In Lieu of Form 3160-5 (June 1990)

UNITED STATES **DEPA** BUREA

FORM APPROVED
Budget Bureau No. 1004-013:
Expires: March 31 1993

SAN JUAN, NEW MEXICO

RTMENT OF THE INTERIOR LU OF LAND MANAGEMENT		Budget Bureau No. 1004-0135 Expires: March 31, 1993	
	5.	Lease Designation and Serial No.	

SUNDRY NOTICES AND REPORTS ON WELLS 14080014704 NM-010910 Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use If Indian, Allottee or Tribe Name "APPLICATION FOR PERMIT--" for such proposals 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE Well Name and No. 8. Type of Well ١. **NEW MEXICO 32-11 #2** ☐ Other **☒** Gas Well □ Oil Well 9. API Well No. Name of Operator 30-045-11380 NORTHWEST PIPELINE CORPORATION Field and Pool, or Exploratory Area 10. 3. Address and Telephone No. IGNACIO BLANCO MESAVERDE PO BOX 58900 MS 2M3, SALT LAKE CITY, UTAH 84158-0900 (801) 584-68795 County or Parish, State 11. Location of Well (Footage, Sec., T., R., M., or Survey Description)

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

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ 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 completio	
		on Well Completion or Recompletion Repo and Log form.)	

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. 13. 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 25, 1994

790' FNL & 990' FEL, SEC 19, T32N, R11W

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

See attached procedure.

DECETVED)
N MAR 2 0 1995

OIL COM. DIV.

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 Title Conditions of approval, if any:	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. PROVED

*See Instruction on Reverse Side

RECOMPLETION PROCEDURE N.M. 32-11 COM #2

PURPOSE: To recomplete the upper Cliff House member of the Mesaverde formation.

- 1. Notify BLM 24 hours prior to work.
- 2. Set 8 frac tanks, blow tank and dig circulation pit. Install rig anchors as needed. Set up drill gas and compressor.
- 3. MIRUSU.
- 4. Blow down well. Kill tubing with 2% KCl water only if necessary. ND wellhead and NU BOP.
 Order out 2-3/8" tubing string (5680').
- 5. Repair wellhead as necessary.
- 6. TOH with 1-1/4" tubing laying down. Visually inspect and replace any bad joints.
- 7. TIH with retrievable BP on 2-3/8" tubing and set BP at 4995'. Drop 10' sand on top of BP. Pressure test BP and casing to 2000 psi. TOH. TOH.
- 8. On wireline run CBL-CCL across upper Cliff House from BP to 4700'. Review log with engineering. Squeeze with cement if necessary.
- 9. On wireline run cased hole neutron log, Blue Jet GSL log (run through PND-S software) from BP to 4700'. Review logs with engineering and pick perfs.
- 10. Spot 300 gals 7-1/2% HCl acid across interval to be perforated from 4930'-4780'. Acid to contain 1 gal/100 gals surfactant and corrosion inhibitor (12 hour inhibition @ 130° F)
- 11. The following perf and stimulation schedule is based on Welex Radioactivity log of 4-19-58. Number of holes and depths may change after running cased hole logs above.
 - *Plan to stimulate the upper Cliff House in 1 stage limited entry, w/ 80,000# 20/40 sand in slick water down 5-1/2" casing. Filter frac water down to 25 microns and add 1% KCl.
 - *Rates during frac job will depend on number of perforations and will be designed for 2 BPM/Perforation and 2000 psi max treating pressure.
- 12. Perforate the upper Cliff House formation in 5" casing w/ 18 0.38" holes using a 3-1/8" select fire casing gun from top down at the following depths; 4781, 4785, 4816, 4817, 4826, 4829, 4835, 4849, 4864, 4869, 4876, 4880, 4893, 4897, 4909, 4920, 4922, 4929.
- 13. Establish an injection rate and shut down for ISIP.

- 14. Breakdown and balloff perforations with 900 gals 15% HCl acid and 50% excess RCN ball sealers. Do not exceed 2000 psi STP.

 Acid to contain 1 gal/1000 gals surfactant and corrosion inhibitor (12 hour inhibition @ 130° F).
- 15. RIH with wireline junk basket and retrieve or knock off balls.
- 16. Rig up pump trucks and fracture stimulate the upper Cliff House with 80,000# 20/40 Brady sand at 36 BPM injection rate down 5-1/2" casing as follows. DO NOT OVERFLUSH. Shut in and record 15 minute ISDP. MIP=2000 psi and MIR=36 BPM.

<u>STAGE</u>	<u>FLUID</u>	<u>SAND</u>
Pad	20,000 gals	-
0.5 ppg	20,000 gals	10,000#
1.0 ppg	30,000 gals	30,000#
1.5 ppg	20,000 gais	30,000#
2.0 ppg	5,000 gals	10,000#
Flush	4,770 gals	-
	99,770 gals	80,000# 20/40 Brady sd

Required amount of usable water = 99,770 gals (2375 bbls), 7-400 bbl tanks plus breakdown

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

- 17. 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 retrieving head. Retrieve BP and TOH.
- 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 minimum 5700'. Land tubing at ±5680'. Pump out plug if used and reverse circulate 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. Notify Production and get well back on production ASAP.

Stergie Katirgis Sr. Engineer

DATA SHEET

WELLNAME: N.M. 32-11 Com #2 FIELD: Blanco Mesaverde

LOCATION: NE/4 NE/4 SEC. 19, T32N, R11W **ELEVATION:** 6610 GR KB: 10'

COUNTY: San Juan State: NM TD: 5720' KB

FORMATION TOPS: Ojo Alamo Cliff House Trans. 4780'

Kirtland 1993' Cliff House 5014' Fruitland 3164'? Menefee 5118' Pictured Cliffs 3370' Point Lookout 5520'

Lewis 3580'

<u>I.D.DATE</u>: 7-58

CASING RECORD:

<u>CASING</u>	SIZE	WT. & GRADE	DEPTH SET	CEMENT	TOC
SURFACE	10-3/4"	32.75# H-40	257'	300 SX	surface
PRODUCTION	7-5/8"	26.4# J-55	3505'	200 SX	
LINER	5-1/2"	15.5# J-55	5720	200 SX	3940'(TS)

WELLHEAD EQUIPMENT: Casinghead: 10" 600 Shaffer Tubinghead: 10" 600 x 6" 600 Schaffer

Bonnet: 6" 600 Schaffer

TUBING EQUIPMENT: 175 JTS. 1-1/4" 2.3# J-55 10rd NUE & 5 JTS 1-1/4" EUE on top. 2' perfed nipple on bottom.

Landed @ 5676' KB.

LOGGING RECORD: GR, Radioactivity

STIMULATION: 5682'-5016' frac w/ 149,000 gals water and 240 balls

PRODUCTION HISTORY: Cumulative production: 2810 MMCF Current production: 125 MCFD

WELLBORE DIAGRAM NEW MEXICO 32-11 COM #2

NE/4NE/4 19-32N-11W San Juan County, NM

Elevatiom	ı 6610'	13/3/4	4° 32.75°, H-40 ⊕ 257 4° Hole •/ 300 sx
Ojo Alamo	4000	TOL @ 34	20'
Kirtland	1993	H H - 5.00	
Fruitland	3164		" 26.4#, J-55 @ 3505' " Hole
Pictured Cliffs	3370		v. 200 sx
Lewis	3580		
CH Trans.	4780	175 jts	1-1/4", 2.3#, 10rd, NUE
Cliff House	5014	on top.	1-1/4° 2.4# 10rd EUE 2° perf nipple on bottom
Menefee	5118	Landed	₱ 5676'.
Point Lookout	5520	5016' to	p perf
		Mes	averde
		5682' bo	ottom perf
		5-1/2	2° 15.5#, J-55 @ 5720'

PBTD-5715'

6-3/4" Hole

Cmt w. 200 sx

TOC ♥ 3940 (temp survey)