

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## 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 078231	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Northwest Pipeline Corporation			7. UNIT AGREEMENT NAME Cox Canyon Unit	
3. ADDRESS OF OPERATOR P.O. Box 90, Farmington, New Mexico 87401			8. FARM OR LEASE NAME Cox Canyon	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1125' FNL & 1450' FWL At proposed prod. zone As above			9. WELL NO. Com. #19	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*			10. FIELD AND POOL, OR WILDCAT Blanco-Pictured Cliffs	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 1125' (Also to nearest drlg. unit line, if any)			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 28, T32N, R11W	
16. NO. OF ACRES IN LEASE NA			12. COUNTY OR PARISH San Juan	
17. NO. OF ACRES ASSIGNED TO THIS WELL 160			13. STATE New Mexico	
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.) 6372' GR			22. APPROX. DATE WORK WILL START*	

## 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#	150'	85 sks.
6 3/4"	2 7/8"	6.4#	3156	210 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 NW/4 of Section 28 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. J. P. Slattery SIGNED J. P. Slattery TITLE Drilling Engineer DATE \_\_\_\_\_  
(This space for Federal or State office use)

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

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

JPS/ch

\*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.

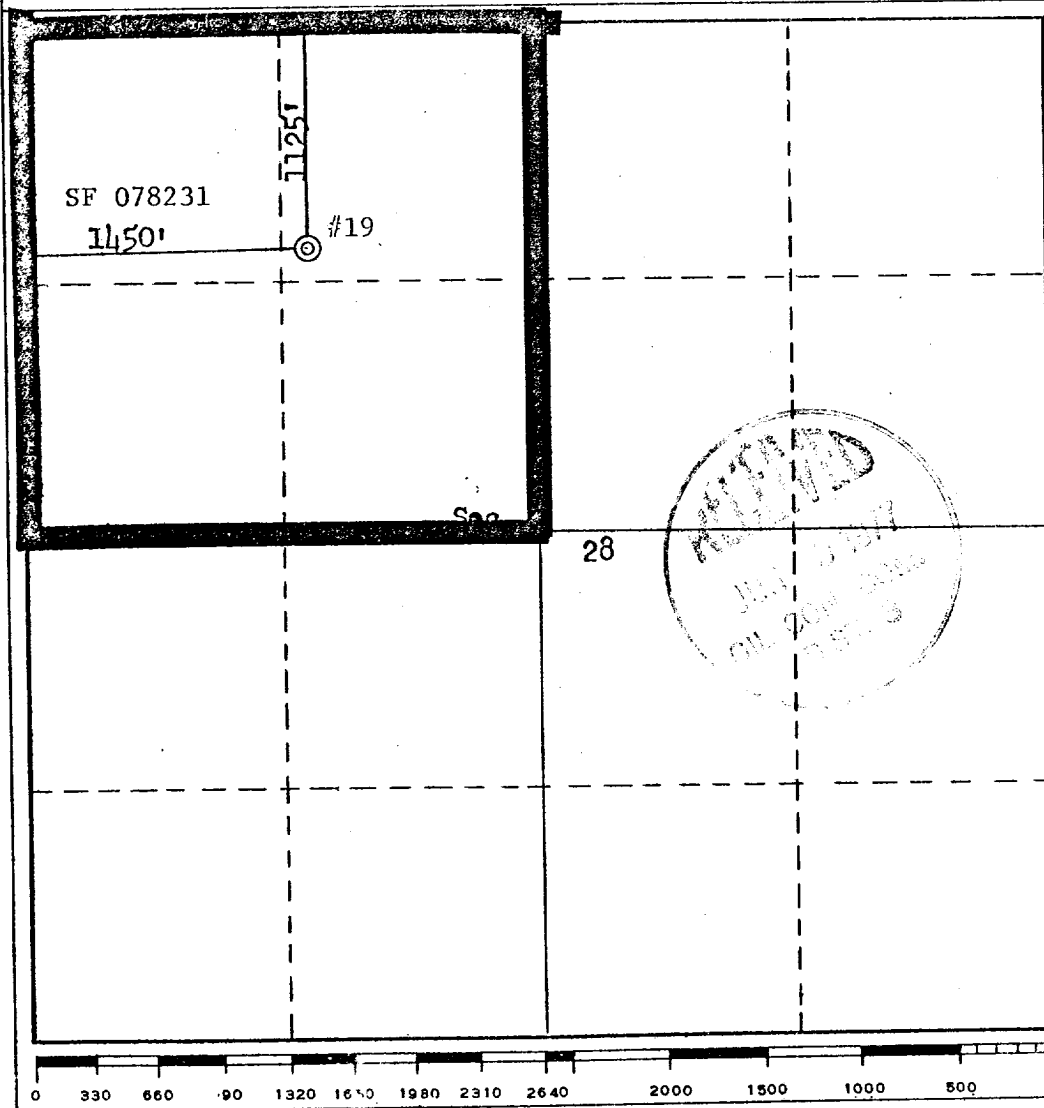
Operator <b>Northwest Pipeline Corporation</b>			Lease <b>Cox Canyon Unit Com</b>		Well No. <b>19</b>
Unit Letter <b>C</b>	Section <b>28</b>	Township <b>32N</b>	Range <b>11W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1125</b> feet from the <b>North</b> line and <b>1450</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6372</b>	Producing Formation <b>Pictured Cliffs</b>		Pool <b>Blanco</b>	Dedicated Acreage: <b>160</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 Communitization

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

Sr. Drilling Engineer

Company

Northwest Pipeline Corp.

Date

5-10-77

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

May 6, 1977

Registered Professional Engineer and/or Land Surveyor

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

Certificate No.

3950

## OPERATIONS PLAN

WELL NAME: Cox Canyon Com. #19

I. LOCATION: 1125' FNL & 1450' FWL

LEASE NUMBER: SF 078231

FEILD: Blanco - Pictured Cliffs

ELEVATION: 6372'GR

II. GEOLOGY:

A. Formation Tops:

Ojo Alamo:	1847'	Total Depth:	3207'
Kirtland:	1974'		
Fruitland:	2772'		
Pictured Cliffs:	3087'		

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:

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 2950'

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: 2950' To: 3207'

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"	150'	8 5/8"	24# K-55	150'
6 3/4"	3207'	2 7/8"	6.4# K-55	3207'

V. CEMENTING:

A. Surface Casing 8 5/8" - Use 85 sks. Class "B" cement with 1/4# flocele/sk and 3% calcium chloride (100% excess to circulate). WOC 12 hours. Test surface casing to 600 PSI for 30 minutes.

Operations Plan  
Cox Canyon Com. #19  
page 2

V. Cementing con't.

B. Production Casing 2 7/8" - Use 160 sks 65/35 poz with 10% gel and 1/4 cu. ft. fine gilsonite/cu. ft. slurry and tail in with 50 sks. Class "B" cement with 2% calcium chloride. WOC 24 hours. Run temperature survey after 12 hours.

JPS/ch