

**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)  
  
**2490' FSL - 1140' FWL, Section 7, T31N, R6W**

5. Lease Designation & Serial #: **SF-078988**

6. If Indian, Allottee/Tribe Name

7. If Unit or CA, Agmt. Design.: **Northeast Blanco Unit**

8. Well Name and No.: **N.E.B.U.# 400R**

9. API Well No.: **30-045-28271**

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"/> Altering Casing
	<input checked="" type="checkbox"/> Other: <b>COMPLETION</b>
	<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 14 1991

**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)

**ACCEPTED FOR RECORD**

Approved By \_\_\_\_\_ Title \_\_\_\_\_ Date JAN 04 1991  
 Conditions of approval, if any:

FARMINGTON RESOURCE AREA

BY [Signature]

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

Completion Report

Northeast Blanco Unit No. 400R - Basin Fruitland Coal

LOCATION: 2490' FSL, 1140' FWL  
Section 7, T31N, R6W  
San Juan County, New Mexico

11-12-90 7" casing at 3190'.

WOC. Nipple up. Lay blooie lines and manifolds.

11-13-90 7" casing at 3190'; open hole 3190-3500'.

Drilling Fruitland coal at 3500'.

WOC. Finish nipling up.

Pressure test blind rams, 7" casing, and manifold valves. Repair leaks. Pressure up to 2000 psi for 30 minutes - held OK.

Pick up 6-1/4" Smith Tool Co. bit, FDT SN# KP9770 (jets: 22-22-22), bit sub, string float, one 4-3/4" drill collar, N nipple (1.875" ID), ten 4-3/4" drill collars, 1 jt 3-1/2" drill pipe, F nipple (2.25" ID), safety sub. BHA = 339.16', with drill pipe 370.95'. TIH with 3-1/2" drill pipe.

Pick up power swivel, tag cement at 3137'. Pressure test 3-1/2" pipe rams and HCR valves to 2000 psi for 30 minutes - held OK.

Drill float at 3152', cement and shoe at 3190'.

Drill Fruitland coal 3190-3500' with 10,000# WOB, 80 RPM, and 500 psi. Have 3' flare from 1 blooie line.

11-14-90 7" casing at 3190'; open hole 3190-3564'.

Circulating and working pipe at TD with 1 MM air and 1.5 BPM water. Drill Fruitland coal 3500-3564'.

Coal Intervals:	3207-3208'	1'
	3209-3210'	1'
	3223-3224'	1'
	3252-3254'	2'
	3275-3276'	1'
	3312-3314'	2'
	3318-3322'	4'
	3323-3330'	7'
	3331-3332'	1'
	3334-3344'	10'
	3375-3383'	8'
	3395-3396'	1'
	3443-3445'	2'
	3447-3448'	1'
	3561-3563'	2'
	Total	44'

Top PC Tongue	-	3450'
Top Main P.C.	-	3563'
Total Depth	-	3564'

Circulate and work pipe at TD with 5 BPM water. Returns light 1/8" coal and fines (95%), shale and siltstone in clear water.

Circulate and work pipe at TD with 4.5 BPM water, dropping rate 1/2 BPM every 2 hours. Returns light 1/16" coal and fines (98%), shale and siltstone in clear water.

Circulate and work pipe at TD with 1 MM air and 3 BPM water, dropping rate 1/2 BPM every 2 hours. Returns light 1/8" and less coal (90%), shale and siltstone in clear water.

11-15-90 7" casing at 3190'; open hole 3190-3564'.

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

Circulate and work pipe at TD with 2 MM air and 1-1/2 BPM water. Returns moderate 1/2" and less coal (98%) with heavy hole tight and sticky.

(Cont'd)

11-15-90 Circulate and work pipe at TD with 2 MM air and 3 BPM water, added 1 MM air, started dropping 1/2 BPM water. Returns moderate to light 1/4" and less coal (98%) and floating powder in gray water.

Circulate and work pipe at TD with 4 MM air and 4 BPM water, reducing water rate 1/2 BPM each hour. Returns moderate to light 1/8" and less coal (98%) in gray water.

Estimated 1/2 to 1 MMCFD.

11-16-90 7" casing at 3190'; open hole 3190-3564'.

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 BPM water. Returns light 1/8" coal and fines in clear water.

Pull 10 jts mill pipe. Pitot test #1 through 2": 1/4 hr - 7 psi, 1644 MCFD; 1/2 hr - 5 psi, 1374; 3/4 hr - 5.5 psi, 1457; 1 hr - 9.5 psi, 1917 MCFD (all gauges wet).

Run shut in test #1: 1/4 hr - 300 psi; 1/2 hr - 450; 3/4 hr - 625; 1 hr - 700 psi. Build well pressure to 1300 psi, surge well. TIH to 3437'.

Circulate and work pipe at 3437'. Clean out to 3564' (TD) with 4 MM air and 3 BPM water with 10 Bbl water sweeps every 30 minutes. Returns moderate to heavy 3/4" and less coal (98%), heavy floating coal powder in black water.

Circulate and work pipe at TD with 4 MM air and 3 BPM water with 10 Bbl water sweeps hourly, reducing water rate 1/2 BPM each hour. Returns moderate to heavy 1/4" and less coal (98%) in gray to black water.

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

Water production - 1028 BPD.

11-17-90 7" casing at 3190'; open hole 3190-3564'.

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

(Cont'd)

11-17-90 Circulate and work pipe at TD with 4 MM air and 1/2 BPM water with 10 Bbl water sweeps hourly. Returns 1/16" coal and coal fines in clear water.

Pull 10 jts drill pipe. Gauge well through 2" line: 1/4 hr - 12 psi, 2148 MCFD; 1/2 hr - 16 psi, 2506; 3/4 and 1 hr - 15 psi, 2416 MCFD (all gauges wet).

Run shut in test: 1/4 hr - 320 psi; 1/2 hr - 500; 3/4 hr - 660; 1 hr - 820 psi. Pressure up to 1300 psi with air and water and surge well. TIH, tag at 3445'.

Circulate and clean out 3445-3564' (TD) with 4 MM air and 3 BPM water. Returns moderate 3/4" and 1/2" coal with heavy 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 moderate to light 1/16" coal (98%) in gray to clear water.

11-18-90 7" casing at 3190'; open hole 3190-3564'.

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 hourly. Returns light 1/16" (98%) coal and coal fines in clear water.

Pull 10 jts drill pipe. Gauge well through 2" line: 0 min. - 25 psi, 3311 MCFD; 1/4 hr - 21 psi, 2953; 1/2 hr - 19 psi, 2774; 3/4 and 1 hr - 18 psi, 2684 MCFD (all gauges wet).

Run shut in test: 1/4 hr - 320 psi; 1/2 hr - 500; 3/4 hr - 620; 1 hr - 820 psi. Surge well with 1400 psi twice. TIH, hit bridge at 3420'.

Circulate and work pipe at TD with 4 MM air and 3 BPM water, reducing 1/2 BPM each hour; 10 Bbl water sweeps every hour with 5 Bbl sweeps on the half hour. Returns light 1/16" and less coal 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 coal fines in clear water; on sweeps light 1/16" coal in gray water.

Estimated water production - 1000 BPD.

11-19-90 7" casing at 3190'; open hole 3190-3564'.

Circulating and working pipe at TD with 4 MM air and 1/2 BPM water with 25 Bbl water sweeps hourly. Returns on sweeps heavy; between sweeps moderate 1/2" and coal dust in black to clear water. Pipe became stuck three times in last 24 hours.

11-20-90 7" casing at 3190'; open hole 3190-3564'.

Circulating and working pipe at TD with 2 MM air and 1/2 BPM water with 25 Bbl water sweeps hourly.

Circulate and work pipe at TD with 4 MM air and 1/2 BPM water with 25 Bbl water sweeps hourly. Returns light 1/16" and less coal (98%) in gray to clear water.

Lay down 10 jts drill pipe, run pitot test #4: 1/4 hr - 15 psi, 216 MCFD; 1/2 hr - 19 psi, 2774; 3/4 and 1 hr - 18 psi, 2684 MCFD (all gauges heavy mist).

TIH, tag bridges at 3424' and 3474', had no fill.

Circulate and work pipe at TD with 2 MM air and 1/2 BPM water with 25 Bbl water sweeps hourly. Returns heavy to light 1/8" and less coal (98%) in black to clear water.

Lay down 10 jts drill pipe, change out drilling line, run pitot test #5: 1/4 hr - 16 psi, 2506 MCFD; 1/2, 3/4, and 1 hr - 18 psi, 2684 MCFD (all gauges heavy mist).

Surge well with 1100 psi three times. TIH, had 15' fill. Circulate to TD.

Circulate and work pipe at TD with 2 MM air and 1/2 BPM water with 25 Bbl water sweeps hourly. Returns heavy to light 1/4" and less coal (98%) in black to gray water.

11-21-90 7" casing at 3190'; open hole 3190-3564'.

Waiting on daylight to snub drill collars out of hole.

Circulate and work pipe at TD with 2 MM air and 1/2 BPM water with 25 Bbl water sweeps hourly. Returns heavy on sweeps, otherwise light 1/4" and less coal (98%) in black to clear water.

Kill well on bottom holding 175 psi across stack.

Nipple down top BOP, nipple up Cameron snubbing stack.

11-22-90 7" casing at 3190'; 5-1/2" liner @ 3564'-3102'.

Nippling up and rigging up BOP & stripping head.

Repair rig. Rig up to snub drill collars out.

Strip out and lay down drill collars. Change rams. Rig up to snub liner in hole.

Snub liner in hole. Strip drill pipe in hole. Wash through bridge at 3324'. TIH to TD. Set liner hanger and pack off. Release setting tool.

Ran 12 jts 5-1/2" (462.33') 23#, L-80 tubing with Baker SLTR hydraulic hanger. Set @ 3564.59' with top of liner @ 3102.26', 87.7' overlap.

Perforations @ 3184.99 - 3439.82'; 3540.86' - 3562.59'.  
8 HPF.

Circulate hole to check packoff, holding OK.

Lay down 4 jts drill pipe. Hang off drill pipe. Rig down Cudd and nipple up snubbing stack.

Nipple up Rig BOP and stripping head.

11-23-90 7" casing at 3190'; 5-1/2" liner @ 3564'-3102'.

Rig released at 8:00 a.m., 11-23-90.

Nipple up BOPs. Lay down 3-1/2" drill pipe.

Rabbit tubing. Change rams, pick up tubing. Run in hole with expendable mill-check. Mill on bottom with F nipple (2.25" ID) one jt up to 3109'.

Pick up power swivel and mill on plugs 3184.99 to 3564'.

Lay down 3 jts 2-7/8" tubing and land tubing in donut @ 3479.87'.

Nipple down BOPs. Nipple up upper tree.

Drop and pump ball with 1600 psi air and water and flow well back through tubing through 3/4 choke. Rig down.

Gauge well through 2" line 21 psi, 2953 MCFD wet.

Rig released at 8:00 am 11-23-90.