

State of New Mexico
Energy, Minerals and Natural Resources Dept.
OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-103
Revised 1-1-89

WELL API NO.:

30-045-27991

5. Indicate Type of Lease
State: X Fee:

6. State Oil & Gas Lease No.:

E-178-1

7. Lease Name/Unit Agrmt Name:

N. E. Blanco Unit

8. Well No.:

504

9. Pool Name or Wildcat:
Basin Fruitland Coal

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

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

2. Name of Operator: Blackwood & Nichols Co, A Limited Partnership

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

4. Well Location N
Unit Letter N 1100 Feet From The South Line and 1480 Feet From the West Line
Section 16, Township 31N, Range 7W, NMPH San Juan County

10. Elevation (Show wheter DF, RKB, RT, GR, etc)
6540 GR

11. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

_____ Perform Remedial Work

_____ Remedial Work

_____ Altering Casing

_____ Temporarily Abandon

_____ Commence Drilling Opns.

_____ Plug and Abandonment

_____ Pull of Alter Casing

_____ Casing Test and Cement Job

_____ Plug of Abandon

X Other: COMPLETION

_____ Change Plans

_____ Other:

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work.) SEE RULE 1103.

RECEIVED
JAN 5 1991
OIL CON. DIV.
DIST. 3

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

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed: R. W. Williams

Title: ADMINISTRATIVE MANAGER

Date: 1/14/91

Roy W. Williams Phone: (303) 247-0728

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

Completion Report

Northeast Blanco Unit #504 - Basin Fruitland Coal

LOCATION: 1100' FSL, 1480' FWL
Section 16, T31N, R7W
San Juan County, New Mexico

11-30-90 7" casing at 3083'.

WOC.

WOC. Nipple down, set slips and cut off. Nipple up and rig up for completion operations.

12-01-90 7" casing at 3083'; open hole 3083-3310'.

Drilling Fruitland formation at 3310' with 8000# WOB, 80 RPM, and 6 BPM water out one blooie line. Had 12-14' flare.

WOC 2 hours. Pressure test blind rams and manifold to 2000 psig for 30 minutes.

Pick up Smith 6-1/4" FDTL bit, SN #KP9771 (jets: 22-22-22), bit sub, string float, one 4-3/4" drill collar, N nipple (1.875" ID), nine 4-3/4" drill collars, 1 jt 3-1/4" drill pipe, F nipple (2.25" ID), safety sub (BHA = 341.29'), and 85 jts 3-1/2" drill pipe.

TIH, tag cement at 3022'. Pressure test #1 and #3 pipe rams, HCR valves, casing valves, and manifold. Everything holding except 2" mud cross valve. Drill cement and float at 3039' to guide shoe. Installed new 2" valve on mud cross. Pressure test to 2000 psi for 10 minutes - held OK.

Drill 7' casing shoe at 3083' and Fruitland formation from 3083' to 3310'.

12-02-90 7" casing at 3083'; open hole 3083-3416'.

Circulating and working pipe at TD with 1 BPM water.

Drill Fruitland formation from 3310-3416' with 8000# WOB, 30 RPM, and 6 BPM out one blooie line with 14' flare.

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

(Cont'd)

12-02-90	Coal Intervals:	3118-3120'	2'
		3135-3139'	4'
		3140-3146'	6'
		3161-3163'	2'
		3164-3169'	5'
		3190-3194'	4'
		3195-3206'	11'
		3207-3210'	3'
		3213-3214'	1'
		3232-3233'	1'
		3236-3239'	3'
		3406-3407'	<u>1'</u>
		Total	43'

PC Tongue	-	3285'
Top Main P.C.	-	3413'
Total Depth	-	3416'

12-03-90 7" casing at 3083'; open hole 3083-3416'.

Circulating and working pipe at TD with 2 MM air and 1-1/2 BPM water with 20 Bbl water sweeps.

Increase pump rate from 1 to 5 BPM water. Open both blooie lines. Bring one MM air on line. Circulate and work pipe with 1 MM air and 5 BPM, decreasing to 1/2 BPM water.

Circulate and work pipe with 2 MM air and 1/2 BPM water, alternating 10 and 20 Bbl water sweeps every hour. Returns on sweeps light 1/8" and smaller coal (85%) with shale and siltstone in gray water.

12-04-90 7" casing at 3083'; open hole 3083-3416'.

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

Lay down 11 jts drill pipe. Thaw out manifold line, run pitot test #1 and shut in test #1. Pitot test: 1/4 hr - 8 psi, 1756 MCFD (dry); 1/2 hr - 9 psi, 1865 (mist); 3/4 hr - 10 psi, 1948 (mist); 1 hr - 11 psi, 2039 MCFD (mist). Shut in test: ISIP - 200 psi; 1/4 hr - 600; 1/2 hr - 1050; 3/4 hr - 1100; 1 hr - 1175; 1-1/4 hrs - 1200 psi. Surge well with 1200 psi (build up pressure). TIH, had 5' fill.

Clean out to TD with 2 MM air and 1/2 BPM water alternating 10 and 20 Bbl water sweeps hourly. Returns moderate to light 1/4" and less coal (98%) in black to clear water.

(Cont'd)

12-04-90 Lay down 11 jts drill pipe, surge well with 1000 psi air; repeat three times. TIH, no fill.

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

Estimate water @ 24 BPD.

12-05-90 7" casing at 3083'; open hole 3083-3416'.

Circulating and working pipe at TD with 3 MM air and 1/2 BPM water with 25 Bbl water sweeps hourly.

Lay down 11 jts drill pipe. Gauge well through 2": 1/4, 1/2, 3/4, and 1 hr - 12 psi, 2148 MCFD (dry). Shut well in. Build pressure to 1200 psi: 1/4 hr - 400 psi; 1/2 hr - 800; 3/4 hr - 1100; 1 hr - 1200 psi. Surge well twice. TIH, had 4' fill.

Circulate and work pipe at TD with 2 MM air and 1/2 BPM water with 10 Bbl water sweeps hourly. Returns light 1/16" and less coal (98%) in clear water.

Circulate and work pipe at TD with 3 MM air and 1/2 BPM water with 25 Bbl water sweeps hourly. Returns light 1/16" and less coal (98%) in clear water.

Estimate 24 BPD water.

12-06-90 7" casing at 3083'; open hole 3083-3416'.

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

Circulate and work pipe at TD with 3 MM air and 1/2 BPM water with 25 Bbl water sweeps hourly. Returns light 1/16" and less coal (98%) in clear water.

Pull 11 jts 3-1/2" drill pipe, gauge well through 2" line: 1/4 hr - 12.5 psi, 2189 MCFD; 1/2, 3/4, and 1 hr - 13 psi, 2237 MCFD (all gauges mist). Surge well twice with air and water @ 1300 psi. TIH, had 3' fill.

Circulate and work pipe at TD with 3 MM air and 1/2 BPM water with 25 Bbl water sweeps hourly. Returns light 1/16" and less coal (98%) in clear water; light 1/8" and less coal on sweeps in clear water.

(Cont'd)

12-08-90 Circulate and work pipe 3338-3416' with 2 MM air and 4 BPM water. Returns heavy to moderate 1/2" and less coal (98%) with moderate floating powder in black to gray water.

Circulate and work pipe at TD with 2 MM air and 4 BPM water, reducing 1/2 Bbl water every hour. Returns moderate 1/4" to coal fines in gray water.

Circulate and work pipe at TD with 2 MM air and 4 BPM water. Returns heavy 1/4" and less in black water.

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

12-09-90 Waiting on daylight to snub 5-1/2" liner in hole.

Circulate and work pipe at TD with 2 MM air and 1/2 BPM water with 25 Bbl water sweeps hourly. Returns light 1/8" and less coal in clear water.

Kill well with water holding 150 psi at surface. POOH with drill pipe and drill collars.

Nipple down top BOP, nipple up snubbing stack. Wait on daylight.

12-10-90 Stripping out of hole laying down drill pipe and drill collars.

Run 12 jts 5-1/2" liner, pick up Baker hydraulic liner hanger.

Change rams and slips, run 3-1/2" drill pipe, fill pipe every 12 stands with water.

Wash on bridge at 3214', wash through bridge, wash to TD.

Drop ball to set slips and packoff. Nothing sheared until pressure reached 2400 psi, hanger did not set or packoff. Drop pump down plug, pressured to 3500 psi, slips and packoff did not set. Setting tool released.

POOH laying down drill pipe holding 150 psi at surface.

Ran 12 jts (369.63') 5-1/2" 17# K-55 USS casing with Baker 7 x 5-1/2" SLPR hanger, set at 3416' with top of

12-11-90 Rig released.

POOH with drill pipe and drill collars.

Rig up to snub 2-3/8" tubing in hole.

Pick up 2-3/8" tubing, 4-3/4" expendable mill-check on bottom, with F nipple (1.81" ID) 1 jt up. Tag hanger top at 3046'.

Mill on perfs 3111-3416' flowing back through 3/4" choke.

Lay down 2 jts 2-3/8" tubing, land tubing.

Nipple down BOPs, nipple up upper tree. Drop ball, pump mill off with 1400 psi, blow well through tubing.

Ran 107 jts (3336.41') 2-3/8" 4.7# J-55 8rd USS EUE FBNAU with expendable mill-check set at 3350.41' with F nipple (1.81" ID) at 3316.87'.

Final gauge 2148 MCFD (dry); 25 BPD water.

Rig down.

(Cont'd)

12-08-90 Circulate and work pipe 3338-3416' with 2 MM air and 4 BPM water. Returns heavy to moderate 1/2" and less coal (98%) with moderate floating powder in black to gray water.

Circulate and work pipe at TD with 2 MM air and 4 BPM water, reducing 1/2 Bbl water every hour. Returns moderate 1/4" to coal fines in gray water.

Circulate and work pipe at TD with 2 MM air and 4 BPM water. Returns heavy 1/4" and less in black water.

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

12-09-90 Waiting on daylight to snub 5-1/2" liner in hole.

Circulate and work pipe at TD with 2 MM air and 1/2 BPM water with 25 Bbl water sweeps hourly. Returns light 1/8" and less coal in clear water.

Kill well with water holding 150 psi at surface. POOH with drill pipe and drill collars.

Nipple down top BOP, nipple up snubbing stack. Wait on daylight.

12-10-90 Stripping out of hole laying down drill pipe and drill collars.

Run 12 jts 5-1/2" liner, pick up Baker hydraulic liner hanger.

Change rams and slips, run 3-1/2" drill pipe, fill pipe every 12 stands with water.

Wash on bridge at 3214', wash through bridge, wash to TD.

Drop ball to set slips and packoff. Nothing sheared until pressure reached 2400 psi, hanger did not set or packoff. Drop pump down plug, pressured to 3500 psi, slips and packoff did not set. Setting tool released.

POOH laying down drill pipe holding 150 psi at surface.

Ran 12 jts (369.63') 5-1/2" 17# K-55 USS casing with Baker 7 x 5-1/2" SLPR hanger, set at 3416' with top of hanger at 3046'; 37' overlap; perfs (4 HPF) 3416-3397' and 3263-3111'.