

*(December 1989)

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

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

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

5. Lease Designation & Serial #:

SF-078988

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.# 486

9. API Well No.:

30-045-27775

10. Field & Pool/Expltry Area:

Basin Fruitland Coal

11. County or Parish, State:

San Juan, New Mexico

SUBMIT IN TRIPLICATE1. 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)

1470' FSL, 865' FWL - Section 19, T31N, R6W

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 open hole "stress relieve" type coal completion.

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

Signed: R. W. Williams ROY W. WILLIAMS

Title: ADMINISTRATIVE MANAGER

Date: 9/17/90

RECEIVED
OCT 1 1990
OIL CON. DIV.
DIST. 3

ACCEPTED FOR RECORD

(This space for Federal or State office use)

Approved By _____ Title _____

Conditions of approval, if any:

Date SEP 24 1990

FARMINGTON RESOURCE AREA

BY MT

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 486 - Basin Fruitland Coal

LOCATION: 2210' FSL, 1795' FWL
Section 19, T31N, R6W,
San Juan County, New Mexico

7-15-90 7" casing at 2945'.

Picking up 3-1/2" drill pipe.

Move in and rig up Aztec Well Service Rig No. 56.

Pressure test blind rams and manifold to 2000 psi for 30 minutes - held OK.

Pick up Smith 6-1/4" FDT bit, SN# KP-1622 (jets: 20-20-20), bit sub, float sub, one 4-3/4" drill collar, N nipple (1.87" ID), 10 drill collars, F nipple (2.25" ID), and safety sub. BHA = 378.29'.

Pick up 79 jts 3-1/2" drill pipe.

7-16-90 7" casing at 2945'; 6-1/4" open hole 2945-3250'.

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

Pick up 3-1/2" drill pipe, tag cement at 2865'.

Pressure test 7" casing, 3-1/2" rams, HCR valves to 2000 psi - held OK.

Tag cement at 2865'. Drill float at 2909'; shoe at 2952'.

Drill Fruitland coal 2952-3250' with 10,000# WOB, 100 RPM @ 250 psi. Circulate and work pipe at TD with 5.5 BPM water, 0 psi. 30' flare through 1 blooie line. Returns 1/4" to 1/8" coal in clear water. Reduce pump 1 BPM every 2 hours.

(Cont'd)

7-15-90 Circulate and work pipe at TD with 1 MM air and 2 BPM water. Returns moderate to heavy 1/4" and smaller coal (95%), shale and siltstone in clear water.

Coal Intervals:	2961-2962'	1'
	2975-2976'	1'
	2991-2992'	1'
	2998-2999'	1'
	3001-3003'	2'
	3006-3010'	4'
	3011-3014'	3'
	3019-3020'	1'
	3021-3022'	1'
	3036-3038'	2'
	3039-3041'	2'
	3047-3048'	1'
	3078-3095'	17'
	3098-3100'	2'
	3109-3118'	9'
	3122-3124'	2'
	3129-3131'	<u>2'</u>
	Total	52'

Top PC Tongue -	3136'
Top Main P. C. -	3247'
Total Depth -	3250'

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

Completion Report

Northeast Blanco Unit No. 486 - Basin Fruitland Coal

LOCATION: 2210' FSL, 1795' FWL
Section 19, T31N, R6W,
San Juan County, New Mexico

- 7-17-90 7" casing at 2952'. 6-1/4" open hole at 2952'-3250' TD.
Circulating and working pipe at TD with 2 compressors and
1 booster with 1.5 BPM water.
Circulate and work pipe at TD with 1 compressor and 1
booster with 2 BPM water at 175 psi. Returns moderate
1/4" and less coal (95%), shale and siltstone in clear
water.
Circulate and work pipe at TD with 1 compressor and 1
booster with 2 BPM water. Returns moderate 1/8" and less
coal (95%), shale and siltstone in clear water.
Circulate and work pipe at TD with 2 compressors and 1
booster with 1.5 BPM water at 250 psi. Returns moderate
to light 1/8" powder coal (98%), shale and siltstone in
clear water.

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 486 - Basin Fruitland Coal

LOCATION: 2210' FSL, 1795' FWL
Section 19, T31N, R6W,
San Juan County, New Mexico

7-18-90 7" casing at 2952'. 6-1/4" open hole at 2952'-3250' TD.

Circulating and working pipe with 2 MM air and 1 BPM water.

Circulate and work pipe with 2 MM air and 1-1/2 BPM water. Returns light 1/8" and less coal (98%), shale and siltstone in clear water.

Circulate and work pipe with 2 MM air and 10 Bbl water sweeps every 30 minutes. Returns on sweeps, same as above.

Hole fell in, pull 3 jts. Clean out to TD with 2 MM air and 3-1/2 BPM water. Returns heavy 3/4" and less coal in clear water.

Circulate and work pipe with 2 MM air and 3-1/2 BPM decreasing to 1 BPM water. Returns moderate to light 1/2" and less coal (98%), shale and siltstone in clear water.

Circulate and work pipe with 2 MM air and 1 BPM water. Returns light 1/4" and less coal (98%), shale and siltstone in clear water.

Estimated gas - 1.0 to 1.5 MMCFD.

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 486 - Basin Fruitland Coal

LOCATION: 2210' FSL, 1795' FWL
Section 19, T31N, R6W,
San Juan County, New Mexico

7-19-90 7" casing at 2952'. 6-1/4" open hole at 2952'-3250' TD.

Circulating and working pipe with 2 MM air and 1 BPM water.

Circulate and work pipe with 2 MM air and 1 BPM water. Returns light 1/8" coal, shale and siltstone in clear water with occasional slugs of 1/2" coal, shale and siltstone in clear water.

Pull into 7" casing to pitot gauge well through 2" line: 1/4, 1/2 and 3/4 hr - 10 oz., 492 MCFD; 1 hr - 8 oz., 434 MCFD (all gauges dry).

Shut in well to monitor pressure build-up: 1/4 hr -150 psi; 1/2 hr - 300; 3/4 hr - 425; 1 hr - 500 psi. Bleed well down through choke.

Bucket test - 123 BPD water. TIH, no fill.

Circulate and work pipe with 2 MM air and 1 BPM water. Returns light 1/8" and less coal, shale and siltstone in clear water with occasional slugs of 1/2" coal, shale and siltstone in clear water.

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 486 - Basin Fruitland Coal

LOCATION: 2210' FSL, 1795' FWL
Section 19, T31N, R6W,
San Juan County, New Mexico

7-20-90 7" casing at 2952'; 6-1/4" open hole at 2952'-3250' TD.

Circulating and working pipe with 3 MM air and 2 BPM water.

Circulate and work pipe at TD with 3 MM air and 1 BPM water. Returns light 1/8" coal, shale and siltstone in clear water with occasional slugs of heavy 1/2" coal, shale and siltstone in clear water.

Pull into 7" casing to pitot gauge well through 2" line:
1/4 hr - 26 oz., 776 MCFD (dry); 1/2 hr - 24 oz., 752 (dry); 3/4 hr - 22 oz., 707 (dry); 1 hr - 19 oz., 667 MCFD (mist).

TIH. Clean out with air and water; 20' bridge 3091-3111' and 12' of fill on bottom.

Circulate and work pipe at TD with 3 MM air and 1 BPM water. Returns light 1/8" coal, shale and siltstone in clear water.

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 486 - Basin Fruitland Coal

LOCATION: 2210' FSL, 1795' FWL
Section 19, T31N, R6W,
San Juan County, New Mexico

7-21-90 7" casing at 2952'; 6-1/4" open hole at 2952'-3250' TD.

Circulating and working pipe with 2 MM air and 2 BPM water.

Circulate and work pipe with 3 MM air and 15 Bbl water sweeps every 30 minutes. Returns on sweeps, 1/8" coal, shale and siltstone in clear water.

Pull into 7" casing to pitot gauge well through 2" line:
1/4 hr - 25 oz., 763 MCFD; 1/2 hr - 23 oz., 726; 3/4 hr -
20 oz., 700; 1 hr - 18 oz., 646 MCFD (all gauges dry).

Bucket test - 177 BPD water.

TIH, tag bridge at 3210'. Clean out with air and water. Hole sticky. Returns heavy 1/2" coal (98%), shale and siltstone in black water; decreasing to light 1/8" coal, shale and siltstone in clear water.

Circulate and work pipe with various rates of air and water in attempt to stop hole from falling in. Hole sticky and sloughing. Returns heavy 1/2" coal, shale and siltstone in black water (lots of floating coal).

7-22-90 7" casing at 2952'; 6-1/4" open hole at 2952'-3250' TD.

Circulating and cleaning out at 3118' with water.

Circulate and work pipe at TD with 2 MM air and 2 BPM water. Returns heavy 1/2" and less coal and coal fines, shale and siltstone in black water.

Circulate and work pipe at TD with 2 MM air and 1 BPM water. Returns heavy 1/2" and less coal, coal fines, shale and siltstone in black water, decreasing to light 1/8" coal, shale and siltstone in clear water.

(Cont'd)

7-22-90 Pull into 7" casing to pitot gauge well through 2" line:
1/4 hr - 35 oz., 910 MCFD; 1/2 hr - 38 oz., 952; 3/4 hr -
35 oz., 910; 1 hr - 30 oz., 823 MCFD (all gauges dry).

TIH, tag at 3095'.

Clean out bridge 3095-3115' with 2 MM air and 3.5 BPM water. Hole sticky and sloughing, high torque and drag. Returns heavy 1/2" coal, coal fines, shale and siltstone in clear water.

Circulate and work pipe at TD with 2 MM air and 2 BPM water. Lost circulation, pulled 6 jts (3053'). Clean out 3053'-TD with air and water. Returns heavy coal, shale and siltstone in black water.

Hole sloughed, pull up to 3087'. Clean out 3087-3118' with water. Returns heavy 1/2" coal, shale and siltstone in black water.

7-23-90 7" casing at 2952'; 6-1/4" open hole at 2952'-3250' TD.

POOH with 4-3/4' drill collars.

Circulate and clean out 3118-3150' with water with heavy 1/4" coal (98%), shale and siltstone in black water. Hole sticky, sloughy, and torque.

Circulate and work pipe with 4 BPM water only. Tried to bring on air twice and stuck pipe each time.

Pull 2 jts, stuck pipe at 3187'. Worked pipe free and went back to bottom; no fill, no problems. Pull back into 7". TIH, clean out 10' of fill.

Circulate and work pipe with 4.5 BPM. Returns light 1/8" and less coal (98%), shale and siltstone in clear water.

Short trip. Clean out 8' fill.

POOH. Prepare to run 5-1/2" liner.

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 486 - Basin Fruitland Coal

LOCATION: 2210' FSL, 1795' FWL
Section 19, T31N, R6W,
San Juan County, New Mexico

7-24-90 7" casing at 2952'; 6-1/4" open hole at 2952'-3250' TD.

Cleaning out 3087-3118' with water only.

Finish POOH, change over and prepare to run 5-1/2" liner.

Pick up shoe, 9 jts 5-1/2" casing, Brown 7" x 5-1/2" mechanical liner hanger, TIH on 3-1/2" drill pipe, tag at 3043'.

Circulate and rotate 3043-3172', unable to circulate and rotate at same time. 200 psi pump pressure would stop pipe from rotating.

POOH, lay down liner hanger and stand back 5-1/2" casing.

Change over and prepare to TIH with drill collars and drill pipe.

Pick up new STC FDT-L 6-1/4" bit, SN# KM-8122 (jets:20-20-20), BHA, and TIH on 3-1/2" drill pipe, tag at 3045'.

Wash and ream 3045-3118' with 5.5 BPM water. Returns heavy 1/2" coal powder (95%), shale and siltstone in black water. Hole sticky and tight.

BLACKWOOD & NICHOLS Co., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 486 - Basin Fruitland Coal

LOCATION: 2210' FSL, 1795' FWL
Section 19, T31N, R6W,
San Juan County, New Mexico

7-25-90 7" casing at 2952'; 6-1/4" open hole at 2952'-3250' TD.

Short trip to 7" casing.

Clean out to 3118' - 3250' TD with 5.5 BPM water. Hole sticky and tight. Unloading 3/4" and less coal in black water.

Circulate and work pipe at TD with 5.5 BPM water. Returns light to moderate 1/8" and less coal (98%), shale and siltstone in gray water.

Circulate and work pipe at TD with 5.5 BPM water. Returns light 1/8" and less coal (98%), shale and siltstone in clear water.

Short trip to 7" casing.

BLACKWOOD & NICHOLS CO., LTD.
P.O. BOX 1237
DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 486 - Basin Fruitland Coal

LOCATION: 2210' FSL, 1795' FWL
Section 19, T31N, R6W,
San Juan County, New Mexico

7-26-90 7" casing at 2952'; 6-1/4" open hole at 2952'-3250' TD.

Circulating and working pipe at 3087' - 3118' with 3.5 MM air and 4.5 BPM water.

Finish short trip. Had 8' of fill on bottom.

Circulate and work pipe with 5.5 - 1 BPM water. Returns light coal, shale and siltstone in clear water.

Circulate and work pipe with 1 MM air and 4.5 BPM water. Pipe got stuck. Pull up to 3087'; pipe free.

Clean out 3087' - 3118' with 4.5 BPM water with moderate heavy coal in black water, decreasing to light coal in clear water.

Circulate and work pipe at 3087' - 3118' with 2 MM air and 4.5 BPM heavy 1/4" coal, shale and siltstone in black water with occasional 1" shale chunks.

Circulate and work pipe at 3087' - 3118' with 3.5 MM air and 5.5-2.5 BPM water. Hole becomes sticky when rate is reduced to less than 3.5 BPM. Returns heavy 3/4" and less coal (98%), shale and siltstone in black water. Gas increasing.

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 486 - Basin Fruitland Coal

LOCATION: 2210' FSL, 1795' FWL
Section 19, T31N, R6W,
San Juan County, New Mexico

7-27-90 7" casing at 2952'; 6-1/4" open hole at 2952'-3250' TD.

Circulating and working pipe at TD.

Circulate and work pipe at 3087-3118' with 3.5 MM air and 3.5 BPM water. Hole sticky at times. Returns heavy 1/4" and less coal (98%), shale and siltstone in black water decreasing to light 1/8" and less coal, shale and siltstone in clear water.

Circulate and work pipe 3118-3150' with 3.5 MM air and 3.5 BPM water. Returns heavy 3/4" coal (98%), shale and siltstone in black water. Stuck pipe at 3132'. Cut water and air - pipe free. Resume circulating with 1.5 MM air and 1.5 BPM water. Unload large slug of heavy coal in black water, decreasing to light coal in clear water.

Clean out 3150-3250' with 1.5 MM air and 1.5 BPM water. Returns light 1/8" coal (98%), shale and siltstone in clear water.

Circulate and work pipe at TD with 1.5 MM air and 1.5 BPM water. Returns same as above.

Short trip to 7"; 10' bridge at 3090' and 15' of soft fill at TD.

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 486 - Basin Fruitland Coal

LOCATION: 2210' FSL, 1795' FWL
Section 19, T31N, R6W,
San Juan County, New Mexico

7-28-90 7" casing at 2952'; 5-1/2" liner 2873-3236'.

Picking up power swivel to drill liner plugs.

Circulate and work pipe at TD with 2 MM air and 1.5 BPM water. Returns light 1/8" coal (95%), shale and siltstone in clear water.

Short trip, tight spot at 3213'. TIH, had 5' fill, no sign of tight spot. POOH to run liner, no drag.

Rig up to run 5-1/2" casing. Gauge well through 2" line: 1/4 hr - 12 psi, 2237 MCFD (dry); 1/2 and 3/4 hr - 14 psi, 2326 MCFD (dry); 1 hr - 14 psi, 2326 MCFD (mist).

Run 9 jts 5-1/2" casing, pick up Baker hanger. TIH with 3-1/2" drill pipe, hit bridge at 3108' and fill at 3127'.

Circulate and rotate liner from 3127' to 3236'. Set liner at 3236', 14' off bottom.

Run 9 jts (363.30') 5-1/2" 17# K-55 Alpine casing and Baker 7" x 5-1/2" Hi-flo III liner hanger, set at 3236'.

Perfs (4 HPF): 2920.77-3117.06'

Top of hanger: 2873.14' 4 jts blank (full)

Overlap: 78.86' 5 jts perf'd (full)

POOH, lay down drill pipe and drill collars.

Change rams, rig up to run 2-3/8" tubing.

Pick up 4-3/4" plug mill, bit sub, 1 jt 2-3/8" tubing, F nipple (1.81" ID). TIH with 2-3/8" tubing, top perf at 2922'.

Pick up power swivel.

7-29-30 7" casing at 2952'; 5-1/2" liner 2873-3236'.

Rig released.

Drill plugs from 2922-3117', tag bottom at 3234'.

Lay down 4 jts 2-3/8" tubing, lay down mill and bit sub.

Pick up expendable check, TIH. RIh 101 jts (3121.37')
2-3/8" 4.7# K-55 FBNAU USS tubing, set at 3135.97' with
top of F nipple at 3103.13'.

Nipple down BOPS, nipple up tree, pump off expendable
check, blow well around with air.

Rig down to move. Gauge well: 1/4 hr - 14 psi, 2326
MCFD; 1/2 and 3/4 hr - 12 psi, 2148 MCFD; 1 hr - 11 psi,
2039 MCFD (all gauges wet).

Release rig at 6:00 a.m., 7-29-90.