

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Blackwood &amp; Nichols Co., Ltd.

## 3. ADDRESS OF OPERATOR

P. O. Box 1237, Durango, Colorado 81301

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1250' F/SL - 1830' F/EL

At proposed prod. zone

Same

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

## 10. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

## 16. NO. OF ACRES IN LEASE

616.32

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

321.10

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

## 19. PROPOSED DEPTH

5955'

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6348 GL

## 22. APPROX. DATE WORK WILL START\*

March 6, 1978

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13-3/4"	9-5/8"	32.00#	250'	Circulate
8-3/4"	7"	23.00#	3595'	Cement to 2000'
6-1/4"	4-1/2"	10.50#	5955'	Cement to 3325'

We propose to perforate the Mesaverde Zone and sand-water fracture with 200,000 gallons water and 200,000 lbs of sand in two stages. Estimated tops: Fruitland 3040', Lewis 3525', Cliffhouse 5145', Point Lookout 5505', Mancos 5615'. A 3000 PSI WP; Series 10" - 900 - adapted to Series 10" - 600 and 6" - 600 hydraulic blowout preventer equipped with blind and necessary pipe rams will be used with adequate kill and bleed off lines. A mud of sufficient weight to control the Fruitland will be used, well to be drilled with gas below 7" casing.

Compensated Density Gamma-neutron logs will be run in open hole.

Blow-out preventers will be tested every trip.

*Gas is dedicated*

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED DeLasso Loos TITLE District Manager DATE 1-18-78

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

RECEIVED

JAN 19 1978

U. S. GEOLOGICAL SURVEY  
DURANGO, COLO.

\*See Instructions On Reverse Side