

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)

Surface: (SF-078581)
1830' FSL - 830' FWL
Section 12, T30N, R8W

Bottom Hole:
1402' FNL - 799' FWL
Section 7, T30N, R7W

5. Lease Designation & Serial #:

SF-079042

6. All Indian Allottee/Tribe Name

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

Northeast Blanco Unit

8. Well Name and No.:

N.E.B.U.# 461

9. API Well No.:

30-045-28222

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

___ Notice of Intent

☒ Subsequent Report

___ Final Abandonment Notice

TYPE OF ACTION

___ Abandonment

___ Recompletion

___ Plugging Back

___ Casing Repair

___ Altering Casing

☒ Other: COMPLETION

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

___ Change of Plans

___ New Construction

___ Non-Routine Fracturing

___ Water Shut-Off

___ 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 open hole "stress relieve" type coal completion.

Please note Bottom Hole Location Change.

ACCEPTED FOR RECORD

OCT 23 1991

FARMINGTON RESOURCE AREA

BY

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

Signed: Mark S. Manson MARK S. MANSON

Title: OPERATIONS ENGINEER

Date: 10-18-91

(This space for Federal or State office use)

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

BLACKWOOD & NICHOLS CO.
A LIMITED PARTNERSHIP
P.O. BOX 1237
DURANGO, COLORADO 81302-1237
(303) 247-0728

Completion Report

Northeast Blanco Unit No. 461 - Basin Fruitland Coal

LOCATION: Surface: 1830' FSL, 830' FEL
Section 12, T30N, R8W
Bottom hole: 1402' FSL, 799' FWL
Section 7, T30N, R7W
San Juan County, New Mexico

11-15-90 7-5/8" casing at 3638' MD, 3038' TVD.

Nipple up, rig up for completion. Strap drill collars.

Pick up 6-3/4" Smith Tool Co. FDTL (jets: 20-20-20), bit sub, 1 drill collar, float sub, F nipple (1.875" ID), ten 4-3/4" drill collars, 1 jt drill pipe, F nipple 2.25" ID). OAL - 345.18'. Pick up 3-1/2" drill pipe. Tag cement at 3588'.

POOH, test blind rams, 7-5/8" casing, and manifold to 2000 psi - held OK.

TIH.

11-16-90 7-5/8" casing at 3638' MD, 3038' TVD; open hole 3638-3850' MD, 3038-3250' TVD.

Working pipe at TD with 7 BPM water.

TIH to 3588' MD, rig up swivel to pressure test.

Work on swivel.

Pressure test rams, HCR valves, and manifold to 2000 psi - held OK.

Work on swivel.

Drill insert float, cement and shoe at 3638', 3038' TVD.

Drill Fruitland coal to 3850' MD, 3250' TVD, with 8000# WOB, 100 RPM, and 7 BPM water @ 1200 psi.

(Cont'd)

11-16-90	Coal Intervals:	3057-3059'	2'
		3061-3073'	12'
		3074-3076'	2'
		3124-3125'	1'
		3126-3135'	9'
		3159-3165'	6'
		3213-3223'	10'
		3244-3245'	1'
		Total	43'

Top Main P.C. - 3247'

Total Depth - 3250'

Work pipe at TD with 7 BPM water through 1 blooie line.
Have 15' flare.

11-17-90 7-5/8" casing at 3638' MD, 3038' TVD; open hole 3638-3850' MD, 3038-3250' TVD.

Circulating at TD with .7 MM air and 7 BPM water.

Circulate and work pipe at TD with 7 BPM water.

Circulate and work pipe at TD with 7 BPM water, reducing pump rate 1/2 BPM every 2 hours to 1/2 BPM. No coal returns. Have 15' flare through 1 blooie line.

Circulate and work pipe at TD with .7 MM air and 7 BPM water. Returns very light 1/8" and less coal (50%) with gray shale and siltstone in clear water.

11-18-90 7-5/8" casing at 3638' MD, 3038' TVD; open hole 3638-3850' MD, 3038-3250' TVD.

Circulating and working pipe at TD with 1.4 MM air and 1 BPM water.

Circulate and work pipe at TD with .7 MM air and 6-1/2 BPM water, reducing pump rate 1/2 BPM per hour to 1 BPM. Returns very light to no coal (50%) with gray and brown shale in clear water.

Circulate and work pipe at TD with 1.4 MM air and 7 BPM water reducing pump rate 1/2 BPM per hour to 1 BPM. Returns same as above - no hole problems.

11-19-90 7-5/8" casing at 3638' MD, 3038' TVD; open hole 3638-3850' MD, 3038-3250' TVD.

Circulating and working pipe at TD with 1.4 MM air and 1 BPM water with 10 to 20 Bbl water sweeps per hour.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water with light to no coal returns.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water with 5 Bbl water sweeps per hour. Returns same as above.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water, alternating 10, 5, and 20 Bbl water sweeps hourly. Returns same as above.

Approximately 15' flare - very little water.

11-20-90 7-5/8" casing at 3638' MD, 3038' TVD; open hole 3638-3850' MD, 3038-3250' TVD.

Circulating and working pipe at TD with 1.4 MM air and 1 BPM water.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water, alternating 5, 10, 15, and 20 Bbl water sweeps hourly. No coal returns, no hole problems.

Pull into 7-5/8" casing to run 2" pitot test #1: 1/4, 1/2, 3/4, and 1 hr - 6 oz., 372 MCFD (dry).

POOH, check BHA.

RIH with 6-3/4" FDTL RR, float sub, 1 drill collar, instring float, F nipple (1.875" ID), 2 drill collars, jars, 8 drill collars, 1 jt drill pipe, F nipple (2.25" ID). OAL = 379.08'. TIH with drill pipe.

Pick up swivel and 7 jts drill pipe. Install new stripper rubber, tag bottom, no fill.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water, alternating 5, 10, 15, and 20 Bbl water sweeps each hour. No coal returns, no hole problems.

11-21-90 7-5/8" casing at 3638' MD, 3038' TVD; open hole 3638-3850' MD, 3038-3250' TVD.

TIH after surge, had 3' fill.

(Cont'd)

11-21-90 Circulate and work pipe at TD with 1.4 MM air and 1 BPM water with various water sweeps hourly. No coal returns.

Pull into 7-5/8" casing for pitot test #2: 1/4 hr - 6.5 oz., 391 MCFD; 1/2 hr - 7.5 oz., 426; 3/4 hr - 8 oz., 434; 1 hr - 7 oz., 404 MCFD. Shut in test #1: 1/4 hr - 110 psi, 1/2 hr - 200; 3/4 hr - 280; 1 hr - 380 psi. Surge well with 600 psi. TIH, had 2' fill.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water with various water sweeps hourly. No coal returns.

Pull into 7-5/8" casing for pitot test #3: 1/4 hr - 10 oz., 492 MCFD; 1/2 hr - 9 oz., 464; 3/4 and 1 hr - 8 oz., 434 MCFD. Shut in test #2: 1/4 hr - 100 psi, 1/2 hr - 200; 3/4 hr - 290; 1 hr - 380 psi. Surge well with 1000 psi. TIH, had 3' fill.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water with various water sweeps hourly. No coal returns.

Pull into 7-5/8" casing for pitot test #4: 1/4, 1/2, 3/4, and 1 hr - 8 oz., 434 MCFD. Shut in test #3: 1/4 hr - 100 psi, 1/2 hr - 200; 3/4 hr - 300; 1 hr - 375 psi. Surge well with 1000 psi. TIH, had 3' fill.

No water production from well.

11-22-90 7-5/8" casing at 3638' MD, 3038' TVD; open hole 3638-3850' MD, 3038-3250' TVD.

TIH, had 4' fill.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water with various water sweeps hourly. No coal returns, no hole problems.

Pull into 7-5/8" casing for Pitot test #5: 1/4, 1/2, and 3/4 hrs - 10 oz., 492 MCFD; 1 hr - 9 oz., 464 MCFD. All gauges dry. Shut in test #4: 1/4 hr - 120 psi, 1/2 hr - 210; 3/4 hr - 310; 1 hr - 410 psi. Pressure wellbore to 1000 psi with air then 2000 psi with water, surge well. TIH, had 4' fill.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water with various water sweeps hourly. Very light to no coal returns, no hole problems.

(Cont'd)

11-22-90 Pull into 7-5/8" casing for Pitot test #6: 1/4, 1/2, and 3/4 hrs - 7 oz., 404 MCFD; 1 hr - 6 oz., 372 MCFD (all gauges dry). Shut in test #4: 1/4 hr - 100 psi, 1/2 hr - 200; 3/4 hr - 280; 1 hr - 360 psi. Surge well with 1000 psi. TIH, had 4' fill, no water production.

Pressure wellbore with air to 1000 psig then water to 2000 psig (52 Bbls), after 5 min. DP pressure 600 psig, pressure up with air to 1000 - surge well.

11-23-90 7-5/8" casing at 3638' MD, 3038' TVD; open hole 3638-3850' MD, 3038-3250' TVD.

Pressuring up wellbore with air.

Circulate and work pipe at TD with 1.4 MM air, 1 BPM water, alternating 5-20 Bbl water sweeps hourly. No coal returns, no hole problems.

Pull into 7-5/8" casing for Pitot test #7: 1/4 hr - 5 oz., 354 MCFD, 1/2, 3/4 and 1 hrs - 4-1/2 oz., 331 (all gauges dry). Shut in test #6: 1/4 hr - 110 psi, 1/2 hr - 130; 3/4 hr - 160; 1 hr - 210 psi. Pressure up wellbore to 1000 psi with air. Surge well. TIH, had 5' fill.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water with 5-20 Bbl water sweeps hourly. No coal returns, no hole problems.

Pull into 7-5/8" casing (tight spot @ 3175') for Pitot test #8: 1/4 and 1/2 hrs - 4-1/2 oz., 331 MCFD, 3/4 1 hrs - 4 oz., 309 MCFD (all gauges dry). Shut in test #7: 1/4 hr - 60 psi, 1/2 hr - 140; 3/4 hr - 240; 1 hr - 280 psi.

11-24-90 7-5/8" casing at 3638' MD, 3038' TVD; open hole 3638-3850' MD, 3038-3250' TVD.

Pressuring up with air.

Finish pressuring up with air to 1400 psig. Formation took air at 1400 psig for 15 min. Surged well with 1300 psig air. RIH, 4' fill.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water with 5-20 Bbl water sweeps hourly. Returns coal dust in clear water. No hole problems.

(Cont'd)

11-24-90 Pull into 7-5/8" casing (tight spot @ 3175') for Pitot test #9: 1/4 and 1/2 hr - 5-1/2 oz., 363 MCFD, 3/4 and 1 hrs - 5 oz., 354 MCFD (all gauges dry). Shut in test #8: 1/4 hr - 100 psi, 1/2 hr - 250; 3/4 hr - 300; 1 hr - 360 psi. Pressured up with air to 1400 psi. Formation took air for 15 min. Surged well with 1200 psi. RIH, 6' fill.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water with 5-20 Bbl water sweeps hourly. Returns coal dust in clear water, no hole problems.

Pull into 7-5/8" casing (bit @ 3603') for Pitot test #10: 1/4, 1/2, 3/4 and 1 hrs - 6 oz., 372 MCFD. All gauges dry. Shut in test #9: 1/4 hr - 100 psi, 1/2 hr - 200; 3/4 hr - 250; 1 hr - 300 psi. Pressured up with air to 1400 psig. Formation took air for 15 min. @ 1400 psig.

11-25-90 7-5/8" casing at 3638' MD, 3038' TVD; open hole 3638-3850' MD, 3038-3250' TVD.

Preparing to POOH.

Surged well with 1300 psig. RIH, 3' fill.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water with 5-20 Bbl water sweeps hourly. Returns light coal 1/4" and less (95%) with coal dust in gray to clear water, no hole problems.

Pull into 7-5/8" casing (bit @ 3603') for Pitot test #11: 1/4, 1/2, and 3/4 and hrs - 11 oz., 514 MCFD, 1 hr - 10 oz., 492 MCFD. All gauges dry. Shut in test #10: 1/4 hr - 150 psi, 1/2 hr - 250; 3/4 hr - 310; 1 hr - 350 psi. Pressured up with air to 1400 psig. Formation took air for 15 min. Surge well. RIH 2' fill.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water with 5-2 Bbl water sweeps hourly. Returns light coal 1/4" and less (95%) coal dust in gray to clear water, no hole problems.

Shut down air. Increase pump rate to 7 BPM. Kill well.

11-26-90 7-5/8" casing at 3638' MD, 3038' TVD; open hole 3638-3850' MD, 3038-3250' TVD.

Circulating and working pipe at TD with 1.4 MM air and 1 BPM water.

(Cont'd)

11-26-90 POOH. Pick up RTTS packer. RIH, set packer at 3566' MD.

Rig up Western. Pump 2626 Bbl water at 19 BPM and 4300 psi. ISIP 1800 psi. 5 min. - 1250 psi, 10 min. - 1100 psi, 15 min. - 1000 psi., 60 min. 500 psi. Bleed pressure off. Release packer.

POOH. Laydown RTTS. Pick up 6-3/4" RR and BHA. RIH. Hit bridge at 3750'. Had 20' fill. Circulate with water to TD.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water. Returns water and air, no gas. Recovered 500 Bbl water (2126 Bbl to recover).

11-27-90 Circulating from TD with 1.4 MM air and 1 BPM water.

Circulate from TD with 1.4 MM air and 1 BPM water. Work pipe every 15 minutes or when hole dictates. Returns light coal fines, water and air (no gas).

Recovered 1500± Bbls water; 626± Bbls to recover.

11-28-90 Circulating and working pipe at TD with 1.4 MM air and 1 BPM water.

Circulate and work pipe at TD with 1.4 MM air and 1 BPM water. Returns very light to no coal fines, flame burning inside muffler of one blooie line.

Recovered all load water.

11-29-90 Running 2-3/8" tubing.

Pressure up wellbore with 1000 psi air, surge well every hour. Returns on surge - air, water, and coal fines in gray water, then small amount of gas. Have 10-15' flare when air is shut off.

Lay down drill pipe and drill collars.

Rabbit and strap 2-3/8" tubing. Rig up floor to run tubing.

Run 114 jts (3605.43') 2-3/8" 4.7# J-55 8rd USS FBNAU tubing, set at 3621.42'; expendable check on bottom, F nipple (1.875" ID) at 3588.49'. (MLS/AR)

Completion operations suspended 8:00 a.m. 11-29-90.

Rig released 8:00 a.m. 11-29-90