Form 3160-5 \*(December 1989)

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

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

Lease Designation & Serial #:

SF-079043

SUNDRY NOTICES AND REPORTS ON WELLS	6. If Indian, Allottee/Tribe Name
ot use this form for proposals to drill, deepen or reentry to a different reservoir.	•

Do no Use "APPLICATION FOR PERMIT-" for such proposals

7. If Unit or CA, Agmt. Design.:

Northeast Blanco Unit

SUBMIT	IN	TRIPLICATE	

SUNDRY NOTICES AND REPORTS ON WELLS.

gas weli X oil well other 1. Type of Well:

Well Name and No.:

2. Name of Operator:

Blackwood & Nichols Co., Ltd.

N.E.B.U.# 418 9. API Well No.:

3. Address of Operator:

P.O. Box 1237, Durango, CO 81302-1237

30-045-27403

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

10. Field & Pool/Expltry Area:

825' FSL, 950' FWL - Section 28, T31N, R7W

Basin Fruitland Coal

11. County or Parish, State:

O-- 1--- N--- N----

		San Juan, New Hexico
12. CHECK APPROPR	RIATE BOX(S) TO INDICATE NATURE OF NOTICE,	REPORT, OR OTHER DATA
TYPE OF SUBMISSION	T	YPE OF ACTION
	Abandonment	Change of Plans
Notice of Intent	Recompletion	New Construction
	Plugging Back	Non-Routine Fracturing
_XSubsequent Report	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	X Other: COMPLETION	
		ults of multiple completion on Well Completion eport and Log form.)

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

OCT 1 1990

OIL CON. DIV. DIST. 3

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

Title: ADMINISTRATIVE MANAGER

(This space for Federal or State office use)

**ACCEPTED FOR RECORD** 

Approved By Conditions of approval, if any:

SEP 24 1990

FARMINGTON RESOURCE AREA

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.

Title

<sup>13.</sup> 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.)\*

#### P.O. BOX 1237

## DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 418 - Basin Fruitland Coal

LOCATION: 825' FSL, 950' FWL Section 28, T31N, R7W San Juan County, New Mexico

7-29-90 Move in and rig up Big "A" Rig No. 23. Nipple up BOPs and blooie lines, change out rams.

Pressure test 7" casing and blind rams to 2000 psi for 30 minutes - held OK.

Strap and caliper drill collars. Pick up rerun Smith 6-1/4" F2 bit, SN# KJ3066 (jets: 20-20-20), bit sub with float, 1 drill collar, N nipple (1.87" ID), 8 drill collars, 1 jt 3-1/2" drill pipe, F nipple (2.25" ID), and safety sub.

7-30-90 Drilling Fruitland formation at 3355' with 10,000# WOB, 60 RPM @ 650 psi.

Strap 3-1/2" drill pipe and pick up same. Tag cement at 3219'. Pick up swivel and break circulation.

Rig repair - 10-1/2 hours.

Test 3-1/2" pipe rams and HCR valves and hand valves to 2000 psi for 30 minutes - held OK.

Drill cement 3219-3240'; drill float collar and shoe at 3281'.

Drill Fruitland Coal 3281-3355' with 10,000# WOB, 760 RPM @ 650 psi. Very little gas flow.

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LOCATION: 825' FSL, 950' FWL

Section 28, T31N, R7W

San Juan County, New Mexico

7-31-90 Circulating with 6 BPM water. Returns 1/16" coal (95%), light shale and siltstone in clear water.

Drill Fruitland formation 3355-3476' (TD) with 10,000# WOB and 60 RPM @ 650 psi.

Coal	Intervals:	3311-3312'		
COUL	THEEL AUTS.	2211-2215.	1'	
		3320-3323'	3 '	
		3325-3330'	5 <b>'</b>	
		3334-3340'	61	
		3341-3342'	1'	
		3349-3351'	2'	
		3369-3371'	2 '	
		3394-3395	ī'	
		3400-3401'	<u>-</u> 1'	
		3453-3454	1'	
		3456-34701	14'	(basal)
		3471-3473	21	(====)
		Total	391	

P. C. Tongue - 3403'
Top Main P. C. - 3474'
Total Depth - 3476'

Circulate and work pipe at TD. Returns 1/16" and smaller coal (95%), shale and siltstone in clear water.

5' flare through one 7" blooie line.

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LOCATION: 825' FSL, 950' FWL Section 28, T31N, R7W San Juan County, New Mexico

8-01-90 Circulating and working pipe at TD with 3 MM air. Returns light 1/16" coal in clear water.

Circulate and work pipe at TD with 3 BPM water. Returns very light 1/16" coal (98%), shale and siltstone in clear water.

Circulate and work pipe at TD with 2 MM air and 3 BPM water. Returns very light 1/16" coal (98%), shale and siltstone in clear water.

Circulate and work pipe at TD with 3 MM air and 3 BPM water. Returns light to moderate 1/2" to powder coal (99%), shale and siltstone in black to clear water.

Circulate and work pipe at TD with 3 MM air and 1-1/2 BPM water. Returns light to moderate 1/2" to powder coal (98%) in black to clear water.

Have 12-15' flare through both blooie lines.

Bucket test = 3240 BPD water.

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Northeast Blanco Unit No. 418 - Basin Fruitland Coal

LOCATION: 825' FSL, 950' FWL Section 28, T31N, R7W San Juan County, New Mexico

8-02-90 Circulating and blowing well with 4 MM air and 3 Bbl water sweeps hourly. Returns light 1/8" coal (98%) and siltstone in clear water.

Circulate and blow well with 3 MM air and 1-1/2 BPM water. Returns light to moderate coal (99%) and siltstone in black to clear water.

Circulate and blow well with 3 MM air and 1 BPM water. Returns light 1/8" and less coal (99%) and siltstone in clear water.

Circulate and blow well with 4 MM air and 1 BPM water. Returns light 1/8" coal (99%) and siltstone in clear water.

Circulate and blow well with 4 MM air and 3 Bbl water sweeps hourly. Returns light 1/8" coal (99%), and siltstone in clear water.

Lay down 6 jts 3-1/2" drill pipe. Pull bit into 7" casing at 3259'. Pitot test: 1/4 hr - 22 psi, 3042 MCFD; 1/2 hr - 28 psi, 3579; 3/4 hr - 32 psi, 3937; 1 hr - 34 psi, 4116 MCFD (all gauges wet).

Shut in test: ISIP - 400 psi; 1/4 hr - 470; 1/2 hr - 510; 3/4 hr - 540; 1 hr - 580 psi.

Bucket test = 2640+ BPD water.

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Completion Report

Northeast Blanco Unit No. 418 - Basin Fruitland Coal

LOCATION: 825' FSL, 950' FWL Section 28, T31N, R7W San Juan County, New Mexico

8-3-90 Hole fell in. Clean out to bottom with 4 MM air and 4 BPM water.

Circulate and work pipe at TD with 4 MM air and 3 bbls water sweeps every 1/2 hour. Returns moderate to heavy 1/2" and less coal (98%) in black to gray water.

Circulate and work pipe at TD with 4 MM air and 3 bbls water sweeps every hour. Returns moderate 1/4" and less coal (98%), siltstone in clear water. 1" and less on sweeps for 10 minutes. Hole unloaded.

Pull 6 jts 3-1/2" drill pipe, 3259'. Pitot test #2: 1/4 hr - 39 psi, 4563 MCF; 1/2 hr - 46 psi, 5190 MCF; 3/4 hr - 48 psi, 5369 MCF; 1 hr - 53 psi, 5816 MCF (all gauges wet).

Shut in test #2: 1/4 hr - 600 psi; 1/2 hr - 730 psi; 3/4 hr - 800 psi; 1 hr - 850 psi. Surge well with 1000 psi.

Pick up 6 jts 3-1/2" drill pipe, TIH. 5' fill.

Circulate and work pipe at TD with 4 MM air and 3 bbls sweeps every hour. Returns moderate 1/4" and less (98%) coal and siltstone in clear water.

Hole fell in. 30% returns. Lost circulation. Pipe stuck at 3441'. Let pipe set, attempt to rotate every 15 minutes. No rotation. Shut in well, 500 psi backpressure. Pipe free. Some drag. Lay down drill pipe to 3321'.

Circulate and work pipe at 3321' with 3 MM air and 3 BPM water. Clean out 3321'-3352'. Unloaded heavy 1/2" and less (98%) coal in black water.

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Completion Report

Northeast Blanco Unit No. 418 - Basin Fruitland Coal

LOCATION: 825' FSL, 950' FWL Section 28, T31N, R7W San Juan County, New Mexico

8-04-90 7" casing at 3286'.

Circulating and working pipe at 3381' with 7 BPM water.

Circulate and work pipe at 3352'-3381' with 4 MM air and 4 BPM water. Had bridges at 3362', stuck pipe at 3352'. Returns very heavy 1/2" and less coal (98%) in black water.

Pressure up back side to 200 psi. Lay down 1 jt drill pipe.

Circulate and work pipe to 3476' with 7 BPM water. Returns heavy to moderate 1/2" and less coal (98%) in gray to black water.

Circulate and work pipe at TD with 7 BPM - 3 BPM water. Returns heavy to moderate 1/2" and less coal (98%) in black water. Returns reduced to light coal.

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

Circulate and work pipe at TD with 1 MM air and 3 BPM water. Returns moderate 1/8" and less coal (98%) in gray water. Hole sticky with torque and drag. Pipe stuck at 3476'. Pressure up back side to 500 psi. Pipe came free. Lay down 6 jts drill pipe.

Circulate and work pipe at TD with 7 BPM water. Hole unloaded 1" to 3/4" coal for 30 min, then 1/4" and less coal in black water. Clean out coal from 3285' to 3381'.

8-05-90 Circulating and working pipe at TD with 1 MM air and 3 BPM water.

Circulate and work pipe at 3381'-3476' with 7 BPM water. Returns 1/8" and less coal (98%), shale and siltstone in clear water.

Circulate and work pipe at TD with 7 BPM water, reducing pump 1 bbl each hour. Returns 1/4" and less coal (98%), shale and siltstone in clear water.

Circulate and work pipe at TD with 1/2 MM air and 4 BPM water. Well unloaded heavy 1/2" and less coal in black water for 15 minutes then moderate 1/4" and less coal in clear water.

Circulate and work pipe at TD with 1 MM air and 3 1/2 BPM water. Returns 1/4" and less coal (98%) in gray water.

Hole sloughed. Work pipe from 3476'-3441'. Very heavy returns 1"-3/4" for 45 min. Pipe stuck at 3411', hole unloaded, pipe came free. Circulated with 5 BPM water, returns heavy in black water.

Circulate and work pipe at TD with 1 MM air and 3 BPM water. Returns heavy to moderate 1/4" and less (98%) in gray to black water. Add second compressor to hole several times, hole gets tight and bridges.

Hauled 4320 bbls water in last 24 hours.

8-06-90 Circulating and working pipe at TD with 1 MM air and 3 BPM water.

Circulate and work pipe at TD with 1 MM air and 4 BPM water. Returns moderate 1/2" and smaller coal (98%) in black to gray water. Hole tight and sticky.

Circulate and work pipe at TD with 2 MM air and 2 BPM water. Returns 1/4" and smaller coal in clear water. No torque or drag.

Shut well in one hour to clean coal out of blow pit. Release pressure through choke slowly. Well pressured up to 1060 psi in one hour.

8-06-90

(con't.) Circulate and work pipe at TD with 2 MM air and 3-2 BPM water. Returns moderate 1/4" and smaller coal (98%) in gray to clear water.

Circulate and work pipe at TD with 4-6 BPM water. Hole fell in. Hole tight and sticky. Returns 3/4" and less in black water.

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

Hauled 4320 bbl water last 24 hours.

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Completion Report

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LOCATION: 825' FSL, 950' FWL Section 28, T31N, R7W San Juan County, New Mexico

8-07-90 Strip drill pipe out of hole.

Circulate and work pipe at TD with 1 MM air and 3 BPM water. Returns hole unloading heavy 1"-3/4" coal in black water.

Circulate and work pipe at TD with 1 MM air and 2 BPM water. Returns light 1/8" and smaller coal (98%) in gray to clear water.

Load well with water, circulate well with 400 psi backpressure. Rig up to circulate across stack holding 400 psi, loosing 4 bbl per hour to formation.

Lay down 7 jts, nipple down top BOP and nipple up snubbing stack.

Rig up Cudd pressure control, pressure test stack to 2000 psi - held OK.

Start out of hole with drill pipe.

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LOCATION: 825' FSL, 950' FWL Section 28, T31N, R7W San Juan County, New Mexico

8-08-90 Rig up to run 2-7/8" tubing.

> Finish POOH with drill pipe and drill collars. Change rams in BOP.

> Rig up to pick up 5-1/2" liner. Rig up snubbing equipment.

> Pick up 7 jts 5-1/2" L-80 casing and liner hanger. Snub liner and 9 jts drill pipe. Rig down snubbing equipment, strip 3-1/2" drill pipe in hole, tag bridge at 3352'.

> Pick up swivel and wash liner through bridge 3352'-3370'. RIH, had 27' fill. Wash to TD (3476'), pick up 1' and hang liner. Pack seal assembly off with 20,000# weight.

> Lay down 9 jts, hang 3-1/2" in tubing head. Rig down Cudd stack, install stripping head.

> POOH, lay down 3-1/2" drill pipe and setting tool. TIH with drill collars and lay down same.

Change out rams to 2-7/8" and rig up to run tubing.

Ran 7 jts 5-1/2" (254.08') 23# L-80 USS set at  $3\sqrt{2}$ 72.32'. Top of Baker Hi Flo II liner hanger at 3220.94', overlap 65.06'.

- 2 1/2' perf 2 full perf 8 HPF
- 3 full blank

Perforations: 3311.15-3349.32'; 3351.62-3391.21; 3393.31-3413.06; 3453.61-3471.12.

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LOCATION: 825' FSL, 950' FWL Section 28, T31N, R7W San Juan County, New Mexico

8-09-90 Wait on truck to move rig.

Pick up expendable mill with check valve, 1 jt tubing, F nipple (2.25" ID). Pick up 2-7/8" tubing, tag liner at 3220'.

Tag top perf at 3311', milled perfs to 3472' (TD).

Lay down 3 jts, land tubing at 3393'. Ran 110 2-7/8" (3379.08) 6.5, J-55 EUE 8RD FBNAU, USS. F nipple at 3351.61.

Land donut, cut packing rubber on donut. Replace packing element. Land donut, still leaking. Pull donut to open pipe rams. Blow well to clean out hanger, reseal donut, held pressure.

Nipple down BOP, nipple up wellhead. Drop ball and pump off mill, flow well up tubing.

Rig down, prepare to move.

Pitot test: 1 hr - 42 psi, 4.832 MMCF (wet).

Water production - 5200 BWPD.

Release rig at 12:00 midnight.

Estimated Daily Cost: \$ 35,726 Estimated Cumulative Cost: \$158,092