In Lieu of
Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT--" for such proposals

SUBMIT IN TRIPLICATE

1.	Type of Well ☐ Oil Well ☒ Gas Well ☐ Other	5.	Lease Designation and Serial No. NM 03189
		6.	If Indian, Allottee or Tribe Name
		7.	If Unit or CA, Agreement Designation
		8.	Well Name and No. COX CANYON UNIT #3
2.	Name of Operator NORTHWEST PIPELINE CORPORATION	9.	API Well No. 30-045-11495
3.	Address and Telephone No. PO BOX 58900 MS 2M3, SALT LAKE CITY, UTAH 84158-0900 (801) 584-68795	10.	Field and Pool, or Exploratory Area BLANCO MESAVERDE
4.	Location of Well (Footage, Sec., T., R., M., or Survey Description) 1650' FSL & 990' FWL, SEC 9, T32N, R11W	11.	County or Parish, State SAN JUAN, NEW MEXICO

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☒ Recompletion	☐ New Construction
☐ Final Abandonment	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Estimated start date of work March 13, 1995.

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

See attached procedure.

RECEIVED
MAR - 6 1995
OIL CON. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct

Signed STERG KATIRGIS Title SR. ENGINEER Date February 13, 1995

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

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.

APPROVED
FEB 22 1995
DISTRICT MANAGER

*See Instruction on Reverse Side

NMOCD

2-13-95

WILLIAMS PRODUCTION COMPANY
RECOMPLETION PROGNOSIS
COX CANYON UNIT #3

Purpose: To recomplete uphole in the Cliff House and Menefee intervals of this Mesaverde producer.

Notify the BLM 24 hours prior work. Check and repair rig anchors. Install drill gas unit and compressor.

1. Spot and fill 8 - 400 bbl tanks with 1% KCl water. Filter water to 25 microns.

2. MIRUSU. Nipple up BOP, stripping head, blooie line, working valves and 2" relief line. Test BOP.

3. RIH with tubing and tag any fill. TOH.

4. TIH w/ 4-3/4" bit on 2-3/8" tubing and clean out to PBTD @ 5650'. TOH.

5. Set drillable BP at 5455'. Load hole with 1% KCl water.

6. Pressure test BP and casing seperately to 1500 psi. Then slowly increase to 2000 psi and hold for 15 minutes.Then slowly increase to 2500 psi and hold for 15 minutes.

7. On wireline run CBL and GR/CCL in 5-1/2" casing from BP-4600' and cased hole neutron (BLue Jet GSL or PND-S if available) from BP'-4700'.

*** The following perf depths, number of perfs and frac sizes are estimates based on Lane Wells open hole Radioactivity Log of 12-1-55. Actual numbers will be based on cased hole logs and engineering review.**

8. TIH w/ 2-3/8" tubing and spot 500 gals 7-1/2% HCl acid across Menefee. Estimated depth of perforations from 5416'-5198'. Acid to contain 1 gal/1000 gals surfactant, iron control and corrosion inhibitor (24 hr inhibition at 150°F). TOH.

9. Correlate to Lane Wells log of 12-1-55 and above cased hole neutron log perforate the Menefee formation in 5-1/2" casing w/ 20 - 0.32" holes using a 3-1/8" select fire casing gun from top down at the following depths; 5198, 5200, 5216, 5224, 5244, 5263, 5267, 5271, 5286, 5314, 5316, 5341, 5347, 5364, 5369, 5371, 5410, 5413, 5416, 5435.

10. Breakdown and attempt to balloff the Point Lookout down casing w/ 1000 gals 15% HCl acid and 30 - 7/8" neutral buoyancy RCN perf balls.
Maximum pressure = 2500 psi.
Acid to contain 1 gal/1000 gals surfactant, iron control and inhibitor (24 hour inhibition at 150°F).

11. RIH w/ wireline junk basket and recover frac balls.

12. Rig up pump trucks and fracture stimulate the Menefee formation with 80,000# 20/40 Brady sand at 40 BPM injection rate down casing as follows. DO NOT OVER FLUSH.

STAGE	FLUID (gals)	SAND (lbs)
Pad	20,000 gals	-
0.5 ppg	20,000 gals	10,000# sand
1.0 ppg	20,000 gals	20,000# sand
1.5 ppg	20,000 gals	30,000# sand
2.0 ppg	10,000 gals	20,000# sand
Flush	(5,327 gals)	-
	95,327 gals	80,000 # 20/40 Brady sd

Required amount of usable water = 2,270 bbls (95,327 gals), 7-400 bbl tanks. Maximum injection rate = 40 BPM. Maximum STP =2500 psi.

All frac fluid to contain 0.5 gal/1000 gals FR-30 friction reducer and 1 gal/1000 gals surfactant (Aquaflow).

13. On wireline set retrievable bridge plug at 5185'. Drop sand on top of RBP. Pessure test BP and casing to 2000 psi then to 2500 psi.

14. TIH w/ 2-3/8" tubing to 5168' and spot 600 gals 7-1/2% HCl acid across Cliff House perforations at 4773'-5166'). Acid to contain 1 gal/1000 gals surfactant, iron control, and corrosion inhibitor (24 hr inhibition at 150°F). TOH.

15. Using Lane Wells logs of 12-1-55 and cased hole neutron logs to correlate, perforate the Cliff House formation in 5-1/2" casing w/ 27 - 0.32" holes using a 3-1/8" select fire casing gun from top down at the following depths; 4773, 4776, 4800, 4882, 4894, 4928, 4960, 4992, 4996, 5014, 5080, 5085, 5090, 5095, 5100, 5105, 5116, 5121, 5126, 5131, 5136, 5141, 5146, 5151, 5156, 5161, 5166.

16. Breakdown and attempt to balloff the Cliff House down casing w/ 1300 gals 15% HCl acid and 41 - 7/8" neutral buoyancy RCN perf balls.
Maximum pressure = 2500 psi.
Acid to contain 1 gal/1000 gals surfactant, iron control and inhibitor (24 hour inhibition at 150°F).

17. RIH w/ wireline junk basket and recover frac balls.

18. Rig up pump trucks and fracture stimulate the Cliff House formation with 100,000# 20/40 Brady sand at 54 BPM injection rate down casing as follows. DO NOT OVERFLUSH.

STAGE	FLUID (gals)	SAND (lbs)
Pad	25,000 gals	-
0.5 ppg	20,000 gals	10,000# sand
1.0 ppg	20,000 gals	20,000# sand
1.5 ppg	26,666 gals	40,000# sand
2.0 ppg	15,000 gals	30,000# sand
Flush	(4,892 gals)	-
	111,558 gals	100,000 # 20/40 Brady sd

Required amount of usable water = 2,656 bbls (111,558 gals), 8-400 bbl tanks. Maximum injection rate = 54 BPM. Maximum STP =2500 psi. MIR = 54 BPM.

All frac fluid to contain 0.5 gal/1000 gals FR-30 friction reducer and

1 gal/1000 gals surfactant (Aquaflow).

SI well for 15 minute ISDP.

19. TIH w/ tubing, and notched collar and cleanout sand to RBP w/ gas. Obtain pitot tube gauge when clean. TOH. TIH with 2-3/8" tubing and retrieving head and retrieve RBP. TIH w/ tubing and mill. Clean out sand to lower BP. Obtain pitot tube gauge when clean. Drill out BP and push to PBTD. Obtain pitot tube gauge when possible.

20. 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 ±5616'. Pump out plug if used and reverse circulate clean. Obtain pitot tube gauge.

21. ND BOP and NU wellhead. Shut well in for buildup.

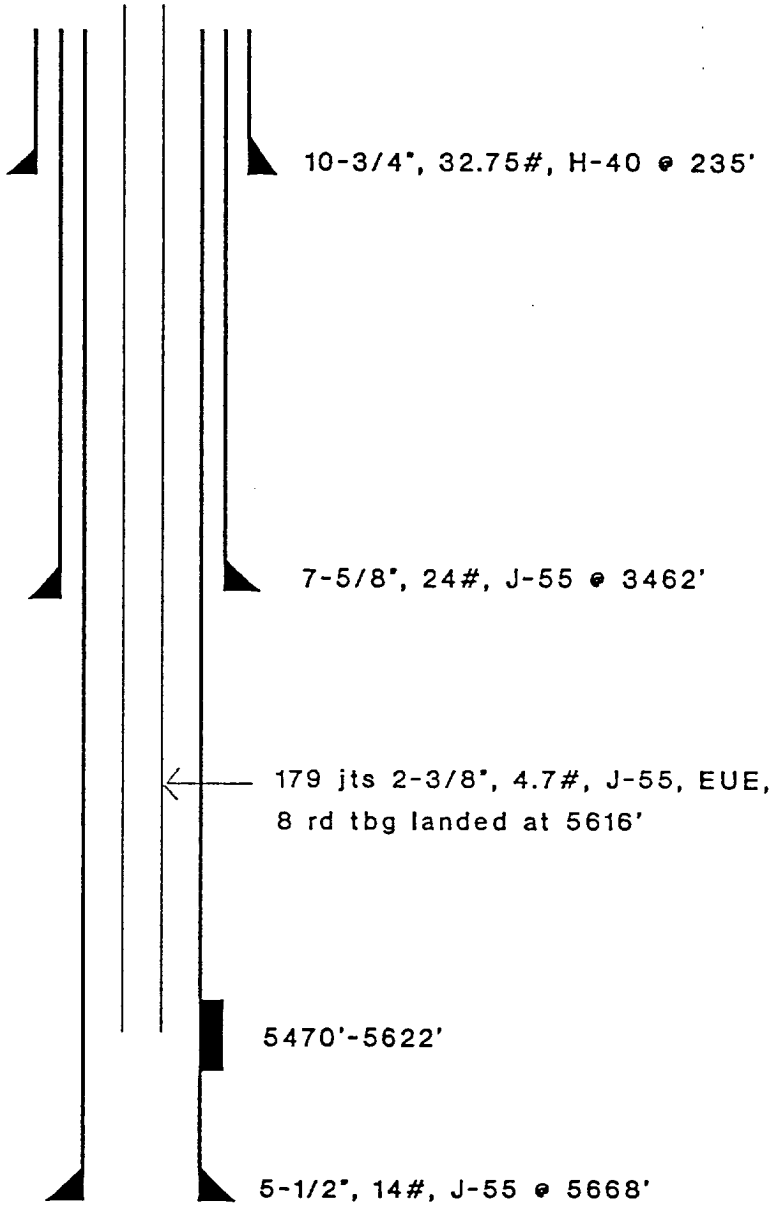
22. Clean up location and release rig.

Stergie Katirgis
Sr. Engineer

WELLBORE DIAGRAM
COX CANYON UNIT #3

1650'FSL & 990'FWL
9 32N 11W
San Juan County, NM
Elevation: 6548' GR

Ojo Alamo	2167?
Kirtland	2780
Fruitland	2780
Pictured Cliffs	3415
Lewis	5077
Cliff House Trans.	4770
Cliff House	5400
Menefee	5481
Point Lookout	5852



PBTD=5650'

PERTINENT DATA SHEET

ELLNAME: Cox Canyon Unit #3 FIELD: Ignacio Blanco MV

)CATION: 1650'FSL,990'FWL,Section 9,T32N,R11W ELEVATION: 6548' GR, TD: 5668'
11'KB PBTD: 5650'?

)UNTY: San Juan STATE: New Mexico

ITE COMPLETED: 12-11-55 ID DATE: 10-28-56

CASING TYPE	CASING SIZE	HOLE SIZE	WEIGHT & GRADE	DEPTH	CEMENT	TOP
urface	10-3/4"	15"	32.75#,H-40	235'	180 sx	
ntermediate	7-5/8"	9-7/8"	24#,J-55	3462'	300 sx	
roduction	5-1/2"	6-3/4"	14#,J-55	5668'	200 sx	

IBING EQUIPMENT
179 jts 2-3/8" 4.7#, 8rd, J-55 landed @ 5616'. Perfed nipple & Otis closing tool on bottom.

ELLHEAD: Casing Head - 10" 600 National Spool - 10" 600 x 10" 600 National
Tubing Head - 10" 600 x 6" 600 National Bonnet- 6" 600 National

)RMATION TOPS:

Ojo Alamo	2167'?	Cliff House	5170'
Kirtland	2780'	Menefee	5504'
Fruitland	2780'	Point Lookout	5668'
Pictured Cliffs	3415'		
Lewis	5077'		

)GGING RECORD: GR-Neutron

:RFORATIONS: MV: 5470' - 5542', 5564'-5622'

'IMULATION: MV: Lower zone: Frac w/ 40,000# sd in 40,000 gal water. BD @ 1000#. AIP=1000#. AIR=59 BPM.
Upper zone: Frac w/ 30,000# sd in 40,000 gal water. BD @ 750#. AIP=750#. AIR=54 BPM.

RODUCTION HISTORY:

	IP Test	CAOF	Remaining Reserves	Cumulative	Current Prod.
MV:	5704 MCFD	10998 MCFD	1341 MMCF	2332 MMCF	375 MCFD