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 & Ser | ial | #: |
|---|-------|-------------------|-----|----|
| | | | | |

| | SUNDRY NOTICES AND REPORTS ON WELLS |
|-----------------|--|
| Do not use this | form for proposals to drill, deepen or reentry to a different reservoir. Use MAPPLICATION FOR PERMIT-" for such proposals |
| | Use "APPLICATION FOR PERMIT-" for such proposats |

| 6. | Ιf | Indian, | Αl | lottee/Tr | ibe | Nam |
|----|----|---------|----|-----------|-----|-----|

NM-033569

| | 7. If Unit or CA, Agmt. Design.: |
|---|----------------------------------|
| SUBMIT IN TRIPLICATE | |
| 1. Type of Well: oil well gas well X other | 8. Well Name and No.: |
| 2. Name of Operator: Blackwood & Nichols Co., A Limited Partnership | N.E.B.U.# 480 |
| 3. Address of Operator: P.O. Box 1237, Durango, CO 81302-1237 | 9. API Well No.: |
| 4. Location of Well: (Footage, Sec., T., R., M., or Survey Description) | 30-045-27722 |
| | 10. Field & Pool/Expltry Area: |
| 1595' FSL, 891' FWL - Section 14, T31N, R7W | 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 |

| | · · · · · · · · · · · · · · · · · · | | | San Juan, New Mexico |
|------------------------|-------------------------------------|--|--------------------|---|
| 12. CHECK AF | PROPRIATE BOX(s) TO I | NDICATE NATURE OF NOTICE, RE | PORT, OR OTHER DAT | TA |
| TYPE OF SUBMISSION | | TYF | E 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 Noti | ce | Altering Casing | | Conversion to Injection |
| | X | Other: COMPLETION | | |
| | | (Note: Report resul or Recompletion Rep | | p <mark>letion on Well Completion</mark>) |

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.



| 14. I hereby certify that the foregoing is true and correct. | | rrect. | OIF COM. DIA. | | |
|--|---|-----------------|------------------------|-----------------|--|
| Signed: _ | Entry Chain ROY W. 1 | WILLIAMS Title: | ADMINISTRATIVE MANAGER | Date: 10/11/90 | |
| | (This space for Federal or State office us | se) | ACCEPTED FOR RECOF | | |
| | Approved By Conditions of approval, if any: | Title NMOCD | Date OCT | 3 0 1990 | |
| | | MMOOD | | RESOURCE AREA | |

Completion Report

Northeast Blanco Unit No. 480 - Basin Fruitland Coal

LOCATION: 1595' FSL, 891' FWL
Section 14, T31N, R7W
San Juan County, New Mexico

9-16-90 Picking up and TIH with 3-1/2" drill pipe.

Move in and rig up Big "A" Rig No. 25. Strap drill collars and drill pipe.

Pressure test manifold, blind rams, and 7" casing to 2500 psi - held OK.

Pick up Smith 6-1/4" FDTL, SN #KT5118 (jets: 20-20-20), float sub, one 4-3/4" drill collar, N nipple (1.875" ID), ten 4-3/4" drill collars, 1 jt drill pipe, and F nipple (2.25" ID): overall length = 369.84'.

9-17-90 7" casing at 3069'; open hole 3069-3337'.

Drilling Fruitland coal at 3337'.

TIH, tag cement at 3020'.

Pressure test #1 and #3 rams and HCR valves; repair leaks. Retest to 1700 psi for 15 minutes - held OK. Drill cement, rig repair. Drill insert float at 3029', cement and shoe at 3069'.

Drill Fruitland coal with 8000# WOB, 80 RPM and 6 BPM @ 1300 psi.

9-18-90 7" casing at 3069'; open hole 3069-3398'.

Circulate and work pipe at TD with 1 BPM water. Have 5' flare from 1 blooie line. Returns light 1/16 coal.

Drilling Fruitland coal 3337-3398'.

Circulate samples.

(Cont'd) 9-18-90

Circulate and work pipe at TD with 6 BPM water, reducing pump rate 1/2 BPM every 2 hours.

| Coal | Intervals: | 3097 - 3100' | 3 ' |
|------|------------|---------------------|-----|
| | | 3109-3121' | 12' |
| | | 3199-3203' | 4 ' |
| | | 3204-3206' | 2 1 |
| | | 3207-3222 1 | 15' |
| | | 3241-3242 | 1' |
| | | 3255-3259' | 4 1 |
| | | 3261-3263' | 2 1 |
| | | 3265-32661 | 1' |
| | | 3274-3275' | 1' |
| | | Total | 45' |

Top P.C. Tongue - 3277'
Top Main P.C. - 3395'
Total Depth - 3398'

9-19-90 7" casing at 3069'; open hole 3069-3398'.

Circulating and working pipe at TD with 2 MM air and 3-1/2 BPM water. Well unloading heavy 1-1/2" and smaller coal (98%), shale and siltstone and floating coal dust.

Circulate and work pipe at TD with 1 BPM water. Returns light 1/16" and smaller coal (98%); 5' flare from 1 blooie line.

Hole sloughed. Circulate and work pipe at TD with 1 MM air and 5 BPM water. Returns 1-1/2" and smaller coal (98%) in black water.

Circulate and work pipe at TD with 1 MM air dropping pump rate 1/2 BPM every 2 hours.

Circulate and work pipe at TD with 1 MM air and 3 BPM water dropping pump rate 1/2 BPM each hour to 1-1/2 BPM.

Well heaved, pipe stuck, close one blooie, raise pump rate to 3 BPM.

Well unloaded heavy 1-1/2" coal in black viscous water.

Circulate and work pipe at TD with 2 MM air and 3 BPM water. Hole sticky, unloads large amounts of coal

Completion Report - NEBU #480

9-20-90 7" casing at 3069'; open hole 3069-3398'.

Circulate and work pipe at TD with 2 MM air and 1-1/2 BPM water with 10 Bbl water sweeps hourly. Returns moderate coal in gray water.

Circulate and work pipe at TD with 2 MM air and 3 BPM water. Returns moderate 3/4" and smaller coal (95%), shale and siltstone in clear water.

Circulate and work pipe at TD with 2 MM air, reducing water rate 1/2 BPM each hour down to 1-1/2 BPM, running 10 Bbl water sweeps each hour. Returns moderate 1/2" and smaller coal (95%), shale and siltstone in black to clear water; on sweeps getting heavy coal and coal fines.

Have 10-12' flare. Estimated 1.2 MMCFD. (DB/AR)

9-21-90 7" casing at 3069'; open hole 3069-3398'.

Circulating and working pipe at TD with 3 MM air and 1-1/2 BPM water with 10 Bbl water sweeps hourly. Returns moderate 1/2" and smaller coal (98%) in black to gray water.

Circulate and work pipe at TD with 2 MM air and 1-1/2 BPM water with 10 Bbl water sweeps hourly. Returns moderate 1/4" and smaller coal (98%) in clear water with heavier coal in black water on sweeps.

Circulate and work pipe at TD with 3 MM air and 1-1/2 BPM to 3 BPM water. Well fell in, lay down 1 jt drill pipe clean out to TD with 3 MM air and 3 BPM water with 10 Bbl water sweeps hourly. Reduced water to 1-1/2 BPM, returns heavy to moderate 1/2" and less coal (98%) in gray to clear water.

Pull 10 jts pipe, run pitot test #1: 1/4 hr - 2 psi, 869 MCFD; 1/2 hr - 20 oz, 673; 3/4 hr - 16 oz, 615; and 1 hr - 13 oz., 565 MCFD (all gauges dry).

Shut in test: 1/4 hr - 200 psi; 1/2 hr - 400; 3/4 hr - 550' 1 hr - 650 psi. Bucket test: 185 BPD water.

Bleed well down to 200 psi, open blooie lines.

(Cont'd)

9-21-90 TIH with 6 jts, hit bridge, had 120' of fill. Circulate with 3 MM air and 3 BPM water, wash 120' to TD. Returns heavy 3/4" coal (98%) in black water. (DB/AR)

9-22-90 7" casing at 3069'; open hole 3069-3398'.

Circulating and working pipe at TD with 4 MM air and 1 BPM water. Returns moderate 1/4" and smaller coal (98%) in gray water.

Circulating and working pipe at TD with 3 MM air and 1 BPM water with 10 Bbl water sweeps hourly. Returns heavy to moderate 1/2" and less coal (98%) in black to gray water.

Circulating and working pipe at TD with 4 MM air and 1-1/2 BPM water with 5 to 10 Bbl water sweeps hourly. Returns very heavy coal on sweeps, otherwise moderate 1/4" and less coal (98%) in black to gray water. (DB/AR)

9-23-90 7" casing at 3069'; open hole 3069-3398'.

Circulating and working pipe at TD with 3 MM air and 1 BPM water with 5 Bbl water sweeps hourly.

Circulating and working pipe at TD with 2 MM air and 3 BPM water. Returns heavy to moderate 1/4" and smaller coal (98%) in black to gray water.

Circulating and working pipe at TD with 3 MM air with 1-1/2 BPM water and 5 Bbl water sweeps hourly. Returns moderate 1/4" and smaller coal (98%) in gray water.

Circulating and working pipe at TD with 3 MM air, and 1 BPM water with 5 Bbl water sweeps hourly. Returns light 1/8" and smaller coal (98%) in clear water.

Circulating and working pipe at TD with 3 MM air and 1 BPM water. Returns heavy 1/4" coal (99%) in black water.

9-24-90 7" casing at 3069'; open hole 3069-3398'.

Circulating and working pipe at TD with 3 MM air and 1 BPM water with 5 Bbl water sweeps hourly. Returns light 1/8" and less coal (98%) in gray water.

(Cont'd) 9-24-90

Circulating and working pipe at TD with 3 MM air and 1 BPM water with 5 Bbl water sweeps hourly. Returns heavy to light 1/4" and smaller coal (98%) in black to clear water. Moderate coal on sweeps in gray water.

Lay down 10 jts, run 2" pitot test #2: 1/4 hr - 15 psi, 2416 MCFD; 1/2 and 3/4 hr - 13, 2237 MCFD; and 1 hr - 12 psi, 2148 MCFD (all gauges damp).

Shut in test: 1/4 hr - 150 psi; 1/2 hr - 300; 3/4 hr - 450'; and 1 hr - 550 psi.

Surge well with 550 psi. TIH, hit bridge at 3179'. Circulate and blow well with 3 MM air and 3 BPM water, clean out to TD.

Circulating and working pipe at TD with 3 MM air and 1 BPM water with 5 Bbl water sweeps hourly. Returns heavy to light 1/2" and smaller coal (98%) in black to gray water.

9-25-90 7" casing at 3069'; open hole 3069-3398'.

Circulating and working pipe at TD with 4 MM air and 1 BPM water. Returns light 1/4" coal (98%) in clear water.

Circulate and work pipe with 3 MM air and 1 BPM water with 5 Bbl water sweeps hourly. Returns light 1/4" and less coal (98%) in clear water.

Load hole with water, pump into formation with 800 psi, 5-1/2 BPM water, total of 200 Bbls water. Open blooie line, flow well back for 1/2 hour. Unload hole with air. Returns heavy coal and powder in black water.

Circulate and work pipe at TD with 4 MM air and 1 BPM water with 5 Bbl water sweeps hourly. Returns heavy 1/4" and powder coal (98%) in black water.

Have 18-20' flare.

9-26-90 7" casing at 3069'; open hole 3069-3398'.

Circulating and working pipe at TD with 3 MM air and 1 BPM water with 10 Bbl water sweeps hourly. Returns light 1/8" coal (98%) in clear water.

(Cont'd)

9-26-90 Circulate and work pipe at TD with 3 MM air and 1 BPM water with 5 Bbl water sweeps hourly. Returns light 1/4" and smaller coal (98%) in clear water.

Lay down 10 jts drill pipe for pitot test #3: 1/4 hr - 4 psi, 1236 MCFD; 1/2 hr - 4.5 psi, 1304; 3/4 hr - 6 psi, 1520; 1 hr - 7 psi, 1644 MCFD.

Shut in test: 1/4 hr - 300 psi; 1/2 hr - 450; 3/4 hr - 575; 1 hr - 700 psi.

Bucket test - 205 BPD water.

Pressure up wellbore to 1000 psi with air, surge well. TIH, tag bridge at 3183', plugged bit. POOH, unplug bit, TIH.

Circulate and work pipe at 3183' washing 215' back to TD with 3 MM air and 1 BPM water. Returns moderate coal in gray water.

Circulate and work pipe at TD with 3 MM air and 1 BPM water with 10 Bbl water sweeps hourly. Returns light 1/8" coal in clear water.

9-27-90 7" casing at 3069'; open hole 3069-3398'.

POOH with 3-1/2" drill pipe to run liner.

Circulate and work pipe at TD with 3 MM air and 1 BPM water with 10 Bbl water sweeps hourly. Returns light 1/8" and smaller coal (98%) in clear water.

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

Load hole with water, set swivel back, prepare to POOH.

POOH with 3-1/2" drill pipe.

9-28-90 7" casing at 3069'; open hole 3069-3398'.

Jarring on 5-1/2" liner at 2107'.

POOH with 3-1/2" drill pipe.

Completion Report - NEBU #480

(Cont'd) 9-28-90

Change rams, rig up to run liner.

TIH with 5-1/2" liner, tag obstruction at 2103'.

Pick up swivel, wash from 2103-2118'. Pump pressure increased to 1500 psi, lost all liner movement.

Work pipe to try to free liner.

Release liner setting tool and POOH.

Wait on Homco, unload fishing tools.

Pick up 5-1/2" casing spear, one 3-1/2" drill collar, stop sub, jars, and ten 4-3/4" drill collars. TIH.

Tag liner top at 1736', set spear at 1766' inside 5-1/2" liner. Jar on liner, liner will move down hole easily but will not come up hole. Appears top hold-down slips are set.

9-29-90

7" casing at 3069'; open hole 3069-3398'.

Washing through bridge at 2724'.

Jar on 5-1/2" liner, work liner out of hole. 10-50,000# drag, top slips had set, jarred slip cone through slips.

Attempt to release spear from liner, lay down 1 jt 5-1/2" liner with spear inside.

Lay down and load out fishing tools.

Lay down 9 jts 5-1/2" casing.

Rig up to run 4-3/4" drill collars and drill pipe in hole. Pick up Smith 6-1/4" FDTL RR bit (jets: 20-20-20), double float sub, N nipple (1.875" ID), ten 4-3/4" drill collars, 1 jt drill pipe, F nipple (2.25" ID). OAL = 369.84'. TIH, tag bridge at 2164'.

Wash through bridges in 7" casing with 5 BPM water. Well unloading heavy shale and siltstone and some coal in black viscous water.

Completion Report - NEBU #480

9-30-90 7" casing at 3069'; open hole 3069-3398'.

Pipe stuck 15' off bottom, circulating with 1 MM air and 3 BPM water. Returns - clear water.

Wash through bridges in 7" casing with 5 BPM water.

Wash to TD with 5 BPM water. Returns heavy 1-1/2" and smaller coal (9505%), shale and siltstone in black viscous water. Have 10-15' flare from 1 blooie line.

Circulate and work pipe at TD with 1 MM air and 6 BPM water. Returns light 1/16" and smaller coal (95%) in clear water.

Circulate and work pipe at TD with 1 MM air and 6 BPM water, reducing pump rate 1/2 BPM every two hours. Returns same as above. 15' flare from both blooie lines.

Hole fell in, struck 15' off bottom.

10-01-90 7" casing at 3069'; open hole 3069-3398'.

Circulating and working pipe at TD with 3 MM air and 1/2 BPM water. Returns light 1/16" and smaller coal (98%) in clear water.

Stuck 15' off bottom, circulate with 1 MM air and 5 BPM water. Had some rotation.

Well unloaded. Returns moderate 2" and smaller coal (85%), shale and siltstone in black viscous water. Bring second compressor on line, well cleaned up. Returns light 1/16" and smaller coal (98%), shale and siltstone in clear water.

Circulate and work pipe at TD with 2 MM air and 5 BPM water, reducing pump rate 1/2 Bbl every 23 hours. Returns same as above.

Circulate and work pipe at TD with 3 MM air and 1/2 BPM water. Returns same as above.

10-02-90 7" casing at 3069'; open hole 3069-3398'.

POOH.