

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

FORM APPROVED  
 Budget Bureau No. 1004-0135  
 Expires: September 30, 1990

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill, 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   
 2. Name of Operator: **Blackwood & Nichols Co., A Limited Partnership**  
 3. Address of Operator: **P.O. Box 1237, Durango, CO 81302-1237**  
 4. Location of Well: (Footage, Sec., T., R., M., or Survey Description)

1123' FNL, 790' FEL - Section 23, T31N, R7W

5. Lease Designation & Serial #: **SF-079010**  
 6. If Indian, Allottee/Tribe Name: **30**  
 7. If Unit or CA, Agmt. Design.: **Northeast Blanco Unit**  
 8. Well Name and No.: **W.E.S.U.# 444**  
 9. API Well No.: **30-045-27720**  
 10. Field & Pool/Expltry Area: **Basin Fruitland Coal**  
 11. County or Parish, State: **San Juan, New Mexico**

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Al...ing Casing
	<input checked="" type="checkbox"/> OIL : COMPLETION
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection

(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.)\*

See Addendum for a full description of the open hole "stress relieve" type coal completion.

**RECEIVED**  
 JAN 4 1991  
 OIL CON. DIV.  
 DIST. 3

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

Signed: R. W. Williams ROY W. WILLIAMS Title: ADMINISTRATIVE MANAGER Date: 11/28/90

(This space for Federal or State office use)

Approved By \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
 Conditions of approval, if any: \_\_\_\_\_

**ACCEPTED FOR RECORD**

JAN 04 1991

INMOOD

FARMINGTON RESOURCE AREA

BY \_\_\_\_\_

Completion Report

Northeast Blanco Unit No. 444 - Basin Fruitland Coal

LOCATION: 1123' FNL, 790' FEL  
Section 23, T31N, R7W  
San Juan County, New Mexico

10-29-90 7" casing at 3150'.

Rigging up swivel.

Move in and rig up Aztec Well Service Rig No. 56.

Nipple up BOPs, pressure test casing and blind rams to 2000 psi - held OK.

Strap drill collars and drill pipe. Pick up 6-1/4" Smith Tool Co. FDTL (jets: 20-20-open) SN# KP-5105, bit sub, float sub, one 4-3/4" drill pipe, N nipple (1.875" ID), ten 4-3/4" drill collars, F nipple (2.25" ID). OAL = 367.56'. TIH, tag cement at 3083'. Pick up swivel.

10-30-90 7" casing at 3150'; open hole 3150-3524'.

Circulating and working pipe at TD with 5 BPM water.

Rig up swivel, install stripping rubber, break circulation. Pressure test pipe rams, HCR valves, manifold and casing valves to 2000 psi - held OK.

Drill cement and float at 3109', shoe at 3150'.

Drill Fruitland coal 3150-3524' with 10,000# WOB, and 80 RPM @ 500 psi.

Coal Intervals:	3200-3202'	2'
	3222-3223'	1'
	3237-3239'	2'
	3240-3244'	4'
	3259-3262'	3'
	3263-3268'	5'
	3269-3271'	2'
	3318-3321'	3'
	3322-3323'	1'
	3326-3327'	1'
	3328-3332'	4'
	3334-3342'	8'
	3370-3377'	7'
	Total	43'

(Cont'd)

10-30-90	Top P.C. Tongue	-	3391'
	Top Main P.C.	-	3520'
	Total Depth	-	3524'

Have 5' flare through one blooie line.

Circulate and work pipe at TD with 5 BPM water. Returns light 1/8" and less coal (95%) with light floating coal dust in clear water.

10-31-90 7" casing at 3150'; open hole 3150-3524'.

Circulating and working pipe at TD with 1 MM air and 1 BPM water.

Circulate and work pipe at TD with 5 BPM water. Returns light 1/16" coal (90%), shale and siltstone in clear water.

Circulate and work pipe at TD with 5 BPM water, reducing 1/2 BPM every hour to 1-1/2 BPM water. Returns light to very light 1/8" and less coal (90%), shale and siltstone in clear water.

Circulate and work pipe at TD with 1 MM air and 4 BPM reducing to 1 BPM water. Returns moderate to light 1/8" and less coal (95%) in gray to clear water.

Have 8-10' flare from 2 blooie lines.

11-01-90 7" casing at 3150'; open hole 3150-3524'.

Circulating and working pipe at TD with 4 MM air and 1/2 BPM water with 5 Bbl water sweeps hourly.

Circulate and work pipe at TD with 2 MM air and 3 BPM water, reducing 1/2 BPM each hour. Returns moderate to light 1/4" and smaller coal (98%) in gray water.

Circulate and work pipe at TD with 3 MM air and 1/2 BPM water with 5 Bbl water sweeps every half hour. Returns moderate 1/2" and less coal (98%) and moderate floating coal fines in black water.

Pull 10 jts drill pipe to pitot test and shut in test. Pitot test #1: 1/2 hr - 11 oz., 514 MCFD; 1/2 hr - 7 oz., 404; 3/4 hr - 4-1/2 oz., 331; 1 hr - 1-1/2 oz., 190 MCFD (all gauges dry).

Shut in test #1: 1/2 hr - 80 psi, 1 hr - 125 psi. RIH, hit bridge at 3351'.

(Cont'd)

11-01-90 Circulate and work pipe at TD with 3 MM air and 1/2 BPM water with 5 Bbl water sweeps hourly. Returns light 1/16" coal in clear water.

Circulate and work pipe at TD with 4 MM air and 1/2 BPM water with 5 Bbl water sweeps hourly. Returns light 1/8" coal and powder in gray to clear water.

Estimate water production at 200 BPD.

11-02-90 7" casing at 3150'; open hole 3150-3524'.

Circulating and working pipe at TD with 4 MM air and 1/2 BPM water with 10 Bbl water sweeps hourly.

Circulate and work pipe at TD with 4 MM air and 1/2 BPM water with 5 Bbl water sweeps hourly. Returns light 1/8" and greater coal (98%) in clear water.

Pull 10 jts 3-1/2" drill pipe, pressure wellbore to 1500 psi with air and water. Surge well. TIH, hit bridge at 3345', had 10' fill on bottom.

Circulate and work pipe at TD with 4 MM air and 3 BPM water. Returns heavy 1" coal and floating coal dust in black water.

Circulate and work pipe at TD with 4 MM air and 1/2 BPM water with 5 Bbl water sweeps every 1/2 hour. Returns light 1/8" and less coal (98%) in clear water.

Circulate and work pipe at TD with 4 MM air and 1/2 BPM water with 10 Bbl water sweeps hourly. Returns moderate 1/8" and less coal (98%) in gray to clear water; on sweeps moderate to heavy 1/2" coal with floating coal dust in black water.

11-03-90 7" casing at 3150'; open hole 3150-3524'.

Circulating and working pipe at TD with 4 MM air and 1/2 BPM water.

Circulate and work pipe at TD with 4 MM air and 1/2 BPM water with 10 Bbl water sweeps hourly. Returns light 1/8" and less coal (98%) in gray to clear water; on sweeps returns heavy 1" coal and floating coal dust in black water.

(Cont'd)

- 11-03-90 Pull 10 jts drill pipe to pitot test and shut in test. Pitot test #2: 1/4 hr - 14 psi, 2326 MCFD; 1/2 hr - 10 psi, 1948; 3/4 hr - 9 psi, 1865; 1 hr - 13 psi, 2237 MCFD (all gauges wet).
- Shut in test #2: 1/4 hr - 250 psi; 1/2 hr - 460; 3/4 hr - 600; 1 hr - 675 psi. Bleed down, TIH, bit bridge at 3340-3342', had 10' fill on bottom.
- Circulate and work pipe at TD with 2 MM air and 3 BPM water. Returns heavy 3/4" coal and floating powder in black water.
- Circulate and work pipe at TD with 4 MM air and 1/2 BPM water with 10 Bbl water sweeps hourly. Returns light 1/4" and less coal (98%) in clear water. Hole gets tight, pump 10 Bbl sweep. Returns heavy 1" coal in black water.
- Circulate and work pipe at TD with 4 MM air and 1/2 BPM water. Returns light 1/8" and smaller coal (98%) in clear water. Pumped 10 Bbl sweep due to tight hole, unloaded heavy 1" coal for five minutes.
- Water production  $\approx$  400 BPD.
- 11-04-90 Circulating and working pipe at TD with 4 MM air and 1/2 BPM water with 25 Bbl water sweeps.
- Circulate and work pipe at TD with 4 MM air and 1/2 BPM water. Returns 1/8" and less coal (98%) in clear water.
- Pull 10 jts drill pipe to gauge well through 2" line and run shut in test. Pitot test #3: 1/4 hr - 13 psi, 2237 MCFD; 1/2 and 3/4 hr - 8 psi, 1756; 1 hr - 11 psi, 2039 MCFD (all gauges wet).
- Shut in test #3: 1/4 hr - 175 psi; 1/2 hr - 375; 3/4 hr - 525; 1 hr - 625 psi. Surge well at 1300 psi. TIH, no fill.
- Circulate and work pipe at TD with 4 MM air and 1/2 BPM water with 25 Bbl water sweeps every 2 hours. Returns light 1/8" and less coal (98%) in clear water; on sweeps returns moderate to heavy 3/4" and less in black water. Unloads for 15 minutes after sweep.

11-05-90 Circulating and working pipe at TD with 4 MM air and 1/2 BPM water with 10 Bbl water sweeps hourly.

Circulate and work pipe at TD with 4 MM air and 1/2 BPM water with 10 Bbl water sweeps every 2 hours. Returns very light 1/8" and coal fines in clear water.

Pull 10 jts drill pipe to gauge well through 2" line and run shut in test. Pitot test #4: 1/4 hr - 6.5 psi, 1584 MCFD; 1/2 hr - 8.5 psi, 1808; 3/4 and 1 hr - 8 psi, 1756 MCFD (all gauges wet).

Shut in test #4: 1/4 hr - 120 psi; 1/2 hr - 360; 3/4 hr - 420; 1 hr - 480 psi. Surge well at 1300 psi. TIH, no fill.

Circulate and work pipe at TD with 4 MM air and 3 BPM water. Well unloaded heavy 3/4" and powder coal in black water for  $\approx$  1-1/2 hours after surge.

Circulate and work pipe at TD with 4 MM air and 1/2 BPM water with 10 Bbl water sweeps hourly. Returns light 1/8" and less coal (98%) in clear water; on sweeps returns moderate to light 1/8" and less coal.

Bucket test - 411 BPD water.

11-06-90 7" casing at 3150'; open hole 3150-3524'.

Rig released.

Circulate and work pipe with 4 MM air and 1/2 BPM water with 10 Bbl water sweeps hourly. Returns light 1/8" coal and coal fines in clear water.

Lay down drill pipe and drill collars.

Change pipe rams to 2-7/8", rig up to run tubing, strap and rabbit tubing.

Pick up 2-7/8" tubing, TIH with expendable check and F nipple (2.25" ID) 1 jt off bottom.

Ran 101 jts (3158.22') 2-7/8" 6.5# J-55 EUE 8rd FBNAU tubing, set at 3172.22'; F nipple at 3138.44'. Land tubing, nipple down BOPs, nipple up upper tree.

Drop ball, pump off expendable check. Flow well, rig down. Pitot test 15 minutes - 10 psi, 1948 MCFD.

Release rig at 6:00 a.m., 11-6-90.