

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-21440

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 1810'
1801' FNL & 1000' FEL
 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)
 1000'

16. NO. OF ACRES IN LEASE
 NA

17. NO. OF ACRES ASSIGNED TO THIS WELL
 115.05 115.31

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

19. PROPOSED DEPTH
 3599'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 6514' GR

22. APPROX. DATE WORK WILL START*
 Sept. 15, 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# K-55	120'	85 sks.
6 3/4"	2 7/8"	6.4# K-55	3599'	240 sks.

Selectively perforate and stimulate the Pictured Cliffs formation.

A BOP will be installed after the surface casing has been run and cemented. All subsequent operations will be conducted through the BOP.

The NE/4 of Section 1 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 June 17, 1977
 (This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

JPS/ch 11/20/77

ST

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.

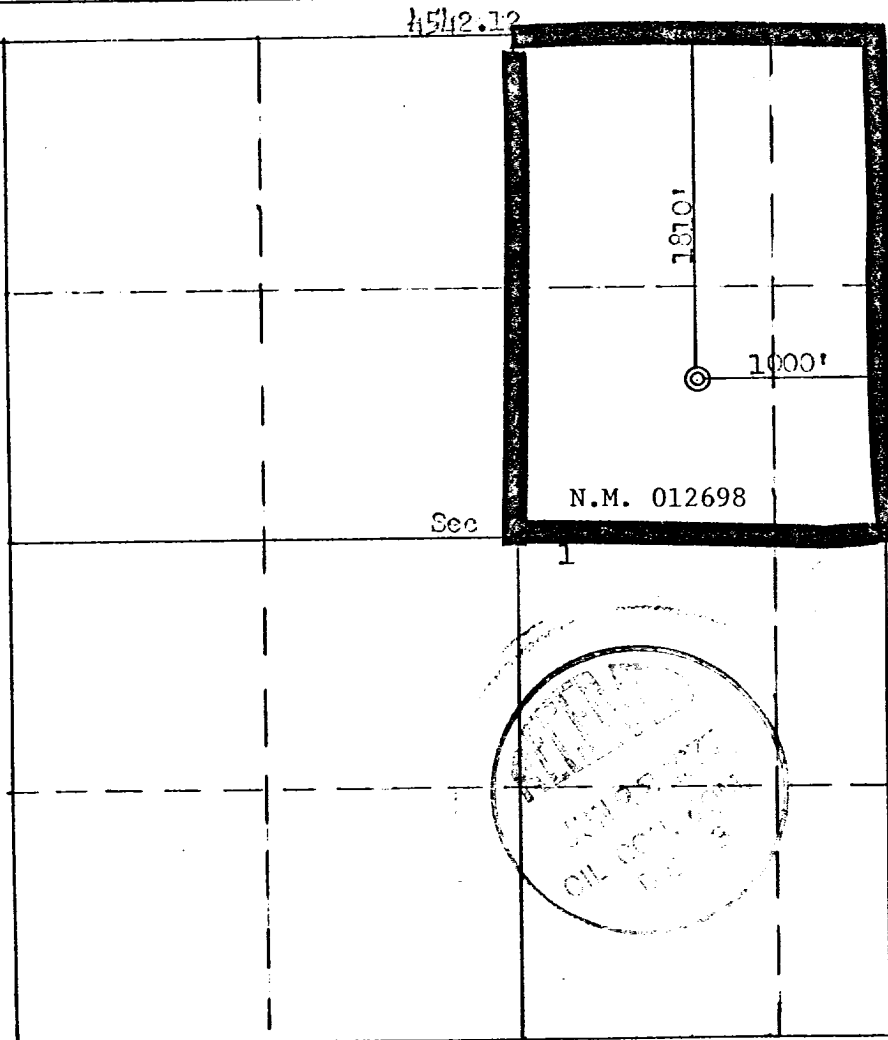
Operator Northwest Pipeline Corporation			Lease San Juan 22-6 Unit		Well No. 110
Unit Letter G	Section 1	Township 29N	Range 6E	County Rio Arriba	
Actual Footage Location of Well: 1810 feet from the North line and 1000 feet from the East line					
Ground Level Elev. 651	Producing Formation Pictured Cliffs	Pool Blanco - Pictured Cliffs	Dedicated Acreage: 115.05 115.31 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.

J.P. Slattery
Name J.P. Slattery

Position
Drilling Engineer

Company
Northwest Pipeline Corp.

Date
June 13, 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 19, 1977

Registered Professional Engineer and Land Surveyor
Fred B. Kerr
Fred B. Kerr

Certificate No.
3950

OPERATIONS PLAN

Well Name: San Juan 29-6 Unit #110

I. LOCATION: SW/4 NE/4 Sec. 1, T29N, R6W LEASE NUMBER: NM 012698

FIELD: Blanco - Pictured Cliffs ELEVATION: 6514' GR

II. GEOLOGY:

A. Formation Tops:
Ojo Alamo: 2594' Total Depth: 3599'
Kirtland: 2744'
Fruitland: 3144'
Pictured Cliffs: 3449'

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: Sept. 15, 1977

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 2700'
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: 2700' To: 3599'
Starloss: CMC Hy-gel mud
Viscosity: 38-80 sec/qt.
Weight: 9.0-9.5 #/gal.
Water Loss: 6-8 cc
Ph: 8.5-9.5

IV. MATERIALS:

A. Casing Program

Hole Size	Depth O.H.	Casing Size	Wt. & Grade	Depth Set
12 1/4"	120'	8 5/8"	24# K-55	120'
6 3/4"	3599'	2 7/8"	6.4# K-55	3599'

V. CEMENTING:

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

V. Cementing con't.

- B. Production Casing 2 7/8" - Use 190 sks. 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 24 hours. Run temperature survey after 12 hours.

JPS/ch

NORTHWEST PIPELINE CORPORATION

MULTI - POINT SURFACE USE PLAN

for the San Juan 29-6 Unit

Well Number 110

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 ditched, 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 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.

JUL 10 1977

11. con't.

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.

June 17, 1977
Date

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

REHABILITATION AGREEMENT

MILES

Lease No.: NM 012698 ; Well Name and No.: San Juan 29-6 #110 ;
Location: SE 1/4 NE 1/4 Sec. 1 , T. 29 N., R. 6 W.

Northwest Pipeline Corporation Oil Company intends to drill a well on surface owned by Porter A. 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.

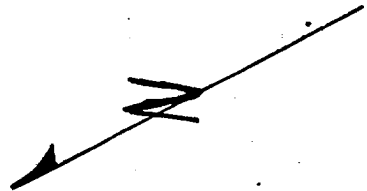
Other requirements: _____

<u>Landowner</u>	<u>Operator/Lessee</u>
Name: <u>Porter A. Smith</u>	Name: <u>Northwest Pipeline</u>
Address: <u>616 E. Blanco</u>	Address: <u>P.O. Box 90</u>
City: <u>Aztec</u>	City: <u>Farmington</u>
State: <u>New Mexico</u>	State: <u>New Mexico</u>
Telephone: <u>334-6773</u>	Telephone: <u>327-5351</u>
Date: <u>6/6/77</u>	Date: <u>6/6/77</u>

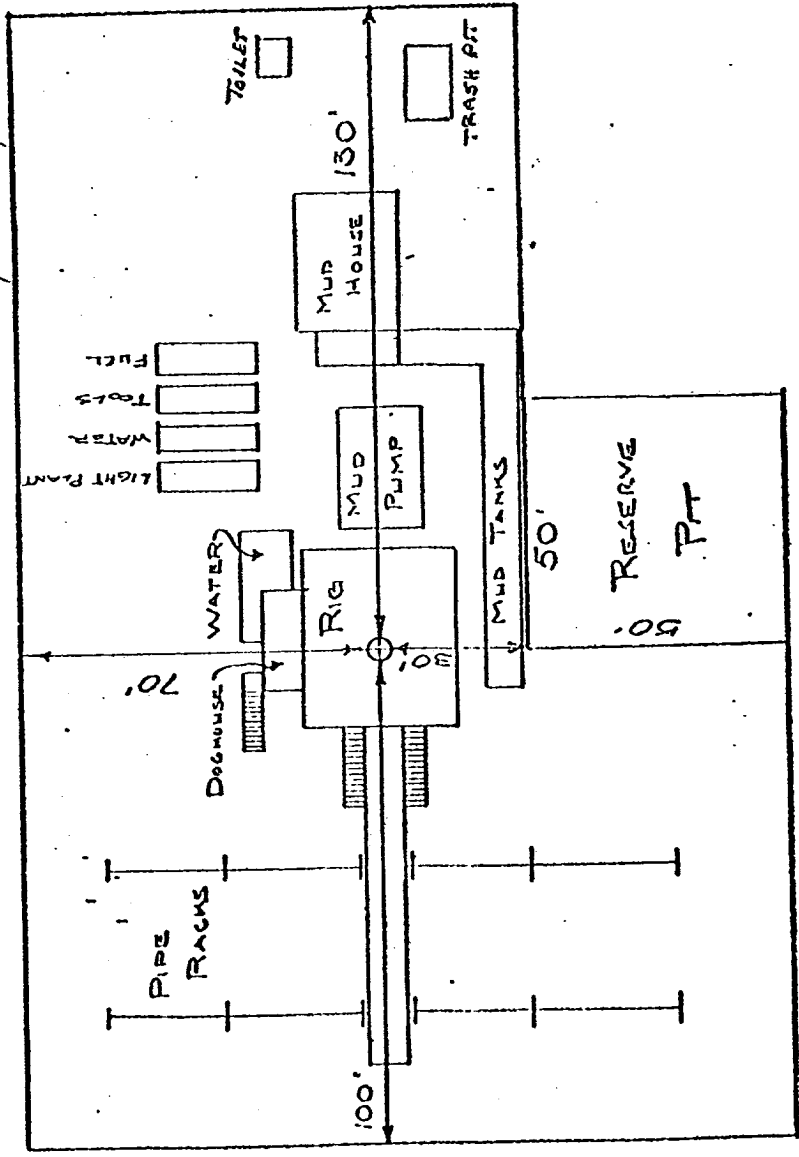
Yes No I certify rehabilitation has been discussed with the surface owner. J.P. Slattery
J.P. Slattery

This agreement covers rehabilitation requirements only and does not affect any.

NORTH WEST PIPELINE CORPORATION
 LOCATION LAYOUT
 SAN JUAN 29-6 UNIT #110



ACCESS



DATE: JUNE 17, 1977
 SCALE: 1CM = 20'