Form 3160-4
(November 1983)
(formerly 9-330)

039-24213

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

RECEIVED
BLM MAIL ROOM
89 MAR 21 PM 1:33
FARMINGTON RESOURCE AREA
FARMINGTON, NEW MEXICO

RECEIVED
APR 03 1989
OIL CON. DIV
DIST. 3

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: Blackwood & Nichols Co., Ltd.

3. ADDRESS OF OPERATOR: P. O. Box 1237, Durango, CO 81302-1237

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements.*)
At surface: 1690' F/NL, 1190' F/EL
At top prod. interval reported below: Same
At total depth: Same

5. LEASE DESIGNATION AND SERIAL NO.: SF 079043

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: NEBU Agreement No. I, Sec. 929

8. FARM OR LEASE NAME: Northeast Blanco Unit

9. WELL NO.: 403

10. FIELD AND POOL, OR WILDCAT: Basin Fruitland Coal

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. H-9-T30N-R7W

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
30-039-24213	--	Rio Arriba	New Mexico

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
7-15-88	7-26-88	10-29-88	6307' GL, 6318' DF, 6319' KB	6307'

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
3500' TD	3447' PBTD	--	→	TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 2974' - 3186' Fruitland

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Induction, Neutron, Density, Sonic, Microscan GR, CBL, CCL, VBC, GGR, Coal Log, Tracer Scan

27. WAS WELL CORED: Yes

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36.0# K-55	536'	12 1/4"	325 cf Class B	Circ. surface
7"	23# N-80	3496'	8 3/4"	273 cf 50/50 Poz	
	(2nd stage	- DV tool @2698')		795 cf Class G 65-35 Poz	Circ. surface

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
None				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.875	3247'	

31. PERFORATION RECORD (*Interval, size and number*)
3159' to 3186', 4 bullets per foot
3077' - 3083', 3018' - 3058', 2992' - 2996'
2974' - 2978', 4 SPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3159 - 3186	65 M gal. 30# X Link Borate gel 19M# 40/70 sand, 180 M# 12/20 sand
2974 - 3083 OA	99 M gal. 30# X Link Borate gel 23M# 40/70 sand, 260 M # 12/20 sand

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
Not Connected		Shut In

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): Well to be tested when pipeline connection becomes possible.

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED William F. Clark TITLE Operations Manager DATE March 10, 1989
William F. Clark

NMOCC

*(See Instructions and Spaces for Additional Data on Reverse Side)

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

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Ojo Alamo	2129'	2292'	ss, water
Kirtland	2292'	2827'	SH, SLTS
Fruitland	2827'	3130'	SH, Coal,SLTS, Water, Hydrocarbon
Pictured Cliff Tounge	3130'	3160'	SS, SH, SLTS, Water, Poss. H-C
L. Fruitland	3160'	3192'	Sh, Coal, slts, Water, Hydrocarbon
Pictured Cliff	3192'	3440'	SS, SH, SLTS, Water, Poss. H-C
Lewis	3440'	TD	SH
DST #1	2969'	3065'	Set pkr. with 2400 psi Nitrogen IF 30", ISI 60" fill d.p. with water injection test well over 180" FF Total ins. 72 BW, 180" FSI, IH 1768 psi, IFP 1635-28, ISIP 1628, FFP was injection, FSIP 1635, FH 1761
DST #2	3130'	3154'	1 HM 1875 psi, IF 10", 151 30", FF 60", FSI 180", IFP 79 psi, ISIP 416 psi, FFP 78 psi, FSIP 1262 psi, FHM 1867. Rec. 45' mud, smpl chamber 100 cc gas, 2000 cc mud.
DST #3	3154'	3175'	DP full water, injection test. Inj. rt. 0.4 BPM @1030 psi. No BDP inj. 31 B.W. in 70 min., surf. press. Incr 1030 to 1140 then stab. BH inj. press. initial 2410, final 2513. Shut in for 2 hr. Leak off test, initial 2491, Final 1773. IHP 1870. FHP 1836 psi.
DST #4	3201'	3217'	1 HP 1946 psi, IF 10", ISI 30", FF 60", FSI 180". FHP 1898 psi. IFP 60 psi; ISIP 673, FFP 53 psi. Had gas to surface on FF period, 1/4" ck FARO 31 MCFD to 24 MCFD. Final at 60". Rec. 30' GCM in DP. Smpl. chmbr. had 1200 cc mud, 900 cc gas RW 2.0 @65°F, pit sample 2.0 @65°F.
Core No. 1	3024'	3038'	
Core No. 2	3038'	3065'	
Core No. 3	3065'	3125'	Shale, Sandstone, Total 4' Random thin coal lams.
Core No. 4	3125'	3154'	3125-3132 - shale, very carbonaceous; 3132 to 3154 - sandstone
Core No. 5	3154'	3175'	3154-3168 - sandstone 3168-3163 - coal and carbonaceous shale 3163-3165 - shale, very black carbonaceous with minor coal stringers 3165-3166 - coal and shale 3166-3175 - lost, assumed to be coal

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Ojo Alamo	2129'	NA
Kirtland	2292'	NA
Fruitland	2827'	NA
Pictured Cliffs	3192'	NA
Lewis	3440'	NA

continued on next page

Core No. 6	3175'	3180'	Shale
Core No. 7	3180'	3191'	All Coal
Core No. 8	3191'	3217'	Shale with 3198 to 3217 sandstone