

UNITED STATES  
DEPARTMENT OF THE INTERIOR

## GEOLOGICAL SURVEY

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

## 1a. TYPE OF WORK

DRILL ☒

DEEPEINED PM 12:58

PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒OTHER ☐FARMINGTON REVENUE AREA  
FARMINGTON, NEW MEXICOMULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Blackwood &amp; Nichols Co., Ltd.

## 3. ADDRESS OF OPERATOR

P.O. Box 1237; Durango, Colorado, 81302-1237

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

At surface

1140' FSL - 790' FWL

At proposed prod. zone

same

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

17 miles NE of Blanco, New Mexico

## 15. DISTANCE FROM PROPOSED\*

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

1140'

## 16. NO. OF ACRES IN LEASE

2056.12

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

250'

## 19. PROPOSED DEPTH

3556'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6408' GL

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

April 1, 1989

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4.

## PROPOSED CASING AND CEMENTING PROGRAM DRILLING OPERATIONS AUTHORIZED ARE

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SUBJECT TO QUANTITY OF CEMENT ATTACHED "GENERAL REQUIREMENTS"
12 1/4"	9 5/8"	36#	300'	207 cuft to circulate
7 7/8"	5 1/2"	17#	3556'	1074 cuft to circulate

Propose to spud in the San Jose formation. Will drill a 12 1/4" surface hole to a TD of 300'. Run and cement surface casing with cement returns to surface. WOC 12 hours. Test to 600 psi. Drill a 7 7/8" hole to a TD of 3556' using fresh water mud. No poisonous gases are anticipated. Weighted mud will be used to drill the Fruitland coals. Logs will be run at TD. Casing will be run and cemented using a two stage cement job, with cement returns to surface. The drilling rig will be released and a completion unit moved on. Cased hole bond and correlation logs will be run. The Fruitland coals will be perforated and frac'd using a fresh water based gel fluid.

RECEIVED

MAR 21 1989

OIL CON. DIV.

Surface ownership is FEE.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and distance to 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.

24.

SIGNED

William F. Clark

TITLE

Operations Manager

DATE

Jan 18, 1989

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

NMOCC

\*See Instructions On Reverse Side

APPROVED

AS AMENDED

MAR 7 1989

AREA MANAGER

All distances must be from the outer boundaries of the Section.

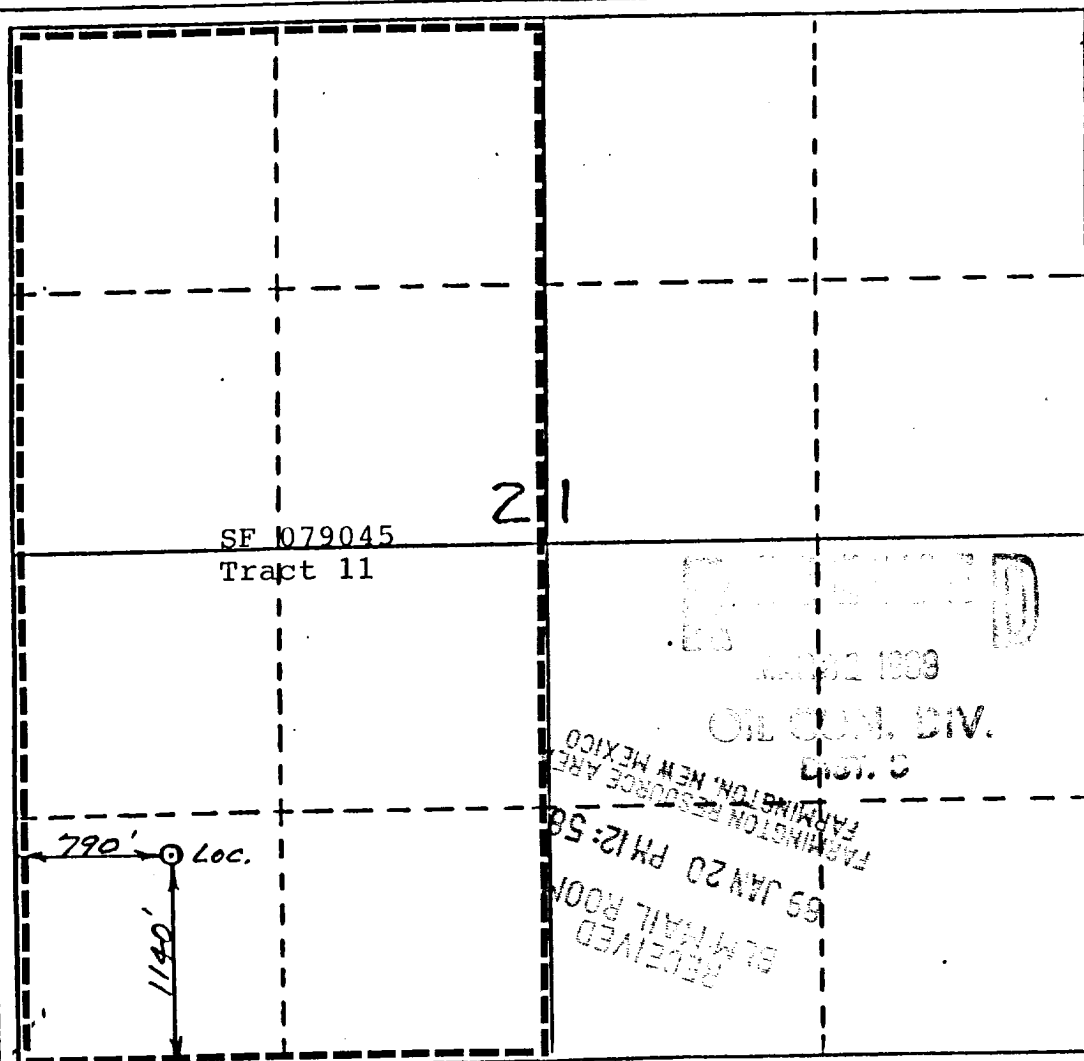
Operator <b>Blackwood &amp; Nichols Co., LTD.</b>		Lease <b>Northeast Blanco Unit</b>		Well No. <b>478</b>
Unit Letter <b>M</b>	Section <b>21</b>	Township <b>31 North</b>	Range <b>7 West</b>	County <b>San Juan</b>
Actual Footage Location of Wells <b>1140'</b> feet from the <b>South</b> line and <b>790'</b> feet from the <b>West</b> line				
Ground Level Elev. <b>6408</b>	Producing Formation <b>Fruitland Coal</b>	Pool <b>Basin Fruitland Coal</b>	Dedicated Acreage <b>320</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation NA

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



CERTIFICATION

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

Name  
*William F. Clark*  
Position  
Operations Manager  
Company  
Blackwood & Nichols Co.  
Date  
January 18, 1989

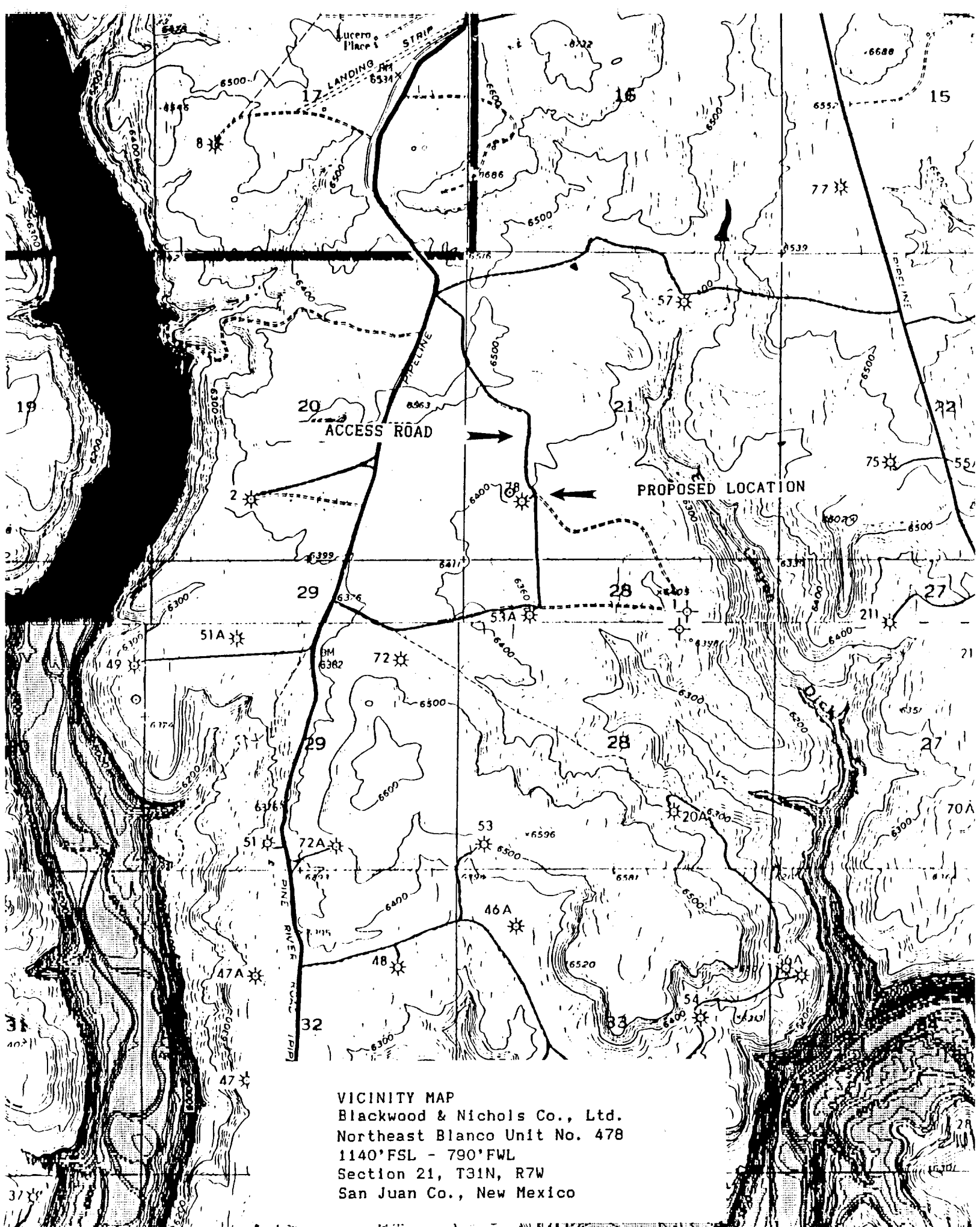
I hereby certify that the location shown on this plat was plotted from the notes of actual survey made by me under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
11/25/88

Registered Professional Engineer and/or Land Surveyor

Neale C. Edwards

Certificate No. 6057



VICINITY MAP  
Blackwood & Nichols Co., Ltd.  
Northeast Blanco Unit No. 478  
1140' FSL - 790' FWL  
Section 21, T31N, R7W  
San Juan Co., New Mexico