

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY30-039-21479
5. LEASE DESIGNATION AND SERIAL NO.

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

1485' FSL & 1080' FWL

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)

1080'

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

NA

16. NO. OF ACRES IN LEASE

NA

19. PROPOSED DEPTH

4084'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

20. ROTARY OR CABLE TOOLS

Rotary

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

7108' GR

22. APPROX. DATE WORK WILL START*

Aug. 26, 1977

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	120'	85 sks.
6 3/4"	2 7/8"	6.4#	4084'	120 sks.

Selectively perforate & stimulate the Pictured Cliffs formation.
A BOP will be installed after the surface casing is set & cemented
All subsequent work will be done through BOP.

The SW/4 of Section 29 is dedicated to this well.

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

July 12, 1977

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

JPS/ch 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.

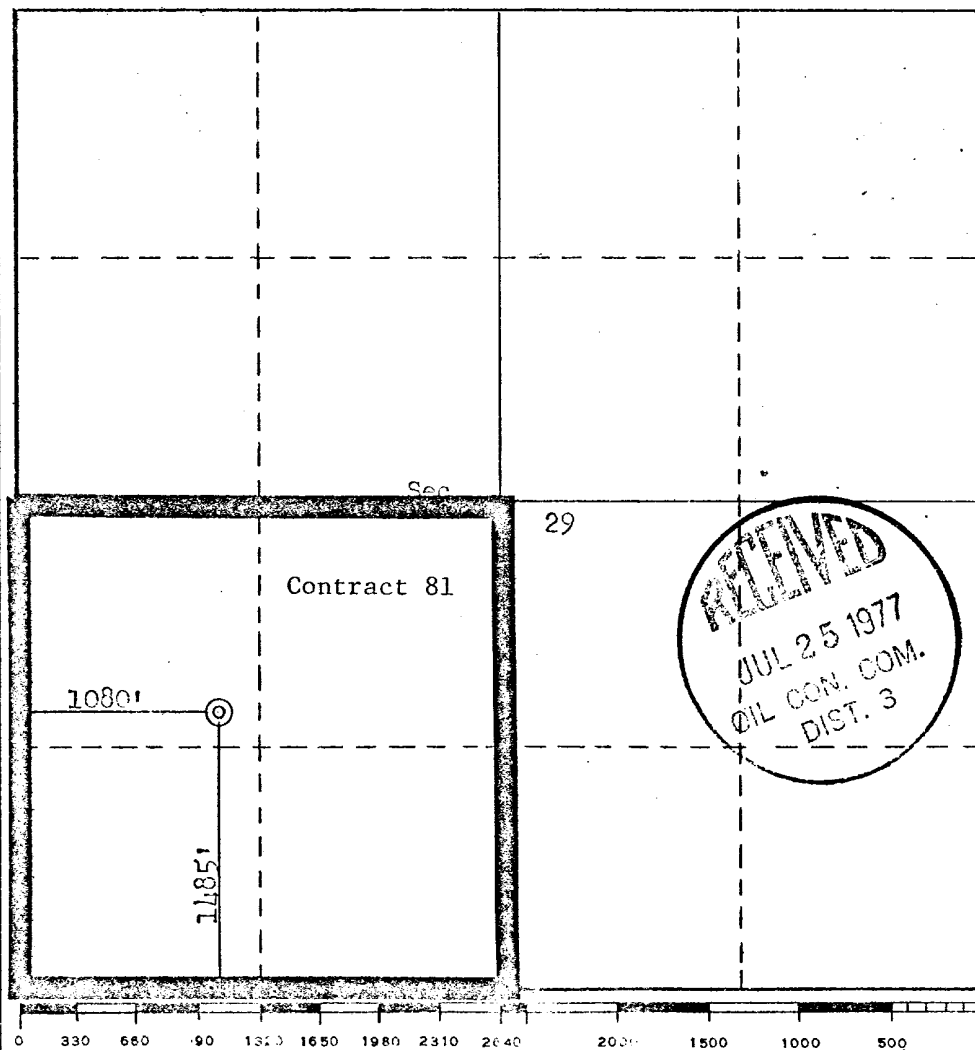
Operator Northwest Pipeline Corporation			Lease Indian "A"		Well No. 3
Unit Letter L	Section 29	Township 29N	Range 3W	County Rio Arriba	
Actual Footage Location of Well: 1185 feet from the South line and 1080 feet from the West line					
Ground Level Elev. 7108	Producing Formation Pictured Cliffs		Pool Choza Mesa		Dedicated Acreage: 160 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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.

Name *S. P. Skilling*
Position **Drilling Engineer**
Company **Northwest Pipeline Corp.**
Date *July 14, 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 **March 20, 1977**
Registered Professional Engineer and/or Land Surveyor *Fred B. Ford Jr.*
Certificate No. **3950**

OPERATIONS PLAN

Indian A #3

I. LOCATION: NW/4, SW/4, Sec. 29, T29N, R3W

LEASE NUMBER: Contract 81

FIELD: Choza Mesa PC

ELEVATION: 7108' GR

II. GEOLOGY:

A. Formation Tops:

Ojo Alamo:	3378'	Total Depth:	4084'
Kirtland:	3544'		
Fruitland:	3652'		
Pictured Cliffs:	3798'		

B. Logging Program: I-ES and Density at T.D.

C. Coring Program: None

D. Testing Program: None

III. DRILLING:

A. Anticipated starting date and duration of activities: Aug. 26, 1977

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

C. Mud Program:

a) Supd Mud: Water, lime and gel.

b) Surface to 3450

Starloss: CMC mud.

Viscosity: 25-30 sec/qt.

Weight: 8.9-9.0 #/gal.

Water Loss: 7-12 cc

Ph: 8.5-9.5

c) From 3450 to 4084

Starloss: CMC Hy-gel mud

Viscosity: 38-80 sec/qt.

Weight: 9.0-9.5 #/ga.

Water Loss: 6-8 cc

Ph: 8.5-9.5

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"	120'	8 5/8"	24# K-55	120'
6 3/4"	4084'	2 7/8"	6.4# K-55	4084'

V. CEMENTING:

A. Surface Casing 8 5/8" - Use 85 sks. Class "B" cmt. with 1/4# flocele/sk. and 3% calcium chloride (100% excess to circ.). WOC 12 hours. Test surface csg. to 6000 PSI for 30 minutes.

- B. Production Casing 2 7/8" - Use 70 sacks 65/35 poz with 10% gel and 1/4 cu. ft. fine gilsonite/cu. ft. slurry and tail in with 50 sacks Class "B" cement with 2% calcium chloride. WOC 0 hrs
Run temperature survey after 12 hours.

NORTHWEST PIPELINE CORPORATION

MULTI - POINT SURFACE USE PLAN

for the Indian "A"

Well Number 3

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.
5. Location and Type of Water Supply: Water needed for the drilling operation will be hauled from the Jicarilla Tapacito Water Hole located in the SE/4 17, T26N, R4W.
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, N.M., 87401,
Phone: 327-5351 Extension 62.

13. Certification:

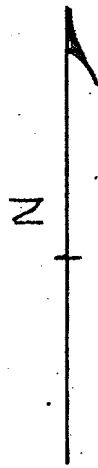
I hereby certify that I have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge true and correct; and, that the work associated with the operations proposed herein will 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.

7-14-77
Date

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

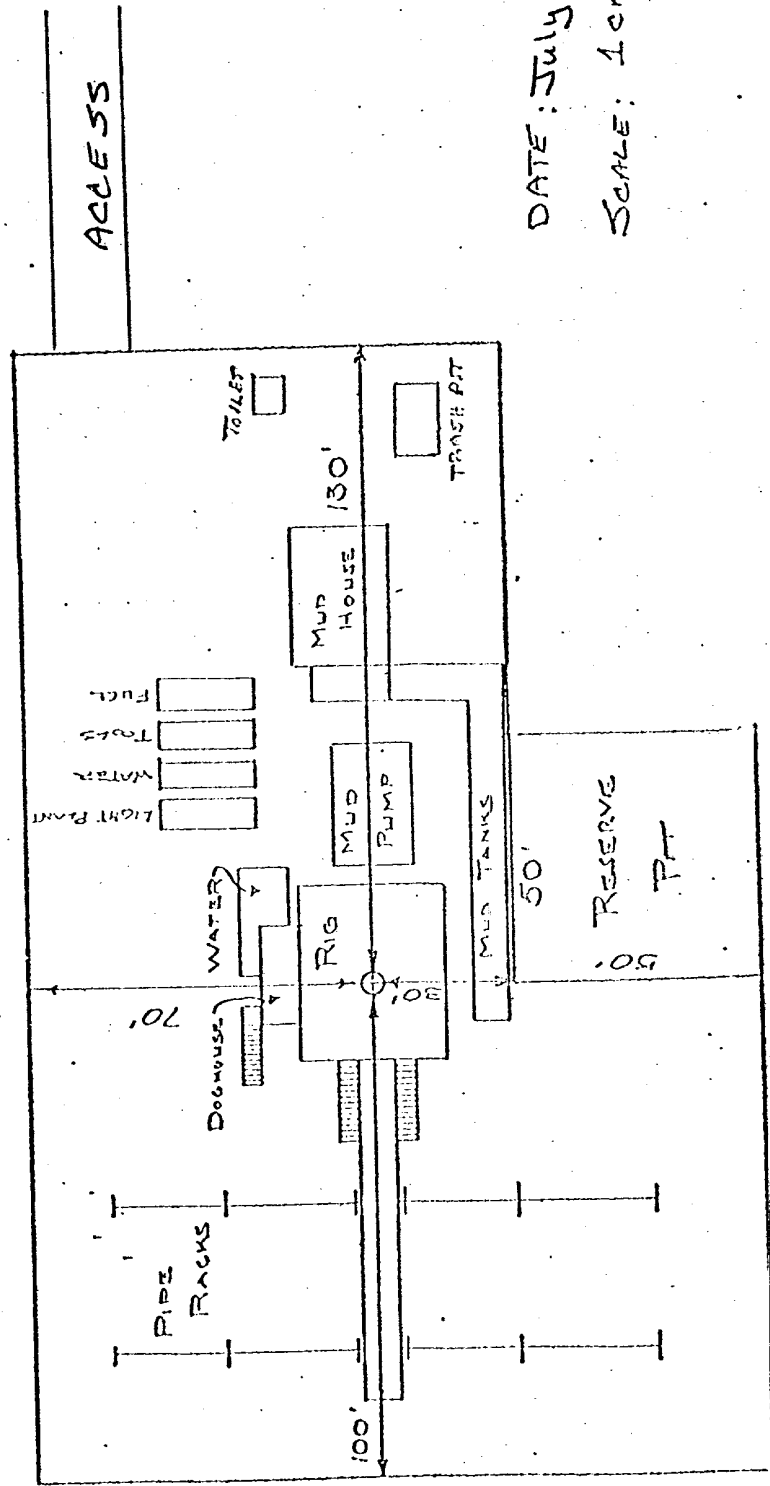
JPS/dd

NORTH WEST PIPELINE CORPORATION
 LOCATION LAYOUT
 INDIAN A #3



6' cut

6' cut



DATE: July 11, 1977
 SCALE: 1cm = 20'

