

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., Ltd.

3. Address of Operator: P.O. Box 1237, Durango, CO 81302-1237

4. Location of Well: (Footage, Sec., T., R., M., or Survey Description)

1200' FSL, 840' FWL - Section 22, T37N, R7W

5. Lease Designation & Serial #:

SF-079003

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.# 476

9. API Well No.:

30-045-27568

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: COMPLETION
	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
	<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

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 tight open hole "stress relieve" type coal operation.

RECEIVED
SEP 13 1990
OIL CON. DIV.]
DIST. 3

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

Signed: ROY W. WILLIAMS Title: ADMINISTRATIVE MANAGER Date: 8/16/90

(This space for Federal or State office use)

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

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 476 - Basin Fruitland Coal

LOCATION: 1200' FSL, 840' FWL
Section 22, T31N, R7W,
San Juan County, New Mexico

5-11-90 7" casing at 2991'.

Drilling Fruitland coal at 3119' with 10,000# WOB, 60 RPM @ 800 psi; average 3 minutes/foot.

Move in and rig up Big "A" Rig No. 23. Pressure test blind rams and manifold to 2000 psi for 30 minutes - held OK.

Pick up Smith 6-1/4" FDT bit SN# KM9758 (jets: 20-20-20), 1 bottom hole collar, float sub with float, F nipple (1.875" ID), 10 drill collars, 1 jt 3-1/2" drill pipe, float sub with float, F nipple (2.25" ID), and crossover sub. Test 4-3/4" rams to 2000 psi for 30 minutes. Pick up 83 jts 3-1/2" drill pipe.

Rig up power swivel, test 3-1/2" rams, HCR valves, and 4" hand valves separately to 2000 psi for 30 minutes - all held OK.

Drill cement and float collar to 3025' with 12,000# WOB, 60 RPM @ 800 psi. Test 7" casing to 2000 psi for 30 minutes - held OK. Float at 2994'.

Drill cement and shoe (3037').

Drill Fruitland coal 3037-3119'.

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LOCATION: 1200' FSL, 840' FWL
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5-12-90 7" casing at 2991'; open hole 2991-3376'.

Working pipe at TD with 2 BPM water. Returns light 1/8" coal, shale and siltstone in clear water. 50 psi on pump. 15' flare - estimated 1 MM gas.

Drill Fruitland coal with 10,000# WOB, 60 RPM @ 800 psi. TD well at 3376'.

Work pipe at TD with 5 BPM water gradually reducing to 2 BPM. Returns light 1/16" coal (98%), shale and siltstone in clear water.

5-13-90 7" casing at 2991'; open hole 2991-3376'.

Working pipe at TD with 1 MM air and 2.5 BPM water.

Work pipe at TD with 2 BPM water @ 500 psi. Returns light 1/16" coal (98%), shale and siltstone in clear water.

Work pipe at TD with 1 MM air and 4 BPM water @ 200 psi. Returns same as above.

Work pipe at TD with 1 MM air and 4 BPM decreasing to 2 BPM water. Returns same as above.

Work pipe at TD, prepare to test well. Lay down 11 jts for pitot test: 1/4 hr - 4 oz.; 1/2 hr - 1 oz.; 3/4 and 1 hr - 0 oz. Shut in test, after 1 hr - 170 psi.

Pick up pipe, wash to bottom with 7 BPM water. Hole bridged below 7" @ 3005'. Wash out bridge, well unloaded large amounts of coal. Returns heavy 1-1/2" to 1/16" coal (98%), shale and siltstone; 600 psi.

(Cont'd)

5-13-90 Work pipe at TD with 1 MM air and 4 BPM decreasing to 2 BPM water. Returns moderate to light 1/2" to 1/16" coal (98%), shale and siltstone; 200 psi.

Bucket test - 480 BPD water.

Estimated gas - 2500 MCFD.

;

5-14-90 7" casing at 2991'; open hole 2991-3376'.

Circulating and blowing well with air and water.

Circulate and blow well with 1 MM air and 2 BPM water @ 200 psi. Returns light 1/8" coal (98%), shale and siltstone.

Hole very tight; shut off air and water. Work pipe free (1 hour). Hole unloaded coal for 45 minutes - very heavy coal, 2" to 1/4". Circulate with 5 BPM water for 4 hours. Returns moderate to light coal in clear water.

Circulate and blow well with 1 MM air and 5 BPM decreasing to 2 BPM water @ 200 psi. Returns light 1/8" to 1/16" coal (98%), shale and siltstone in clear water. 25-30' flare. Estimated gas 2500-3000 MCFD.

Bucket test - 562 BPD water.

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LOCATION: 1200' FSL, 840' FWL
Section 22, T31N, R7W,
San Juan County, New Mexico

5-15-90 7" casing at 2991'; open hole 2991-3376'.

Trying to clean out to bottom; 6 jts off bottom @ 3221'.

Work pipe at TD with 1 MM air and 2 BPM water. Returns light 1/16" coal (98%), shale and siltstone.

Lay down 11 jts, pull into 7" to run pitot test: 1/4 hr - 36 psi, 4295 MCFD; 1/2 and 3/4 hr - 40 psi, 4653 MCFD; 1 hr - 43 psi, 4921 MCFD (all gauges wet).

Shut in test: initial - 150 psi; 1/4 hr - 580; 1/2 hr - 950; 3/4 hr - 1020; 1 hr - 1120 psi.

Clean out to 3221', lost returns, no flare. Work pipe, lay down 2 jts, no returns. Hole very tight, work pipe at 3096'.

Work pipe, had some movement, no returns, no flare. Pump pressure 1200 psi. Pressure up on back side with water to 1100 psi, pull 5 jts, regain returns. Circulate hole with 7 BPM water until clean. Bit in 7" casing.

Circulate hole with 7 BPM water, wash down to 3221' (6 jts drill pipe). Returns moderate to light 1/16" (98%), shale and siltstone in gray water.

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5-16-90 7" casing at 2991'; open hole 2991-3376'.

Working pipe at 3221'; heavy to moderate coal returns.

Work pipe at 3221' with 7 BPM water. Returns heavy coal in black water, hole very sticky.

Work pipe at 3190' with 2 MM air and 6 BPM water @ 500 psi. Returns moderate 1/8" coal (98%), shale and siltstone in brown to clear water.

Work pipe at 3221' with 2 MM air and 6 BPM water. Returns heavy to moderate coal, hole tight and sticky @ 3221'.

Gas increasing - hole heaving.

Bucket test - 598 BPD water.

Estimated gas 5.5 to 7 MMCFD.

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LOCATION: 1200' FSL, 840' FWL
Section 22, T31N, R7W,
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5-17-90 7" casing at 2991'; open hole 2991-3376'.

Working pipe at 3221'; returns heavy to moderate.

Work pipe at 3221' with 2 MM air and 6 BPM water. Returns moderate to heavy coal (98%), shale and siltstone in clear water. Hole sticky 3221-3210'.

Work pipe at 3221' with 2 MM air and 6 BPM water. Made connection. Work pipe 3221-3252'. Hole tight, very sticky; lay 1 jt drill pipe down. Returns heavy 1/8" coal (98%) in gray water.

Work pipe at 3221' with 2 MM air and 6 BPM water. Heavy to moderate coal (98%), shale and siltstone in clear water.

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LOCATION: 1200' FSL, 840' FWL
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5-18-90 7" casing at 2991'; open hole 2991-3376'.

Working pipe at TD.

Work pipe at 3221' with 2 MM air and 6 BPM water.
Returns moderate 1/8" coal, shale and siltstone in clear water.

Work pipe at 3252' with 2 MM air and 6 BPM water.
Returns moderate 1/8" coal, shale and siltstone in clear water.

Work pipe at 3283' with 2 MM air and 6 BPM water.
Returns heavy to moderate 1/8" coal (98%), shale and siltstone in gray water.

Lay down 2 jts drill pipe, hole sticky with high torque.

Work pipe at 3221' with 2 MM air and 6 BPM water.
Returns heavy to moderate 1/8" coal (98%), shale and siltstone in gray to clear water.

Work pipe at 3252' with 2 MM air and 6 BPM water.
Returns moderate 1/8" coal (98%), shale and siltstone in clear water.

Work pipe at 3284' with 3 MM air and 6 BPM water.
Returns moderate to heavy coal (98%), shale and siltstone. Hole got tight, reduced air to 2 MM.

Work pipe at 3284' with 2 MM air and 6 BPM water @ 800 psi. Returns moderate to light 1/8" coal (98%), shale and siltstone in clear water.

Work pipe at 3315' with 2 MM air and 6 BPM water.
Returns light 1/8" coal (98%), shale and siltstone.

Work pipe at 3346' with 2 MM air and 6 BPM water.
Returns light 1/8" coal (98%), shale and siltstone in
clear water.

Work pipe at TD (3376') with 2 MM air and 6 BPM water.
Returns light coal (98%), shale and siltstone in clear
water.

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5-19-90 7" casing at 2991'; open hole 2991-3376'.

Working pipe at TD with 2 MM air and 6 BPM water. Returns light 1/16" coal (98%), shale and siltstone.

Work pipe at TD with 2 MM air and 6 BPM water. Returns light 1/16" coal (98%), shale and siltstone in clear water. No hole problems, 40-50' flare.

Load hole with water, lay down 11 jts for short trip. Wait 1 hour, tag fill, 8 jts in at 3244'. Put air back on hole with 2 MM air and 6 BPM water, wash to bottom.

Hole fell in, stuck pipe, lost returns, let pipe sit for 1/2 hour, pipe came free. Blow hole, hole sloughed again. Pipe stuck one hour. Had half returns. Work pipe free at 3270'.

Circulate and blow well with 2 MM air and 6 BPM water. Heavy to moderate 2" decreasing to 1/4" coal (90%). Had 2" decreasing to 1/2" shale and siltstone in black to gray water.

Circulate well with 2 MM air and 6 BPM water. Wash 3 jts down, 60' off TD. Hole sloughed, making 2" to 1/2" shale. Returns moderate 1/8" coal (95%), shale and siltstone in gray water. Stuck for 1/2 hr, had full returns, set 5000# down, pipe fell free.

Circulate and blow well with 2 MM air and 6 BPM water. Returns moderate to light 1/8" coal, 1/2" shale and siltstone.

Circulate and blow well with 2 MM air and 6 BPM water. Hole tight and sticky. Drill pipe pressure went to 1400 psi, cut air off; circulate with water and clean up well. Returns moderate to light 1/8" coal (98%), shale and siltstone in clear water.

(Cont'd)

5-19-90 Work pipe at TD with 2 MM air and 6 BPM water. Returns light 1/8" coal (98%), shale and siltstone in clear water.

5-20-90 Casing shoe corrected to 3040'. 7" casing at 3040'; open hole 3040-3376'.

Rigging up to snub 5-1/2" liner.

Circulate and blow well with 2 MM air and 6 BPM water. Returns 1/8" coal, shale and siltstone in clear water.

Short trip, lay down 11 jts. Shut in well. Open choke, start loading hole with water, pump across stack.

TIH, no fill. Lay down 14 jts, hang drill pipe in donut.

Nipple down BOP, nipple up snubbing stack and pressure test same.

Strip drill pipe out of hole.

Change rams, wait on spider and slips.

Strip drill collars out of hole.

Rig up to snub 5-1/2" liner.

5-21-90 7" casing at 3040'; open hole 3040-3376'.

Rigging up to pick up 2-7/8" tubing.

Rig up to snub 5-1/2" liner. Pick and make up liner hanger on 1 jt drill pipe.

Snub 5-1/2" liner (circulate across stack holding 200-300 psi).

Change over and snub 3-1/2" drill pipe. Rig down snubbing equipment and strip 3-1/2" drill pipe.

(Cont'd)

5-21-90 Tag @ 3226', pick up power swivel, wash 5-1/2 jts to bottom.

Hang liner, circulate out gas-cut water, set pack-off.

Lay down 2 jts drill pipe, hang drill pipe on donut. Rig down Cudd and rig up and lay down drill pipe and drill collars.

Change over to pick up 2-7/8" tubing.

Run 10 jts (390.13') 5-1/2" 23# L-80 8rd LT&C USS, total length with hanger 400.28'; set at 3375' with Brown V set shoe on bottom; top of 5-1/2" hanger at 2975'; overlap 65'. PBD 3373'. Open hole TD 3376'.

Perfs (all 8 HPF): 3070-3111'
3134-3154'
3157-3195'
3198-3239'

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5-22-90 7" casing at 3040'; 5-1/2" liner 2975-3375'; 2-7/8" tubing 3161'; F nipple set at 3135'.

Rigging down.

Rig up to pick up 2-7/8" tubing. Pick up 4-1/2" mill, crossovers, 1 jt of tubing, F nipple, and TIH with 2-7/8" tubing. Tag liner top at 2975' and top perfs at 3070'.

Drill aluminum perf plugs and clean out to 3373'.

Rig up Wire Line Specialties and chemically cut tubing off 6' above crossover subs and mill (mill 2' off bottom at 3371'). Tubing was not completely loaded. Tool came up hole and tied a knot in line; could not go down to check cut off. POOH with wireline and tools.

Rig down Wireline Specialties and rig up Jay Wireline (slick line). Check cut off - gone. Locate F nipple and set plug in F nipple.

Lay down 6 jts. Land 2-7/8" tubing. Donut did not seal.

Pull donut. Rubber O-ring damaged. Flow test well through 3/4" fixed choke: 1/4 hr - 460 psi, 5836 MCFD; 1/2 hr - 400 psi, 5094; 3/4 hr - 380 psi, 4847; 1 hr - 350 psi, 4476; 1-1/2 hrs - 280 psi, 3611; 2 hrs - 270 psi, 3487; 2-1/2 hrs - 250 psi, 3240; 3 hrs and 3-1/2 hrs - 240 psi, 3116; 4 hrs - 230 psi, 2992 MCFD. Well was making heavy water during this entire period.

Wait on replacement O-ring. Had wrong profile donut.

Change out donut and land 2-7/8" tubing.

Nipple down BOPs and nipple up upper tree and slowly shut well in.

Rig up Jay Wireline and retrieve plug from F nipple.

Rig down and move to NEBU 426. Released rig at 8:00 a.m., 5-22-90.

Tubing summary: run 102 jts (3147.05') 2-7/8" 6.5# J-55 8rd EUE FBNAU USS tubing; set at 3161'. Note - bottom hole assembly and 6' of 2-7/8" tubing was chemically cut off. Bottom hole assembly is: 4-1/2" plug mill (.74') with 3-3/4" fishing neck and 2-7/8" regular pin; crossover (1.42'), 2-7/8" regular (B) x 2-3/8" IF (B) with float 3-5/8" OD and crossover 2-3/8" IF(P) x 2-7/8" EUE (B) (.89') and 3-1/2" OD. Total length of fish = 9.05'. Top of fish at 3364'. A Baker F nipple was run 1 jt off bottom; set at 3135'