In Lieu of Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

	FOR	M Al	PR	٥v	ED	
Bud	lget Bu	ıreau	No	. 10	04-01	35
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CHANDA NOTICES	AND	DEPODTS	ON WE	119	

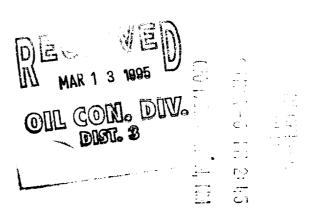
Lease Designation and Serial No.

Do not use this form for proposals to drill or to deepen or reentry to a different recentair. He			NM 03189		
APPLICATION FOR PERMIT—" for such proposals			6. If Indian, Allottee or Tribe Name		
SUBMIT IN TR	RIPLICATE	7.	If Unit or CA, Agreement Designation		
Type of Well ☐ Oil Well	Other	8.	Well Name and No. COX CANYON UNIT #4		
Name of Operator NORTHWEST PIPELINE CORPORATION		9.	API Well No. 30-045-11368		
Address and Telephone No. PO BOX 58900 MS 2M3, SALT LAKE CITY, UTAH 84158-0900 (801) 584-6879		10.	Field and Pool, or Exploratory Area BLANCO MESAVERDE		
Location of Well (Footage, Sec., T., R., M., or Survey Description) 990' FNL & 990' FEL, SEC 21, T32N, R11W			County or Parish, State SAN JUAN, NEW MEXICO		
CHECK APPROPRIATE	BOX(s) TO INDICATE NATURE OF NOTICE	REPORT, OR	OTHER DATA		
TYPE OF SUBMISSION	TY	PE OF ACTIO	N		
☑ Notice of Intent	☐ Abandonment ☑ Recompletion		☐ Change of Plans ☐ New Construction		
☐ Subsequent Report	☐ Plugging Back ☐ Casing Repair	□ Non-Routine Fracturing□ Water Shut-Off			
☐ Final Abandonment	☐ Altering Casing ☐ Other		☐ Conversion to Injection ☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)		
	SUBMIT IN TE Type of Well Oil Well SGas Well Name of Operator NORTHWEST PIPELINE CORPORATION Address and Telephone No. PO BOX 58900 MS 2M3, SALT LAKE CITY Location of Well (Footage, Sec., T., R., M., or 990' FNL & 990' FEL, SEC 21, T32N, R11W CHECK APPROPRIATE TYPE OF SUBMISSION Notice of Intent Subsequent Report	SUBMIT IN TRIPLICATE Type of Well Oil Well Gas Well Other Name of Operator NORTHWEST PIPELINE CORPORATION Address and Telephone No. PO BOX 58900 MS 2M3, SALT LAKE CITY, UTAH 84158-0900 (801) 584-6879 Location of Well (Footage, Sec., T., R., M., or Survey Description) 990' FNL & 990' FEL, SEC 21, T32N, R11W CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, TYPE OF SUBMISSION TY Notice of Intent Recompletion Subsequent Report Plugging Back Casing Repair Final Abandonment Altering Casing	SUBMIT IN TRIPLICATE Type of Well Oil Well Gas Well Other Name of Operator NORTHWEST PIPELINE CORPORATION Address and Telephone No. PO BOX 58900 MS 2M3, SALT LAKE CITY, UTAH 84158-0900 (801) 584-6879 Location of Well (Footage, Sec., T., R., M., or Survey Description) 990' FNL & 990' FEL, SEC 21, T32N, R11W CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR TYPE OF SUBMISSION TYPE OF ACTIO Notice of Intent Subsequent Report Plugging Back Casing Repair Final Abandonment Altering Casing		

Estimated start date of work March 20, 1995.

It is proposed to recomplete additional pay in the Mesaverde formation.

See attached procedure.



14.	I hereby certify that the foregoing is true and correct					
	Signed STERG KATIRGIS		Title SR. ENGINEER		Date March 3, 1995	
	(This space for Federal or State office use)					
	Approved by Conditions of approval, if any:	Title	· - /m · · · ·	Date		

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECOMPLETION PROCEDURE Cox Canyon Unit #4

PURPOSE: To perforate and fracture stimulate the upper Cliff House member of the Mesaverde formation.

- 1. Notify BLM 24 hours prior to work.
- 2. Set frac tanks, blow tank and dig pit. Install rig anchors as needed. Move and set compressor.
- 3. MIRUSU.
- 4. Kill tubing with water only if necessary. ND wellhead and NU BOP. Repair tubing head as needed. Install seals and injection ports if needed.
- 5. RIH to bottom perf with tubing and tag fill if any. TOH with 2-3/8" tubing and visually inspect. Replace any bad joints.
- 6. On wireline set drillable BP at 5050'.
- 7. Pressure test casing and BP to 1600 psi. Slowly increase pressure to 2000 psi and hold for 30 minutes. Repair if necessary.
- 8. On wireline run CBL-CCL across upper Cliff House from BP to 4700'. Squeeze as necessary. Review log and procedure with engineering.
- 9. On wireline run neutron log (Blue Jet GSL through PND-S software) from BP to 4700'.
- 10. Spot 500 gals 7-1/2% HCl acid across interval to be perforated, from 5020'-4770'.
- 11. Perforations and stimulation will be based on neutron log above.

Plan to stimulate the upper Cliff House limited entry, .38" diameter holes, with 80,000 lbs 20/40 sand in slick water.

Rates during frac job will depend on number of perforations and will be designed for 2 BPM/Perforation or approximately 50 BPM and 2000 psi max treating pressure.

- 6 tanks on location per frac job.
- 12. Establish an injection rate and shut down for ISIP.
- 13. Breakdown and balloff perforations with 1200 gals 15% HCl acid and 50% excess RCN ball sealers. Do not exceed 2000 psi.
- 14. RIH with wireline junk basket and retrieve or knock off balls.

- 15. Fracture stimulate well. Flush to top perforation. DO NOT OVERFLUSH. Shut in and record ISDP and 15 minute ISDP.
- 16. Shut well in for 1 hour. TIH w/ tubing, and notched collar and cleanout sand to BP w/ gas. Obtain pitot tube gauge when possible. TOH. TIH with 2-3/8" tubing and 4-1/4" mill (or retrieving head and retrieve RBP), drill up BP and push to PBTD. Obtain pitot tube gauge when clean.
- 17. TOH when well has cleaned up.
- 18. TIH w/ 2-3/8", J-55, 4.7#, 8rd, EUE tubing w/ notched collar on bottom and SN 1 joint up. Clean out to PBTD'. Land tubing at ±5707'. Pump out plug if used and reverse circulate well clean. Obtain pitot tube gauge.
- 19. ND BOP and NU wellhead. Shut well in for buildup.
- 20. Cleanup location and release rig. Fill in pit.
- 21. Return well to production.

Stergie Katirgis Sr. Engineer

WELLBORE DIAGRAM COX CANYON #4 NE/4 NE/4 SEC 21, 32N, 11W San Juan County, NM



990'FNL & 990'FEL 21 32N 11W San Juan County, NM Elevation: 6535' GL

9-5/8" H-40, 8RD @203'

Cmt w/ 125 sx TOC • surface (circ) 12-1/4" hole

Ojo Alamo 2153 Kirtland 2778 Fruitland 3260 Pictured Cliffs 3442 Lewis 5060 Cliff House Trans. 4770 Cliff House 5064 Menefee 5162 Point Lookout 5512

7° 20#, J-55 @ 3460' Cmt W/ 200 sx TOC • 2282' (calc) 8-3/4' hole

186 jts 2-3/8", 4.7#, J-55, 8rd, EUE 5697' set @ 5707' 3' perferd nipple on botm

top per 5072'

Mesaverde

bottom perf 5716

PBTD=5717'

5° 11.5#, J-55, 8rd, € 5719'

Cmt w/ 150 sx TOC • 3988' (calc)

6-1/4° hole

DATA SHEET

WELLNAME: Cox Canyon Unit #4 FIELD: Blanco Mesaverde

LOCATION: NE/4 NE/4 SEC. 21, T32N, R11W ELEVATION: 6535' GR KB: 12'

COUNTY: San Juan State: NM TD: 5719' KB

FORMATION TOPS: Ojo Alamo 2153' Cliff House Trans. 4770'

Kirtland 2778' Cliff House 5064'
Fruitland 3260' Menefee 5162'
Pictured Cliffs 3442' Point Lookout 5512'

Lewis 5060'

I.D.DATE: 10-28-56

CASING RECORD:

WT. & GRADE DEPTH SET CEMENT TOC CASING SIZE surface 125 SX **SURFACE** 9-5/8" 32.3# H-40 203' 2282'(calc) 200 SX 20# J-55 3460' INTERMEDIATE 7* 3988'(calc) 5719" 150 SX 5" 11.5# J-55 **PRODUCTION**

WELLHEAD EQUIPMENT: Casinghead: 10" 600 OCT C-20 Tubinghead: 10" 600 x 6" 600 OCT T-16

Spool: 10" 600 x 10" 600 OCT C-20 Bonnet:

TUBING EQUIPMENT: 186 JTS. (5697') 2-3/8" 4.7# J-55 EUE W/ 3' perfed nipple on bottom.

Landed @ 5707' KB.

LOGGING RECORD: GR, Radioactivity

STIMULATION: 5642'-5716' Frac w/ 50,400 gals water

5516'-5612' Frac w/ 46,200 gals water 5202'-5480' Frac w/ 54,000 gals water 5104'-5072' frac w/ 50,400 gals water

PRODUCTION HISTORY: Cumulative production: 5374 MMCF Current production: 230 MCFD