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 #:

## 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

NM-03358
6. If Indian, Allottee/Tribe Name

| USE AFFEIGHTION FOR FEMILE TO SUCH PROPOSETS                            | 7. If Unit or CA, Agmt. Design.:   |  |
|---|--|--|
| SUBMIT IN TRIPLICATE LIFE CO. A. A. C. C. C. C.                         | Northeast Blanco Unit  |  |
| 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.# 490  |  |
| 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) | 30-045-27567   |  |
| 1904' FNL, 790' FEL - Section 14, T31N, R7W                             | 10. Field & Pool/Expltry Area:  Basin Fruitland Coal  11. County or Parish, State: |  |
|   | San Juan, New Mexico   |  |

| 12.                      | CHECK APPROPRIATE B      | OX(s) TO I        | NDICATE NATURE OF NOTICE, REF                | ORT, OR OTHER DA | TA                               |
|--------------------------|--------------------------|-------------------|--|------------------|----------------------------------|
|                          | TYPE OF SUBMISSION       | TYPE OF ACTION    |  |                  |                                  |
|                          | _                        |                   | Abandonment                                  |                  | Change of Plans                  |
|                          | Notice of Intent         |                   | Recompletion                                 |                  | New Construction                 |
| Final Abandonment Notice |                          | l                 | Plugging Back                                |                  | Non-Routine Fracturing           |
|                          |                          | Casing Repair     |  | Water Shut-Off   |                                  |
|                          | Final Abandonment Notice |                   | Altering Casing                              |                  | Conversion to Injection          |
|                          | x                        | Other: COMPLETION |  |                  |                                  |
|                          |                          |                   | (Note: Report result<br>or Recompletion Repo |                  | mpletion on Well Completion<br>) |

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



| 14. I hereby certify that the foregoing is true and correct.                         |                    | OIL CON DAY                                  |  |  |
|--|--------------------|--|--|--|
| Signed: R. M. Williams   | _ ROY W. WILLIAMS  | Title: ADMINISTRATIVE MANAGER Date: 11/28/90 |  |  |
|  |                    | ACCEPTED FOR RECORD                          |  |  |
| (This space for Federal or State o<br>Approved By<br>Conditions of approval, if any: | e office use)Title | JAN 0 4 1991                                 |  |  |
|  |                    | FARMINGTON RESOURCE AREA                     |  |  |
|  |                    | PY JET                                       |  |  |

<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.)\*

Completion Report

Northeast Blanco Unit No. 490 - Basin Fruitland Coal

LOCATION: 1904' FNL, 790' FEL Section 14, T31N, R7W San Juan County, New Mexico

10-14-90 Picking up drill pipe.

Move in and rig up Big "A" Rig No. 25. Nipple up BOP. Pressure test blind rams and 7" casing to 2000 psig for 30 minutes - held OK.

Pick up 6-1/4" Smith FDTL bit, SN# KT6001 (jets: 20-20-20), float sub, 1 drill collar, F nipple (1.871" ID), 10 drill collars, 1 jt 3-1/2" drill pipe, and F nipple (2.25" ID).

10-15-90 7" casing at 3001'; open hole 3001-3390'.

Drilling Fruitland coal formation with 6-1/2 BPM water, 10,000# WOB, and 70 RPM @ 800 psi.

Pick up drill pipe, tag cement at 2961'. Dig out blow pit with back hoe.

Drill cement 2961' to shoe at 3001'. Drill Fruitland coal 3001-3390'; 388' in 12-1/2 hours. Have 3-5' flare.

10-16-90 7" casing at 3001'; open hole 3001-3413'.

Circulating and working pipe at TD with 2 MM air and 1 BPM water. Returns light 1/8" coal in clear water.

Drill Fruitland coal to TD with 6-1/2 BPM water, 6000# WOB, and 90 RPM @ 800 psi. Had 5' flare.

| ( | Co | nt | 1 | d) |
|---|----|----|---|----|
|---|----|----|---|----|

| 10-16-90 | Coal Intervals: | 3033-3034' | 1'  |
|----------|-----------------|------------|-----|
|          |                 | 3095-3096' | 1'  |
|          |                 | 3106-3107' |     |
|          |                 | 3112-3114' | 2'  |
|          |                 | 3128-3131' | 3 ' |
|          |                 | 3137-3141' | 4 ' |
|          |                 | 3142-3148' | 61  |
|          |                 | 3232-3142' | 10' |
|          |                 | 3244-3246' | 2'  |
|          |                 | 3247-3248  | 1'  |
|          |                 | 3249-3260' | 11' |
|          |                 | 3276-3278' | 2 ' |
|          |                 | 3291-3292' | 1'  |
|          |                 | 3293-3301' | 8'  |
|          |                 | 3311-3314' | 3 ' |
|          |                 | 3401-3411' | 10' |
|          |                 | Total      | 661 |
|          |                 | Total      | 66' |

Top P.C. Tongue - 3316'
Top Main P.C. - 3411'
Total Depth - 3413'

Circulate hole with 6-1/2 BPM water, drop pump rate 1 BPM hourly to 3-1/2 BPM. Returns very light 1/8" coal (98%) in clear water.

Circulate and work pipe at TD with 1 BPM water. Returns light 1/4" and smaller coal (98%) in black to clear water.

10-17-90 7" casing at 3001'; open hole 3001-3413'.

Circulating and working pipe at TD with 2 MM air and 1 BPM water. Returns light 1/8" coal in clear water.

Circulate and work pipe at TD with 2 MM air and 1 BPM water with 10 Bbl water sweeps hourly. Returns heavy coal on sweeps, reducing to light 1/8" coal (98%) in black to clear water.

Have 12-15' flare.

10-18-90 7" casing at 3001'; open hole 3001-3413'.

Circulating and working pipe at TD with 2 MM air and 1 BPM water with 20 Bbl water sweeps hourly. Returns light 1/8" and smaller coal (98%) in clear water.

(Cont'd)

10-19-90 Circulate and work pipe at TD with 3 MM air and 1-1/2 BPM water with 20 Bbl water sweeps hourly. Returns on sweeps heavy 1/4" and smaller coal in black water.

Have 25' flare.

10-20-90 7" casing at 3001'; open hole 3001-3413'.

Circulating and working pipe at TD with 3 MM air and 1 BPM water with 20 Bbl water sweeps hourly. Returns 1/8" and less coal (95%) in gray water.

Circulate and work pipe at TD with 3 MM air and 1 BPM water with 20 Bbl water sweeps hourly. Returns on sweeps heavy to moderate; between sweeps light 1/8" and less coal (99%) in gray water.

10-21-90 7" casing at 3001'; open hole 3001-3413'.

Changing rams to 5-1/2".

Circulate and work pipe at TD with 2 MM air and 1 BPM water with 20 Bbl water sweeps hourly. Returns heavy to moderate coal on sweeps; returns between sweeps moderate 1/4" and smaller coal (95%) in black to gray water.

Load hole with water, pump across stack with 300 psi. Pull 20 stands and rig up Cudd.

Strip out of hole with 3-1/2" drill pipe and 4-3/4" drill collars. Change rams to 5-1/2". Rig up to run 5-1/2" liner.

10-22-90 7" casing at 3001'; open hole 3001-3413'.

Washing to bottom with 5-1/2" liner at 3084'.

Pick up and snub 5-1/2"liner in hole.

Wait on 1 jt 5-1/2" csg (damaged threads on 1 jt casing).

Finish snubbing 5-1/2" liner, change rams to 3-1/2" and strip drill pipe in hole. Hit bridge at 3066'. Pick up swivel.

Wash 5-1/2" liner from 3066-3084'.

10-23-90 7" casing at 3001'; 5-1/2" liner 2963-3412' (37.69' overlap).

Picking up swivel to mill liner plugs.

(Cont'd)

10-18-90 Lay down 12 jts drill pipe for pitot test #1: 1/4 hr - 6 oz., 372 MCFD; 1/2 hr - 5 oz., 354; 3/4 and 1 hr - 10 psi, 1948 MCFD (all gauges wet).

Shut in test: 1/4 hr - 150 psi; 1/2 hr - 325; 3/4 hr - 450; 1 hr - 600; 1-1/4 hrs - 750 psi.

Bucket test - 690 BPD water.

Surge well with 750 psi, TIH, tag bridge @ 3262', wash through bridge. Returns heavy coal and powder. Clean out to TD, returns at TD heavy to light 1/4" and smaller coal (98%) in black to clear water.

Circulate and work pipe at TD with 2 MM air and 1 BPM water alternating 10 and 20 Bbl water sweeps each hour. Returns on sweeps moderate coal; between sweeps light 1/8" and smaller coal in gray to clear water.

Load hole with water, pump 200 Bbls in formation @ 6-1/2 BPM @ 1800 psi, let well unload.

Circulate and work pipe at TD with 2 MM air and 1 BPM water running 20 Bbl water sweeps hourly. Returns moderate to light 1/4" and smaller coal (98%) in gray to clear water.

10-19-90 7" casing at 3001'; open hole 3001-3413'.

Circulating and working pipe at TD with 3 MM air and 1-1/2 BPM water with 20 Bbl water sweeps hourly. Returns moderate 1/8" and smaller coal (99%) in gray water.

Circulate and work pipe at TD with 2 MM air and 1 BPM water with 20 Bbl water sweeps hourly. Returns light 1/8" and smaller coal (99%) in clear water.

Circulate and work pipe at TD with 3 MM air and 1 BPM water with 20 Bbl water sweeps hourly. Returns light 1/8" and smaller coal (99%) in gray water.

Pull into 7" for pitot test #2: 1/4 hr - 50 oz., 1150 MCFD; 1/2 and 3/4 hr - 8 psi, 1756; 1 hr - 7 psi, 1644; 1-1/4 hrs - 6 psi, 1520 MCFD.

Shut well in 1 hr: ISIP -170 psi; 1/4 hr - 370 psi; 1/2 hr - 515; 3/4 hr - 750; 1 hr - 850 psi. Surge well with 850 psi.

TIH, hit bridge at 3375', wash to TD with 3 MM air and 3 BPM water. Returns heavy coal fines in black water.

(Cont'd)

10-23-90 Wash to TD with 5-1/2" liner.

Set and pack off Baker hydraulic liner hanger; release from liner.

Run 14 jts (439.63') 5-1/2" 17# K-55 casing, set at 3412'; top of liner hanger at 2963.31'; 37.69' overlap. Perforations (4 HPF): 3047-3066'; 3104-3161'; 3216-3332'; and 3391-3409'.

Circulate hole for 1/2 hour, tag top of liner, lay down 3 jts drill pipe, hang drill pipe in pipe rams. Rig down Cudd. Nipple up stripping head.

Lay down drill pipe and drill collars, rabbit and strap tubing.

Change pipe rams to 2-7/8", rig up to run tubing.

Pick up 4-3/4" expendable mill/check, 1 jt tubing, and F nipple (2.25" ID). TIH with tubing, tag liner top at 2963.31', tag top perf at 3046.93'. Pick up swivel.

10-24-90 7" casing at 3001'; 5-1/2" liner 2963-3412'.

Waiting on daylight to move rig.

Pick up swivel and circulate hole with water.

Mill liner plugs.

Lay down 3 jts 2-7/8" tubing, land tubing.

Run 106 jts (3328.70') 2-7/8" J-55 FBNAU USS tubing, set at 3340.70' with Baker F nipple (2.25" ID) at 3308.04'. Nipple down BOP stack, nipple up tree. Pump 10 Bbls water, drop ball, pump mill and check off with 2000 psi. Flow well back up tubing to unload water. Rig released 5:00 p.m., 10-23-90.

10-18-90: 2" pitot gauge - 1948 MCFD water production - 690 BPD