

UNITED STATES  
DEPARTMENT OF THE INTERIOR

## GEOLOGICAL SURVEY

## 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 ☐

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 1850' FNL & 1185' FEL  
At proposed prod. zone as above

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
65 miles east of Aztec, N.M.

15. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any) 1185'

16. NO. OF ACRES IN LEASE  
NA

17. NO. OF ACRES ASSIGNED  
TO THIS WELL  
1/320

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT. NA

19. PROPOSED DEPTH  
8300

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
6501' GR

22. APPROX. DATE WORK WILL START\*  
July 30, 1979

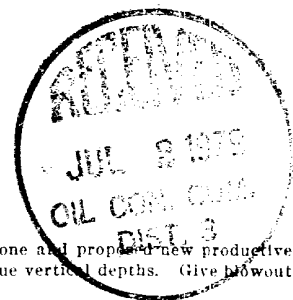
PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	32.3#	350	185 sks
8 3/4"	7"	20#	4015	175 sks
6 1/4"	4 1/2"	10.5# & 11.6#	8300	362 sks

Selectively perforate and stimulate the Dakota formation.

A BOP will be installed after the surface casing is set and cemented. All subsequent work will be conducted through the BOPs.

The North half of Section 34 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 flowout preventer program, if any.

24. SIGNED William Billman TITLE Drilling Engineer DATE 6/26/79  
W.J. Billman  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

ok Frank

\*See Instructions On Reverse Side

JUN 29 1979

U. S. GEOLOGICAL SURVEY  
DURANGO, COLO.

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form C-132  
Revised 10-1-78

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

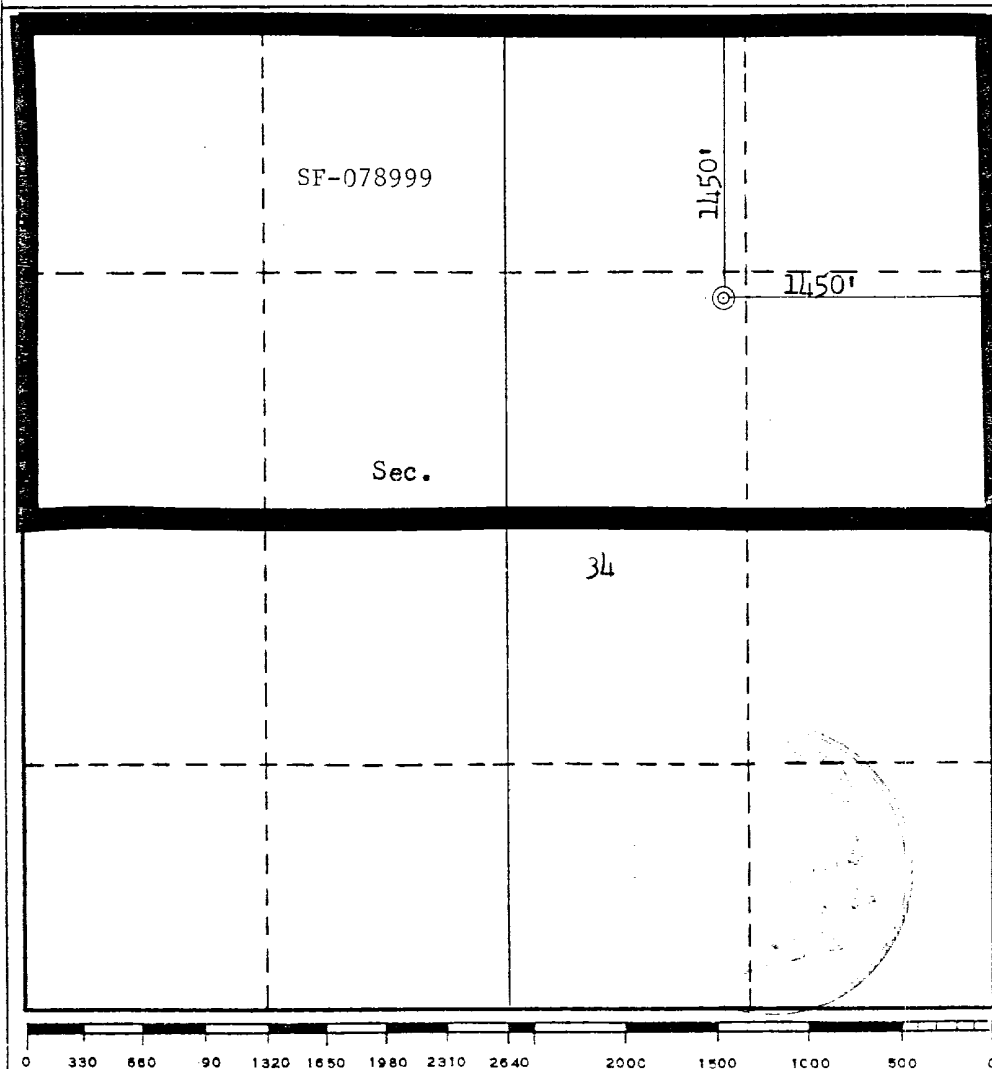
Operator <b>NORTHWEST PIPELINE CORPORATION</b>			Lease <b>SAN JUAN 31-6 UNIT</b>		Well No. <b>33</b>
Unit Letter <b>G</b>	Section <b>34</b>	Township <b>31N</b>	Range <b>6W</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well: <b>1450</b> feet from the <b>North</b> line and <b>1450</b> feet from the <b>East</b> line					
Ground Level Elev. <b>6494</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>	Dedicated Acreage: <b>320</b> 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.

*William J. Billman*  
Name

William J. Billman  
Position

Drilling Engineer  
Company

Northwest Pipeline Corp.  
Date

6/26/79

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.

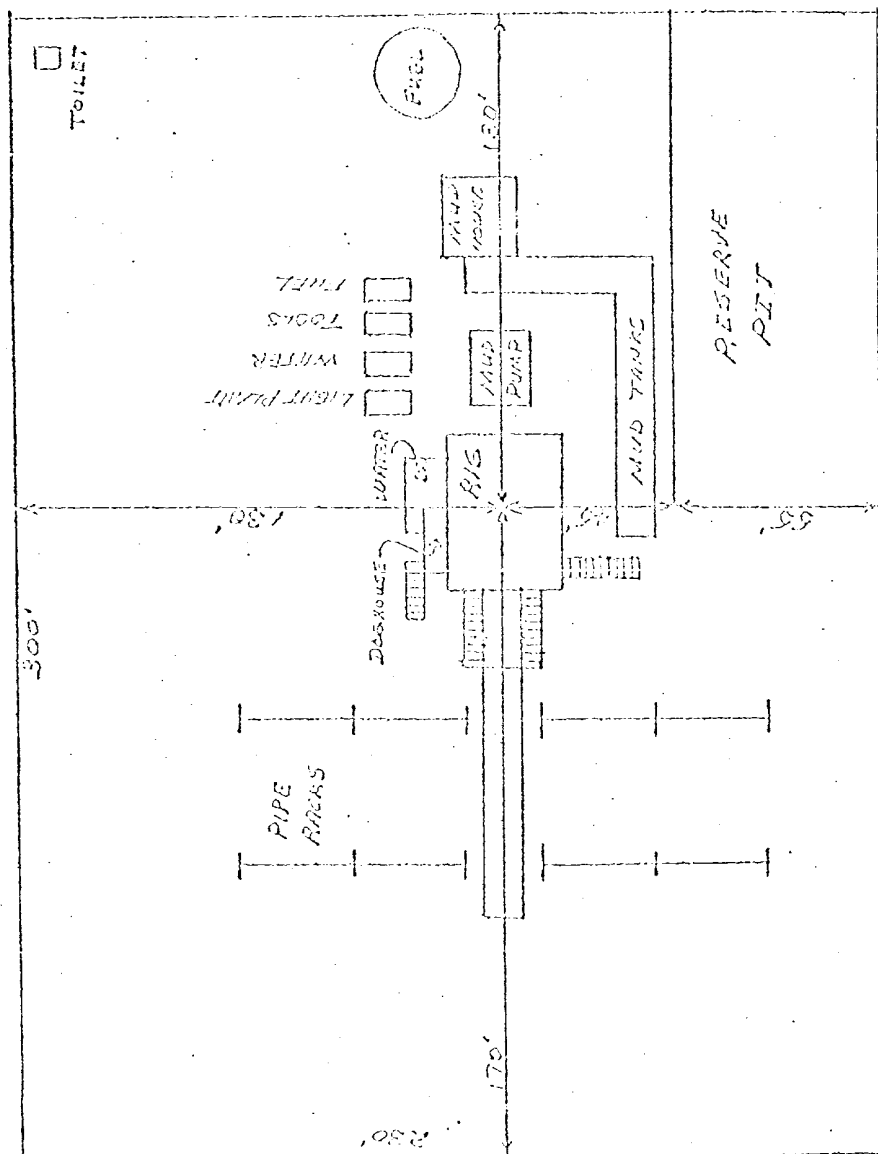
Date Surveyed  
June 23, 1979

Registered Professional Engineer  
and/or Land Surveyor

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

Certificate No. **3950**

NORTHWEST PIPELINE CORP. JAN 31-6 # 33



DATE:

SCALE: 1 cm = 20'

## OPERATIONS PLAN

I. WELL NAME: San Juan 31-6 #33

June 27, 1979

LOCATION: 1850' FNL & 1185' FEL

LEASE NUMBER: SF-078999

Sec. 34, T31N, R6W

FIELD: Basin Dakota

ELEVATION: 6501'

### II. GEOLOGY:

A. Formation Tops:	Cliff House	5491'	
Ojo Alamo	2740'	Point Lookout	5691'
Kirtland	2792'	Greenhorn	7696'
Fruitland	3102'	Graneros	7746'
Pictured Cliffs	3262'	Dakota	7921'
Lewis	3521'	Total Depth	8300'

B. Logging Program: Gamma Ray Induction & Density at Total Depth.

C. Coring Program: None

D. Natural Gauges: Gauge at 5691', 7696', 7746', and at total depth. Gauge any noticeable increases in gas flow at depths other than those noted above. Record all gauges on daily drilling reports and tower reports.

### III. DRILLING:

A. BOP: Blind rams and pipe rams, 10', 900 series, double gate, rated at 3000 psi.

B. Mud Program:

a) Spud Mud: Water, lime and gel.

b) Surface to 350'.

Viscosity: 32-38 sec/qt.

Weight: 8.8-9.2 #/gal.

Water Loss: 8-20 cc

Ph: 8.5-9.5

c) From 350' to 4015'

Viscosity: 36-45 sec/qt.

Weight: 8.5-9.5 #/gal.

Water Loss: 8-20 cc

Ph: 8.5-9.5

d) From 4015' to total depth with gas.

### IV. MATERIALS:

A. Casing Program:

<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>Wt. &amp; Grade</u>
12 1/4"	350'	9 5/8"	32.3# H-40
8 3/4"	4015'	7"	20# K-55
6 1/4"	8300'	4 1/2"	10.5# & 11.6# K-55

B. Float Equipment:

Surface - 9 5/8" guide shoe.

Intermediate - 7 " guide shoe, self-filling insert float valve.

Production - 4 1/2" geyser shoe, flapper type float collar.

C. Tubing: 8250' of 2 3/8" 4.7#, J-55, BRD EUE tubing with a common seating nipple above bottom joint.

D. Well Head Equipment: Gray Tool Company drawing No. E-5533, or equivalent. Well head representative to set slips on intermediate and production strings.

V. CEMENTING:

A. Surface Casing: 9 5/8" - Use 185 sacks of class 1 "B" cement with 1/4# gel flake per sack and 3% calcium chloride, (100% excess to circulate 9 5/8" casing). WOC 12 hours. Test to 600 psi for 30 minutes.

B. Intermediate Casing: 7" - Use 175 sacks of 65/35 Class "B" poz with 12% gel and 15.52 gallons of water per sack. Tail in with 50 sacks of Class "B" with 2% calcium chloride (360 cu. ft. of slurry 50% excess to cover Ojo Alamo). Use top rubber plug only. Run temperature survey after 8 hours. WOC 12 hours. Test casing to 1200 psi for 30 minutes.

C. Production Casing: 4 1/2" - Precede cement with 40 barrels of water mixed with 4 sacks gel. Cement with 262 sacks of Class 1 "B" cement with 8% gel, 12 1/2# fine gilsonite per sack and 0.4% HR-4. Tail in with 100 sacks of Class "B" cement with 1/4% fine tuf-plug per sack and 0.4% HR-4 per sack.

NORTHWEST PIPELINE CORPORATION  
MULTI - POINT SURFACE USE PLAN  
for the San Juan 31-6 Unit  
Well Number 33

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 run off and soil erosion. Drainage facilities may include ditches, water bars, culverts or any other 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 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 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 layout sheet.
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 the site. For this well code number 959-34127, 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.

Multi-Point Surface Use Plan

Page 2

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: W.J. Billman - P.O. Box 90 - Farmington, New Mexico 87401. Phone: 327-5351 Extension #103.
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.

6/28/79  
Date

William J. Billman  
W.J. Billman  
Drilling Engineer

WJB/ch

27°30' 131

282

4557 IV VW  
(BANCOS MESA NW)

284

25'

