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

## 5. Lease Designation & Serial #:

6. If Indian, Allottee/Tribe Name

SF-079003

SUNDRY MOTICES AND REPORTS ON WELLS

Do not use this	s form for proposals	to drill, deepen	or reentry to a	ifferent reservoir.
	Use MAPPLICA	TION FOR PERMIT-M	for such proposal	· (110.01.

2 7. Ha. 7 W	7. If Unit or CA, Agmt. Design.:
SUBMIT IN TRIPLICATE	Northeast Blanco Unit
1. Type of Well: oil well gas well X other Green and ACC	8. Well Name and No.:
2. Name of Operator: Blackwood & Michols Co., Ltd.	N.E.B.U.# 494
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)	30-045-26368 10. Field & Pool/Expitry Area:
1250' FSL - 1640' FWL, Section 27, 131M, R7W	Basin Fruitland Coal
	11. County or Parish, State:
	San Juan, New Mexico

12.	CHECK APPROPRIATE E	BOX(s) TO INDICATE NATURE OF NOTICE, REPORT	, OR OTHER DATA
	TYPE OF SUBMISSION	TYPE OF	ACTION
		Abandonment	Change of Plans
Notice of Intent	Notice of Intent	Recompletion	New Construction
	<del>_</del> · · ·	Plugging Back	Non-Routine Fracturing
_	XSubsequent Report	Casing Repair	Water Shut-Off
Final Abandonment Not	ar I standament Nation	Altering Casing	Conversion to Injection
	Final Abandonment Notice	X Other: COMPLETION	
		(Note: Report results o or Recompletion Report	f multiple completion on Well Completion and Log form.)

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



14. I hereby certify that the fore Signed:	going is true and correct.	OIL CON. DIV.	Date: 9/21/90
(This space for Feder	al or State office use)	ACCEPTE	D FOR RECORD
Approved By	Title	Oet	02 1990
Conditions of approva	(, it any:	FARMINGTO BY 2	ON RESOURCE AREA

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency or the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

<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. 494 - Basin Fruitland Coal

LOCATION: 1250' FSL, 1640' FWL

Section 27, T31N, R7W

San Juan County, New Mexico

9-05-90 7" casing at 2737'; float at 2692'.

Picking up 3-1/2" drill pipe to TIH.

Move in and rig up Big "A" Rig No. 25. Change rams. Pressure test blind rams, BOPs, kill manifold, and choke manifold to 2300 psi - OK.

Put drill collars and drill pipe on pipe racks and tally same.

Pick up 6-1/4" bit, Smith Tool Co., FDTL SN #KT5106 (jets: 24-24-24). Pick up one 4-3/4" drill collar, N nipple (1.875" ID), ten 4-3/4" drill collars, 1 jt 3-1/2" drill pipe, F nipple (2.25" ID), and safety sub. TIH.

9-06-90 7" casing at 2737'; open hole 2737-3015'.

Drilling Fruitland coal at 3015' with 8,000-10,000# WOB, 100 RPM, 1200 psi.

Pick up 3-1/2" drill pipe and TIH, tag insert float at 2692'.

Pick up swivel. Pressure test pipe rams, kill manifold, and choke manifold to 2000 psi for 20 minutes - held OK.

Drill insert float, cement, shoe, and Fruitland coal.

9-07-90 7" casing at 2737'; open hole 2737-3088'.

Circulating and working pipe at TD with 1-1/2 BPM water. Returns light 1/8" and smaller coal (85%) in gray water. 2' flare from 1 blooie line.

Drill Fruitland coal 3015-3088' with 8,000-10,000# WOB, 100 RPM, and 7 BPM water.

Circulate and work pipe at TD. Returns moderate coal (98%) in gray water with heavy floating coal.

Circulate and work pipe at TD with 7 BPM water reducing pump rate 1/2 Bbl every 2 hours. Returns very light 1/8" and smaller coal (100%) in gray water with heavy floating coal.

01				
Coal	Intervals:		2805-2806	1'
			2823-2824	1'
			2827-28291	2'
			2851-2852'	1'
			2853-2854	ī'
			2866-2867	ī,
			2873-2876	3'
			2878-2879	1'
			2882-2883	ī٠
			2884-2886'	2'
			2921-2929'	8'
			2930-29321	2'
			2984-29861	2'
			3011-3013'	2 1
			3066-3070'	4 '
			3072-3074'	2 1
			3075-30861	11'
_			Total	45'
ם מחת	C Manage	00001		

Top P.C. Tongue - 3029'
Top Main P.C. - 3086'
Total Depth - 3088'

9-08-90 7" casing at 2737'; open hole 2737-3088'.

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

Circulate and work pipe at TD with 1 MM air and 5 BPM water, dropping water rate 1/2 BPM every 2 hours. Returns light 1/8" coal (98%) in clear water.

9-09-90 7" casing at 2737'; open hole 2737-3088'.

Circulating and working pipe at TD with 3 MM air and 1 BPM water. Returns heavy to moderate 1/8" and smaller coal (98%) in black water. 8-10' flare.

Circulate and work pipe at TD with 3 MM air and 1 BPM water with 10 Bbl water sweeps each hour. Returns light 1/16" with powder coal (98%), shale and siltstone in clear water.

Shut off air compressors, load hole with water, pump 180 Bbls into formation at 6 BPM @ 1500 psi. Open one blooie line, surge pressure off well, bring on 3 MM air to unload hole, Returns heavy 1/4" and smaller coal in black water. Unloaded large amounts of coal fines.

Circulate and work pipe at TD with 3 MM air and 1 BPM water. Returns heavy coal fines in black water.

Load hole with water, pump into formation at 6 BPM @ 1700 psi. Pump approximately 50 Bbls, pressure broke back to 1400 psi, rate increased to 6-1/2 BPM, pumped 150 Bbls, urge pressure off well, unload well with 3 MM air . Returns large amounts of powdered coal in black water.

(Cont'd) 9-09-90

Circulate and work pipe at TD with 3 MM air and 1 BPM water. Returns heavy coal fines (99%), in black water.

9-10-90 Circulating and working pipe at TD with 3 MM air and 1 BPM water with 10 Bbl water sweeps hourly. Returns light 1/16" coal and powder 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 1/16" and smaller coal (98%) in clear water; on sweeps moderate coal and powder coal. Have 8-10' flare.

Load hole with water, pump 200 Bbls water into formation at 6 BPM @ 1800 psi. Flow well back - returns heavy coal dust. Unload hole with 3 MM air .

Circulate and work pipe at TD with 3 MM air and 1/2 BPM water with 10 Bbl water sweeps hourly. Returns heavy to moderate powder coal (99%) in black to gray water.

Lay down 12 jts drill pipe and gauge well: 1/4 hr - 6 oz., 372 MCFD; 1/2 hr - 5.5 oz., 363; 3/4 hr - 4 oz., 309; 1 hr - 3.5 oz., 286 MCFD (all gauges dry).

Shut in: 1/4 hr - 90 psi, 1/2 hr - 155; 3/4 hr - 225; 1 hr - 350 psi.

Water production rate TSTM.

Pressure up to 1200 psi with air and surge well, TIH, no fill.

Circulate and work pipe at TD with 3 MM air and 1 BPM water with 10 Bbl water sweeps each hour. Returns moderate to light 1/16" and powder coal (98%), shale and siltstone in clear to gray water.

9-11-90 7" casing at 2737'; open hole 2737-3088'.

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

Circulate and work pipe at TD with 3 MM air and 1 BPM water. Returns light 1/8" and powder coal (98%), shale and siltstone in gray water.

Pull up to 7", pressure wellbore to 1100 psi and surge; repeat two more times.

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

Pull up to 7", pressure up to 1100 psi, surge well; repeat three times. TIH, no fill.

Circulate and work pipe at TD with 3 MM air and 3 BPM water. Returns moderate to light 1/4" and smaller coal (98%) in black to clear water.

Circulate and work pipe at TD with 3 MM air and 1/2 BPM water, sweeping hole with 10 Bbls water each hour. Returns light 1/16" coal (98%) in clear water.

9-12-90 7" casing at 2737'; open hole 2737-3088'.

Circulating and working pipe at TD with 3 MM air and 1 BPM water with 5 Bbl water sweeps hourly. Returns light coal dust with heavy coal dust on sweeps in black water.

Circulate and work pipe at TD with 3 MM air and 1/2 BPM water. Returns light 1/16" and coal powder in clear water.

Shut in well, pressure up to 1100 psi with air. Pump 10 Bbls water, pressure fell to 100 psi, pressure up to 1100 psi with air, alternate water and air until pressure came up to 1900 psi on backside. Shut in well for 1/2 hr, pressure fell to 1700 psi, surge well through both blooie lines, blow well down. Returns heavy coal dust in black water. TIH, had no fill.

(Cont'd)

9-12-90 Circulate and work pipe at TD with 3 MM air and 1 BPM water. Returns light 1/16" coal in black water. Replace HCR valve.

Load hole with water, pressure up to 1200 psi with air. Pump 180 Bbls water into formation, surge well with 1500 psi on backside.

Circulate and work pipe at TD with 3 MM air to unload hole. Returns moderate 1/4" and smaller coal in gray water.

Circulate and work pipe at TD with 3 MM air and 1 BPM water with 5 Bbl water sweeps hourly. Returns light 1/8" and smaller coal in black water.

9-13-90 7" casing at 2737'; open hole 2737-3088'.

Circulating and working pipe at TD with 3 MM air and 1/2 BPM water with 10 Bbl water sweeps every hour. Returns moderate 1/8" and less coal (98%) in black water.

Circulate and work pipe at TD with 3 MM air and 1/2 BPM water with 5 Bbl water sweeps hourly. Returns light 1/8" and less coal (98%) with heavy coal dust on sweeps.

Load hole with water, shut well in, pressure up to 1200 psi with air, chase air with water. Pressure back up with air, chase air with water. Pump 180 Bbls into formation, surge well with 1500 psi, no fill.

Circulate and work pipe at TD with 3 MM air to unload hole. Returns moderate 1/4" and less coal (98%) in black water.

Circulate and work pipe at TD with 3 MM air and 1/2 BPM water, sweeping hole with 10 Bbls water each hour. Returns 1/4" and less coal (98%) in black water.

9-14-90 7" casing at 2737'; open hole 2737-3088'.

Set swivel back, start laying down drill pipe.

Circulate and work pipe at TD with 3 MM air and 1/2 BPM water with 10 Bbl water sweeps every 2 hours. Returns light 1/16" and smaller coal (98%) in clear water; on sweeps returns moderate 1/8" and smaller coal in black water.

Run pitot test #2: 1/4 hr - 12 oz., 539 MCFD; 1/2 hr - 11 oz., 514; 3/4 and 1 hr - 10 oz., 492 MCFD (all gauges dry).

Bucket test - 49 BPD water.

Circulate and work pipe at TD with 1 MM air and 5 Bbl water sweeps every 2 hours. Returns on sweeps 1/8" and smaller coal in black water.

Circulate and work pipe at TD with 2 MM air and 1/2 BPM water. Returns very light coal dust in gray to clear water.

9-15-90 7" casing at 2737'; open hole 2737-3088'.

Rig released.

Lay down 3-1/2" drill pipe and 4-3/4" drill collars.

Change 3-1/2" rams to 2-3/8" and rig up to run tubing.

Pick up 2-3/8" expendable check, 1 jt 2-3/8" tubing, F nipple (1.81" ID), and 87 jts 2-3/8" tubing. Run 2708.16' of tubing and set at 2722.16', F nipple set at 2690.43'. Bottom of tubing is 14.84' up inside of 7" casing.

Land tubing in tubing head, nipple down BOPs and nipple up upper tree.

Drop ball and pump off expendable check.

Flow back well through 2" for flow test. Final gauge through 2" pitot: 1/4 hr -11 oz., 514 MCFD; 1/2 and 3/4 hr - 10 oz., 492; 1 hr - 9.5 oz., 476 MCFD (all gauges misting water).

(Cont'd) 9-15-90

9-15-90 Produced water - 49 BPD.

Release rig at 12:00 midnight.

Total tubing run: 88 jts 2-3/8" landed at 2722.16' with F nipple (1.81" ID) set at 2690.43'.

1.4.2