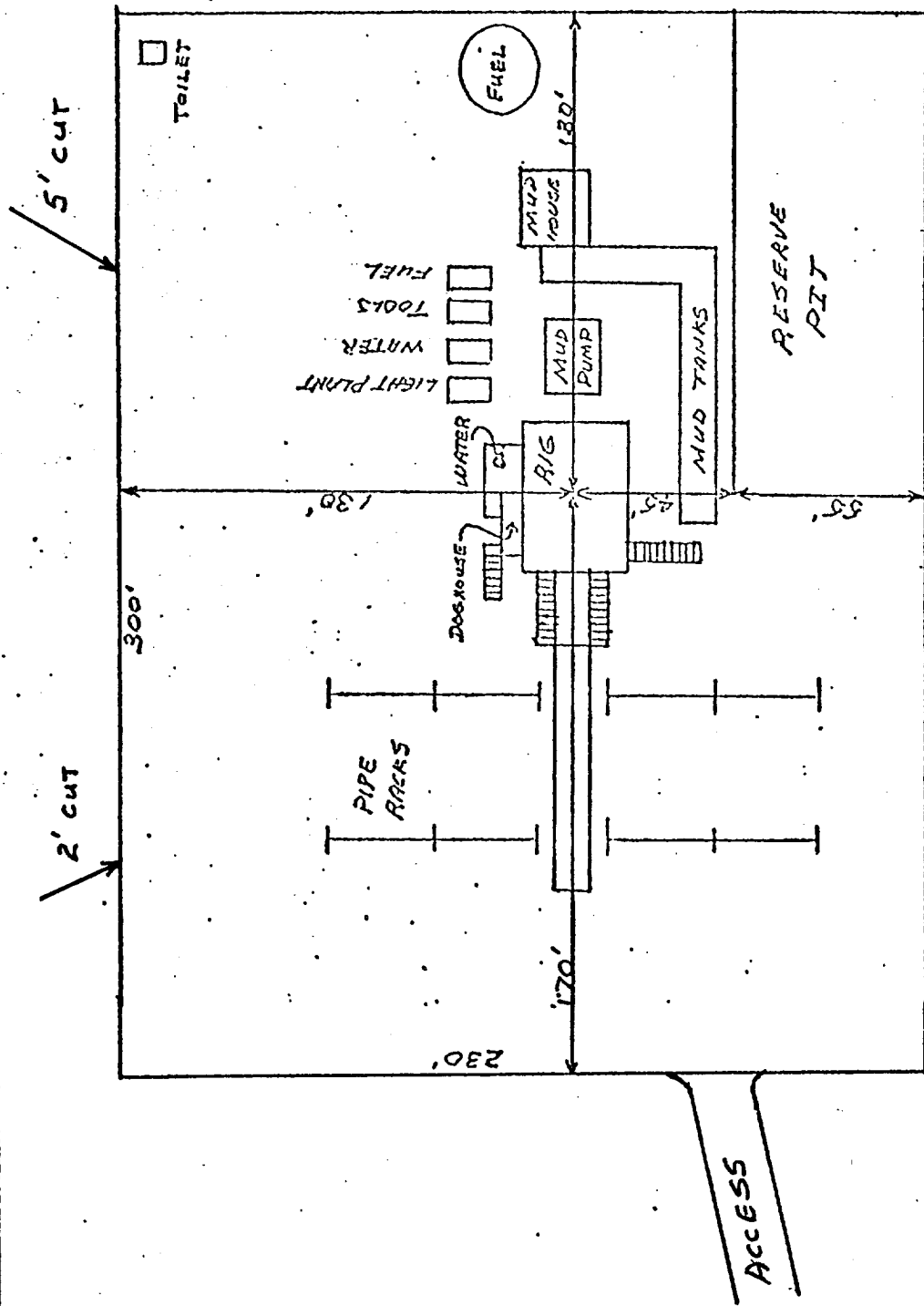
NORTHWEST PIPELINE CORPORATION

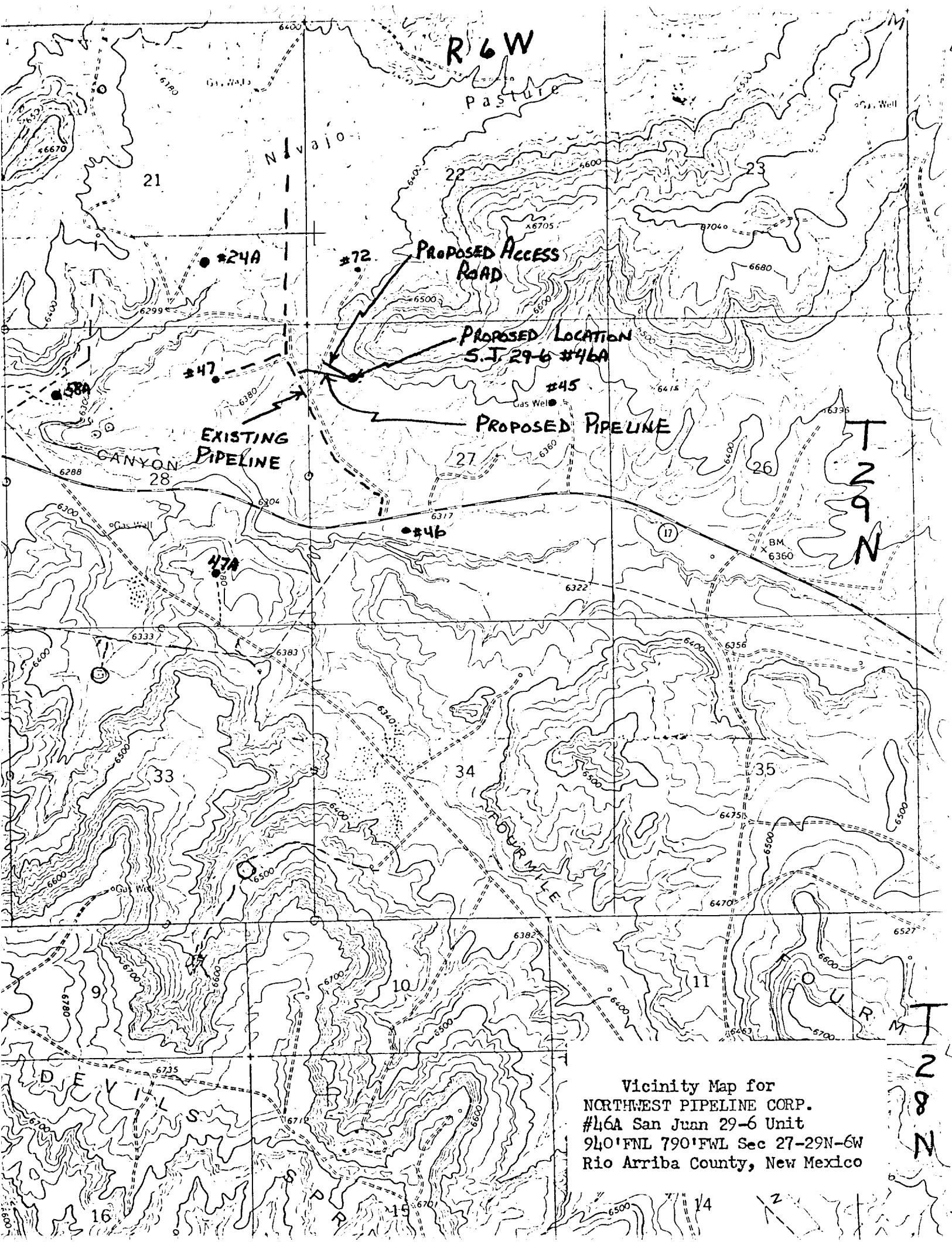
LOCATION LAYOUT

SAN JUAN 29-6 UNIT #46A



DATE: 8-2-76
SCALE: 1" = 20'





Vicinity Map for
NORTHWEST PIPELINE CORP.
#46A San Juan 29-6 Unit
940'FNL 790'FWL Sec 27-29N-6W
Rio Arriba County, New Mexico