

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-21344

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. SF 080377	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Northwest Pipeline Corporation			7. UNIT AGREEMENT NAME San Juan 29-6 Unit	
3. ADDRESS OF OPERATOR P.O. Box 90, Farmington, New Mexico 87401			8. FARM OR LEASE NAME San Juan 29-6 Unit	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1450' FNL & 1620' FWL At proposed prod. zone As above			9. WELL NO. 72A	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*			10. FIELD AND POOL, OR WILDCAT Blanco Mesa Verde	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 920'			11. SEC., T., R., M., OR B.L.K. AND SURVEY OR AREA Sec. 22, T29N, R6W	
16. NO. OF ACRES IN LEASE NA			12. COUNTY OR PARISH Rio Arriba	
17. NO. OF ACRES ASSIGNED TO THIS WELL 320			13. STATE N.M.	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. NA			20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6365' GR			22. APPROX. DATE WORK WILL START* April 20, 1977	

23. PROPOSED CASING AND CEMENTING PROGRAM

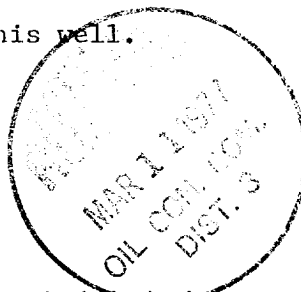
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36	200'	125 sks.
8 3/4"	7"	20	3561'	150 sks.
6 1/4"	4 1/2" Liner	11.6	3411'-T.D.	210 sks.

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 22 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 J. P. Slattery TITLE Drilling Engineer DATE 2/28/77
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*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.

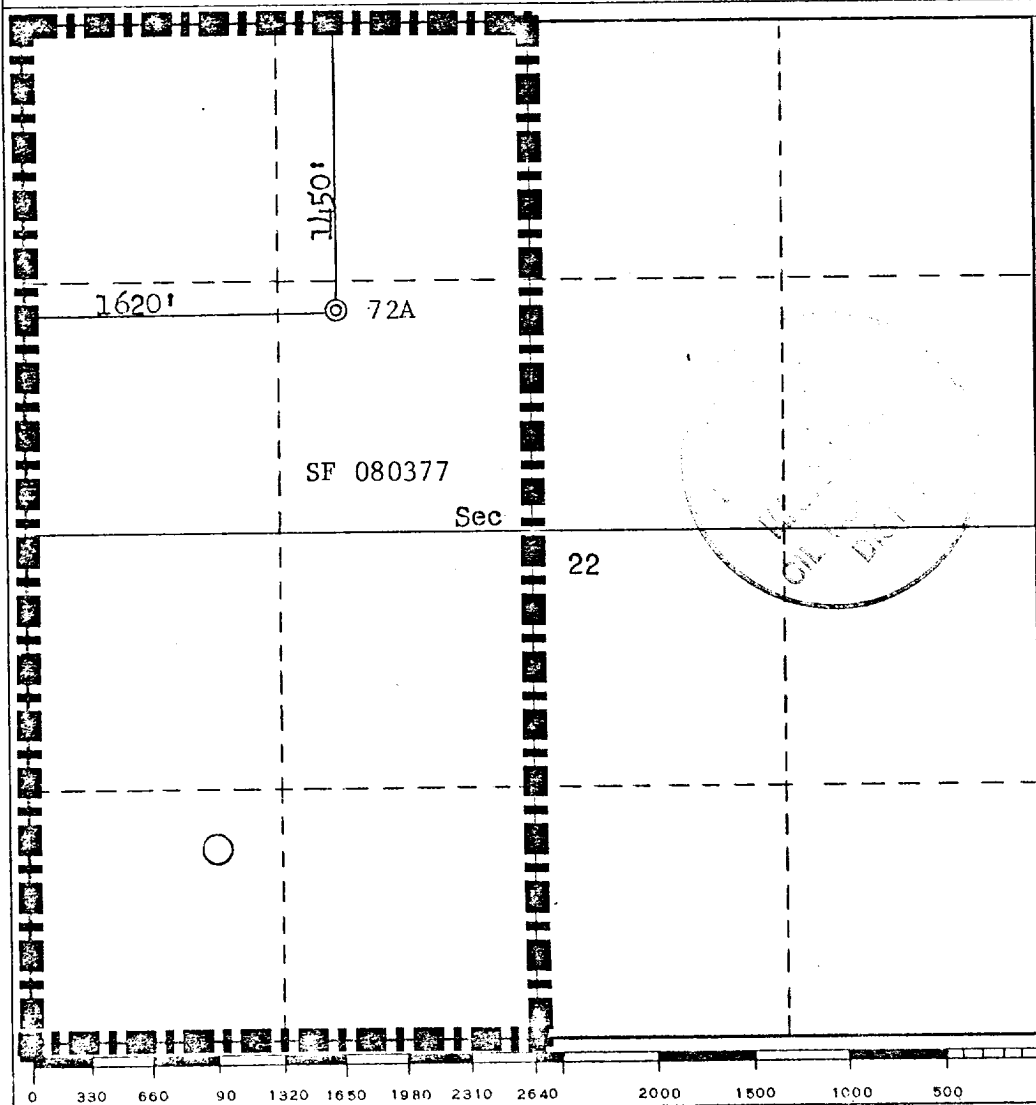
Operator Northwest Pipeline Corporation			Lease San Juan 29-6 Unit		Well No. 72A
Unit Letter F	Section 22	Township 29N	Range 6W	County Rio Arriba	
Actual Footage Location of Well:					
1450 feet from the North line and		1620 feet from the West line			
Ground Level Elev. 6365	Producing Formation Mesa Verde		Pool Blanco	Dedicated Acreage; 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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.

J.P. Slattery
Name **J.P. Slattery**

Position
Drilling Engineer

Company
Northwest Pipeline Corp.

Date
March 3, 1977

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
February 18, 1977

Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr Jr.
Fred B. Kerr Jr.

Certificate No.
3950

REHABILITATION AGREEMENT

Lease No.: SF 080377; Well Name and No.: San Juan 29-6 Unit #72A;
Location: SE 1/4 NW 1/4 Sec. 22, T. 29 N., R. 6 W.

Northwest Pipeline Corporation Oil Company intends to drill a well on surface owned by Porter Smith. The lessee/operator agrees to complete the following rehabilitation work if the well is a producer:

☐ Yes ☐ No Maintain access road and provide adequate drainage to road.

☐ Yes ☐ No Reshape and reseed any area in excess of the pump and support facilities.

Other requirements: _____

The following work will be completed when the well is abandoned:

☒ Yes ☐ No Site will require reshaping to conform to existing topography.

☒ Yes ☐ No Pit will be fenced until dry, then filled to conform to topography.

☒ Yes ☐ No Entire disturbed area will be reseeded. If yes, the following seed mixture will be used:

Mixture #1 _____

☒ Yes ☐ No Access road will be rehabilitated and reseeded using the same seed mixture as above.

☐ Yes ☐ No Access road will remain for landowner's use.

Other requirements: _____

Landowner

Name: Porter Smith
Address: 616 E. Blanco
City: Aztec
State: New Mexico
Telephone: 334-6773
Date: 3-3-77

Operator/Lessee

Name: Northwest Pipeline Corporation
Address: P.O. Box 90
City: Farmington,
State: New Mexico
Telephone: 327-5351
Date: 3-3-77

☒ Yes ☐ No I certify rehabilitation has been discussed with the surface owner. J. P. Gatter

This agreement covers rehabilitation requirements only and does not affect any other agreements between the lessee/operator and surface owner.

NORTHWEST PIPELINE CORPORATION
MULTI - POINT SURFACE USE PLAN
for the San Juan 29-6 Unit
Well Number #72A

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, culverts 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. The pipeline will be constructed adjacent to the area cleared for the access road.
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.
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. Seeding 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.

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 agency's representative.

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

12. Operator's Representative: J.P. Slattery, P.O. Box 90, Farmington, New Mexico 87401, Phone 327-5351 Extension 62.
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.

3-8-77
Date

J.P. Slattery
J.P. Slattery
Drilling Engineer

OPERATIONS PLAN

San Juan 29-6 Unit #72A

Rio Arriba County, N.M.

I. LOCATION: NW/4 Sec. 22, T29N, R6W

LEASE NUMBER: SF 080377

FIELD: Blanco Mesa Verde

ELEVATION: 6365' GR

II. GEOLOGY:

A. Formation Tops:

San Jose:	Surface	Cliff House:	5051'
Ojo Alamo:	2380'	Menefee:	5144'
Kirtland:	2561'	Point Lookout:	5456'
Fruitland:	3014'	Total Depth:	5656'
Pictured Cliffs:	3246'		
Lewis:	3361'		

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: April 20, 1977.
Operations will last about 15 days.

B. BOP: Blind rams and pipe rams, 10" 900 series, double gate, rated at 3000 PSI.

C. Mud Program:

a) Spud Mud: Water, lime and gel.

b) Surface to 3481'
Viscosity: 32-38 sec/qt.
Weight: 8.8-9.2 #/gal.
Water Loss: 8 -20 cc.
Ph: 8.5-9.5

c) From 3481' to 3681'
Viscosity: 36-45 sec/qt.
Weight: 8.5-9.5 #/gal.
Water Loss: 6 - 12 cc
Ph: 8.5-9.5

d) From 3681' 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>
12 1/4"	200'	9 5/8"	36# K-55	200'
8 3/4"	3561'	7"	20# K-55	3561'
6 1/4"	3561'-T.D.	4 1/2"	10.5# K-55	3411'-T.D.

- B. Tubing Program: 5600', 2 3/8", 4.7#, K-55 tubing with seating nipple on top of bottom joint. Expendable check valve on bottom.

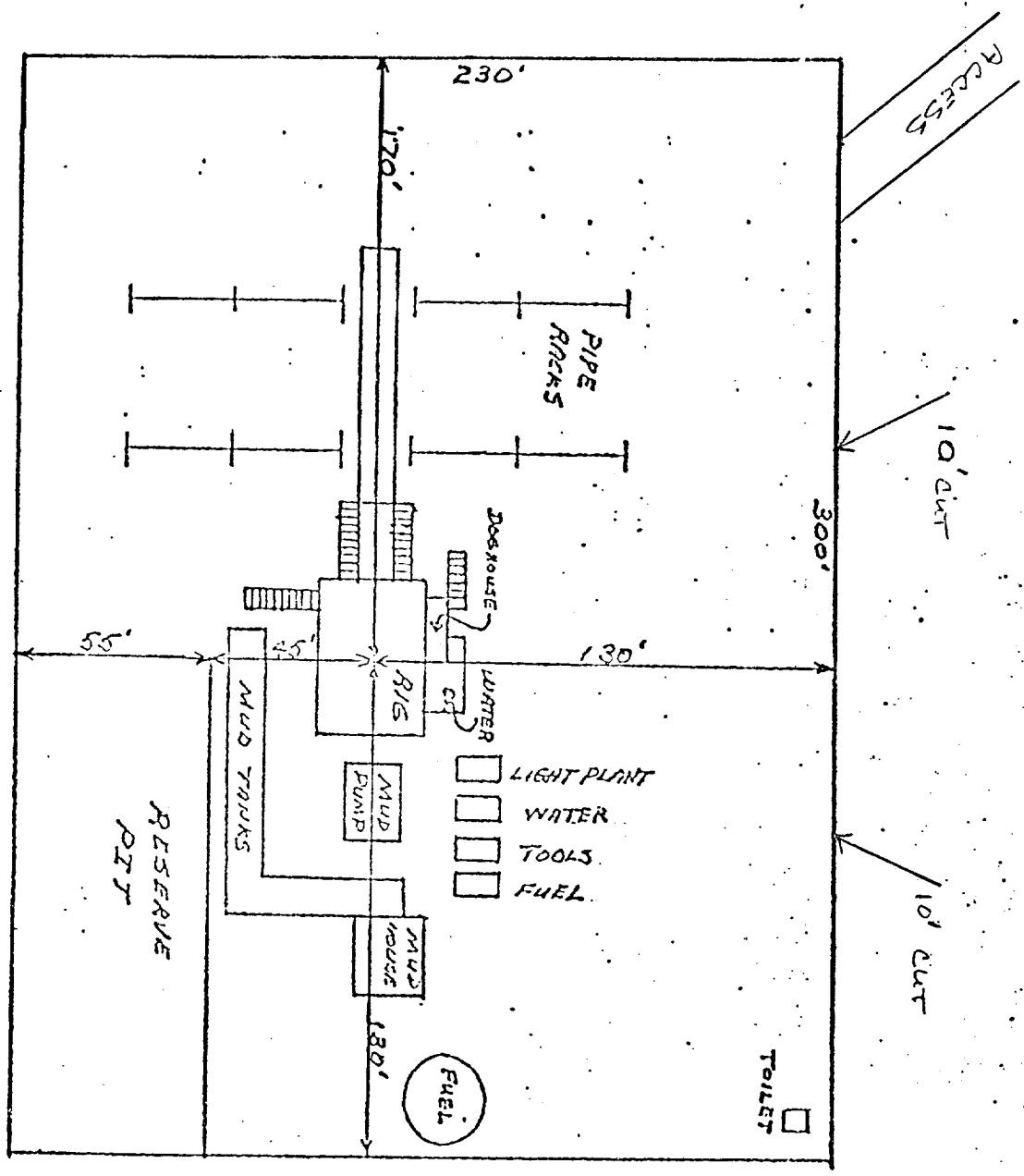
V. CEMENTING:

- A. Surface Casing 9 5/8" - Use 125 sks. CL. "B" w/1/4# gel flake/sk. & 3% calcium chloride (100% excess to circ.) WOC 12 hrs. Test surface csg. to 600 PSI for 30 min.
- B. Intermediate Casing - Use 100 sks. Cl. "B" 65/35 poz w/12% gel & 15.52 gal. water/sk. Tail in w/50 sks. Cl. "B" w/2% calcium chloride (65% excess to cover Ojo Alamo). WOC 12 hrs. Run temp. survey after 8 hrs. Test csg. to 600 PSI.
- C. Production Liner 4 1/2" - Use 210 sks. Cl. "B" w/4% gel & 1/4 cu. ft. of fine Gilsonite/sk. Precede cmt. w/20 bbls. water mixed w/3 sks. gel (70% excess to circ. liner). Set liner pack off & reverse out excess cmt. Run 6 1/4" bit to top of liner & pressure test (test 12 hrs. after plug is down). Lay down DP & run 3 7/8" bit on 2 3/8" EUE tubing to clean out liner. Perforate 18 hrs. after plug is down.

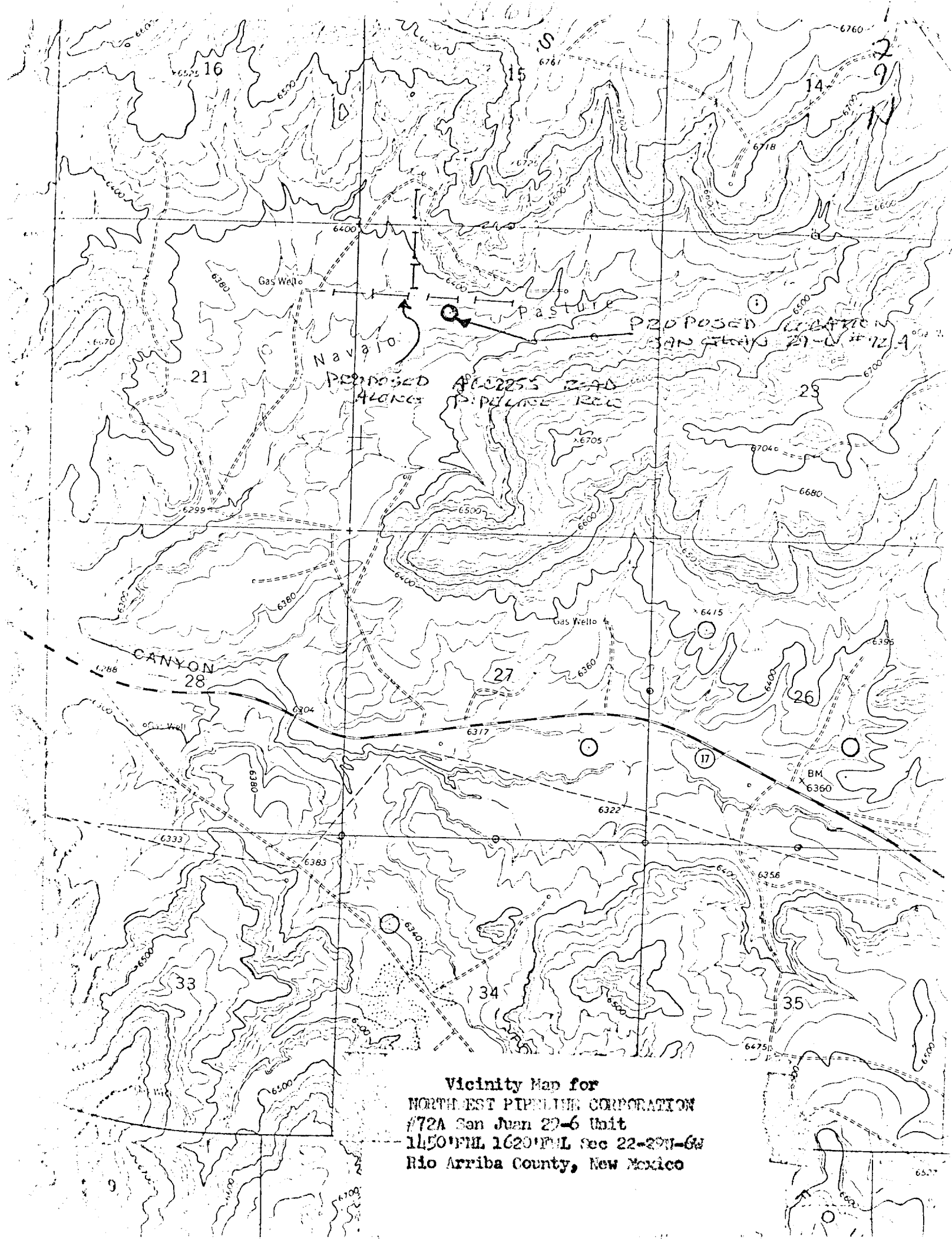
NORTHWEST PIPELINE CORPORATION

LOCATION LAYOUT

SAN JUAN 29-6 UNIT #724



DATE: 3-3-77
SCALE: 1" = 20'



Vicinity Map for
NORTH EAST PIPELINE CORPORATION
#72A San Juan 21-6 Unit
11450' N 1620' W Sec 22-29N-6W
Rio Arriba County, New Mexico