

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

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MAR 28 1989

Form C-101
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

Lease No. (Assigned by OCD on New Wells)

DIST. 30-045-27257

5. Indicate Type of Lease

STATE ☒

FEE ☐

6. State Oil & Gas Lease No.

B 11125

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:

DRILL ☒

RE-ENTER ☐

DEEPEN ☐

PLUG BACK ☐

b. Type of Well:

OIL
WELL ☐

GAS
WELL ☒

OTHER ☐

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

7. Lease Name or Unit Agreement Name

Northeast Blanco Unit

2. Name of Operator

Blackwood & Nichols Co., LTD.

8. Well No.

450

3. Address of Operator

P.O. Box 1237, Durango, CO 81302-1237

9. Pool name or Wildcat

Basin Fruitland Coal

4. Well Location

Unit Letter N : 795 Feet From The South Line and 2010 Feet From The West Line

Section 32 Township 31 North Range 7 West NMPM San Juan County

10. Proposed Depth

3432'

11. Formation

Fruitland Coal

12. Rotary or C.T.

Rotary

13. Elevations (Show whether DF, RT, GR, etc.)

6349' GL

14. Kind & Status Plug, Bond

State Wide

15. Drilling Contractor

16. Approx. Date Work will start

April 1, 1989

17. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/4"	9 5/8"	36 #	300'	207 cuft to	circulate
8 3/4"	7"	23 #	3432'	910 cuft to	circulate

Propose to spud in the San Jose formation. Will drill a 12 1/4" hole to a TD of 300'. Surface casing will be run and cemented with cement returns to surface. WOC 12 hours. Test to 600 psi/ 30 mins. Drill an 8 3/4" hole to a TD of 3432' 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. Production casing will be run and cemented, with cement returns to surface. The drilling rig will be released and a completion unit moved on. Cased hole correlation and bond logs will be run. The Fruitland coals will be perforated and frac'd with a fresh water base gel fluid.

APPROVAL EXPIRES 9-28-89
UNLESS DRILLING IS COMMENCED.
SPUD NOTICE MUST BE SUBMITTED
WITHIN 10 DAYS.

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. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

SIGNATURE William F. Clark TITLE Operations Manager DATE 3/27/89

TYPE OR PRINT NAME William F. Clark TELEPHONE NO. 303/247-072

(This space for State Use)

APPROVED BY Emilio Burcha TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE MAR 28 1989

CONDITIONS OF APPROVAL, IF ANY:

HOLD C-104 FOR NSL

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

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

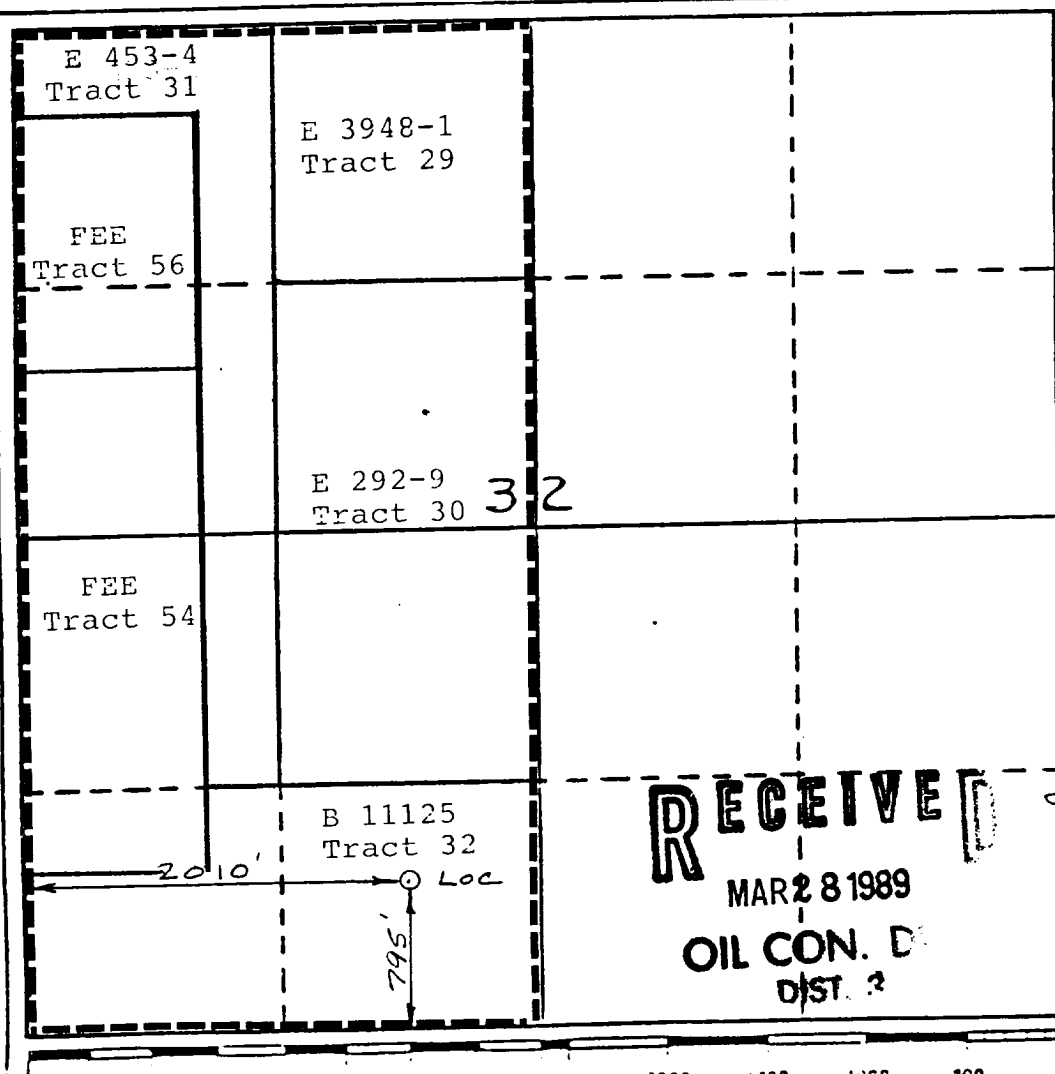
Operator Blackwood & Nichols Co., LTD.		Lease Northeast Blanco Unit		Well No. 450
Unit Letter N	Section 32	Township 31 North	Range 7 West	County San Juan
Actual Footage Location of Wells 795 feet from the South line and 2010 feet from the West line				
Ground Level Elev. 6349'	Producing Formation Fruitland Coal	Pool Basin Fruitland Coal	Dedicated Acreage: 320.11 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 Unitization

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, forced-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 11/28/88

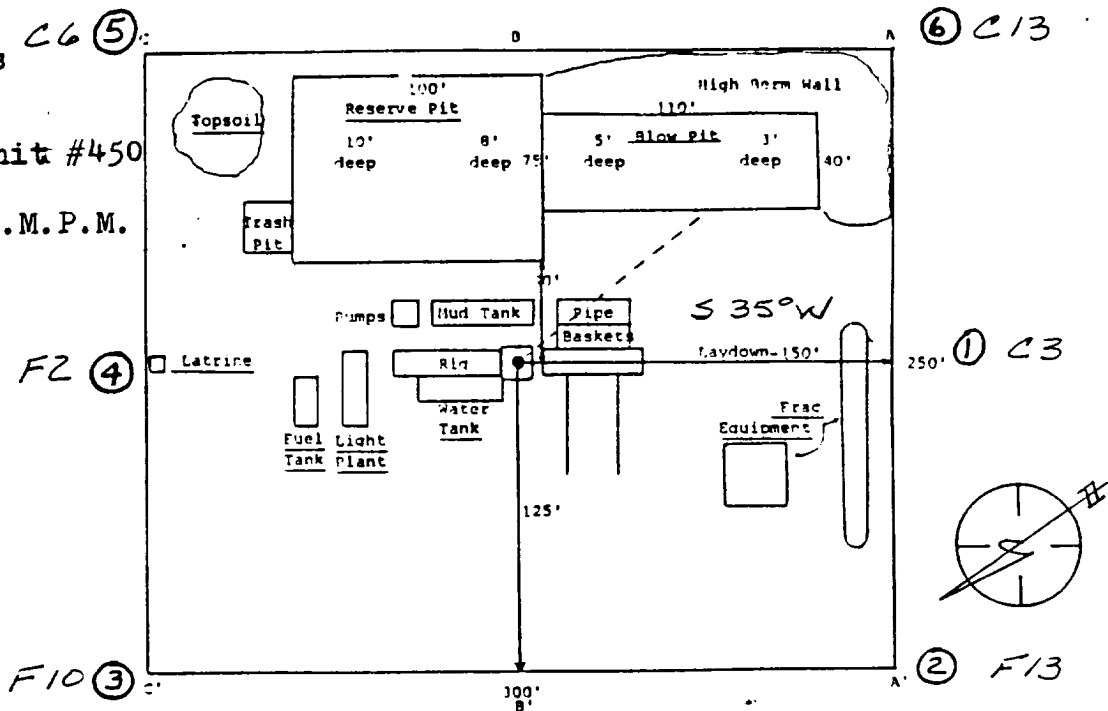
I hereby certify that the location shown on this plat was plotted from field notes of accurate survey made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed 11/28/88
Registered Professional Engineer and/or Land Surveyor

W. C. Edwards
Certificate No. 6057

Blackwood & Nichols
Co., LTD.

Northeast Blanco Unit #450
795' FSL, 2010' FWL
Sec 32, T31N, R7W N.M.P.M.
San Juan Co., N.M.



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A - A'	Vert.: 1" = 30'	Horiz.: 1" = 50'	C/L
6359			
6349			
6339			

B - B'	C/L
6359	
6349	
6339	

C - C'	C/L
6359	
6349	
6339	

Blackwood & Nichols Co., Ltd.
Northeast Blanco Unit No. 450
795' FSL - 2010' FWL
Section 32, T31N, R7W
San Juan Co., New Mexico

Field: Basin Fruitland Coal

Elevation: 6349'GL

Geology:

Formation Tops: San Jose - Surface
Ojo Alamo - 2188'
Kirtland - 2288'
Fruitland - 2930'
Pictured Cliffs - 3232'
Total Depth - 3432'

Logging Program: Dual Induction/SFL from TD to surface
casing shoe. Compensated Density/Nuetron
from TD to 2432'.

Drilling:

Contractor:

Toolpusher:

Operator's Representative:

Mud Program: 0 - 300': Spud mud of lime and gel.
300'- 2830': Benex and water with 5 sack gel
sweeps every 500' or less if hole
conditions dictate.
2830'- 3432': Fresh water, low solids mud. Mud
wt.-10.0 to 10.5 ppg, as necessary
to control well. 40-50 sec./qt.
viscosity. 6-8 cc water loss.

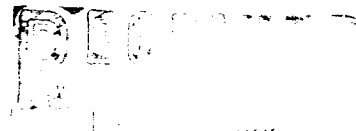
Start mud up 100' above Fruitland

Weight up to 10.0 ppg prior to 3055'.

Materials:

Casing Program:

Hole Size	Depth Set	Casing Size	Wt. & Grade
12 1/4"	300'	9 5/8"	36# , K-55
8 3/4"	3432'	7"	23# , K-55



Materials: Cont'd

Float Equipment:

- 9 5/8" surface casing - Texas Pattern Guide Shoe. Threadlock guide shoe.
- 7" Production Casing - Texas Pattern Guide Shoe. Self fill insert float valve run one joint above shoe. DV tool run 200' above top coal. Ten(10) bow spring centralizers run every other joint above shoe.

Wellhead Equipment:

- 9 5/8" X 10" 3000 casing head with 7" automatic slips.
- 10" 3000 X 6" 3000 tubing head with a 2 7/8" EUE Tubing hanger.

Cement Program:

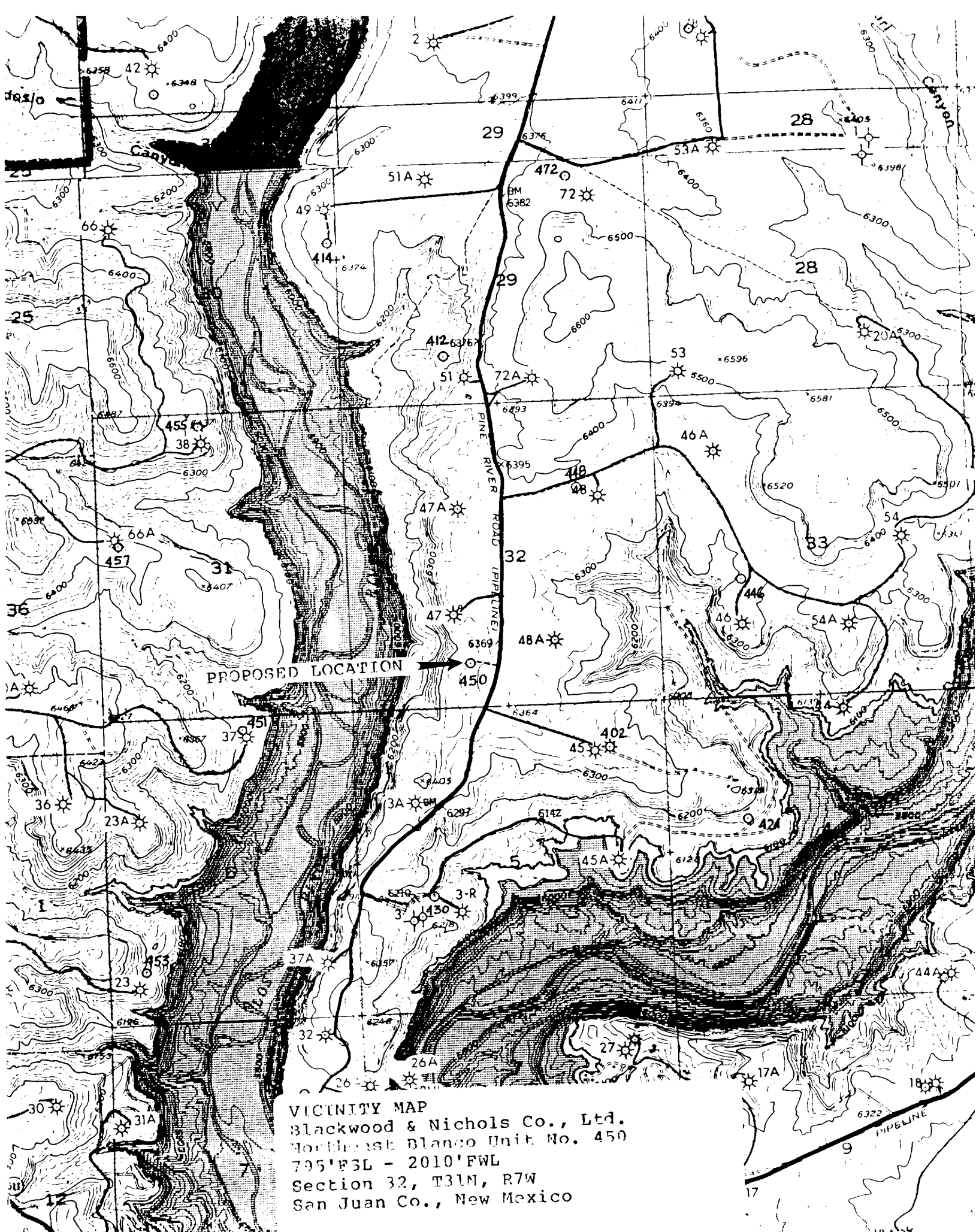
- 9 5/8" surface casing- 175 sacks(207 cuft) of Class B w/ 2% CaCl and 1/4# flocele per sack. 100 % excess to circulate to surface. WOC 12 hours. Pressure test to 600 psi for 30 minutes prior to drilling surface shoe.
- 7" Production casing - Stage 1: 150 sacks(197 cuft) of Class B with 2% retarder, 1% CaCl, 1.3% fluid loss additive, and 6 1/4 # gilsonite/sack. 70 % excess to circulate to the DV tool. WOC and circulate between stages for 4 hours.
Stage 2: 325 sacks(598 cuft) of 65/35 Poz with 6% gel, 1/4# celloflake/sack, and 0.6% fluid loss additive. Tail in with 100 sacks(115 cuft) of Class B with 1/4 # celloflake/sack. 70 % excess to circulate to surface. Run temperature survey at eight(8) hrs. if cement does not circulate.

Miscellaneous:

- Operate pipe rams dailly and record in tour reports.
- Operate Blind rams on each trip and record in tour reports.
- 7" casing rams are to be installed prior to running the production casing.

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VICINITY MAP
Blackwood & Nichols Co., Ltd.
Northeast Blanco Unit No. 450
795'FSL - 2010'FWL
Section 32, T31N, R7W
San Juan Co., New Mexico