

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-145-24449

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 & 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
 1770' F/NL - 10' F/WL
 At proposed prod. zone
 Same

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

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

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

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 6140' GL

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"	36.00#	250'	Circulate
8 3/4"	7"	23.00#	3480'	Two stage to surface
6 1/4"	4-1/2" Liner	10.50#	5725'	Circulate to top of liner

5. LEASE DESIGNATION AND SERIAL NO.
 SF 079042
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 7. UNIT AGREEMENT NAME
 Northeast Blanco Unit
 Agreement #1, Sec. 929
 8. FARM OR LEASE NAME
 Northeast Blanco Unit
 9. WELL NO.
 31A
 10. FIELD AND POOL, OR WILDCAT
 Blanco Mesaverde
 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 E-7-30N-7W
 12. COUNTY OR PARISH
 San Juan
 13. STATE
 New Mexico

We propose to perforate the Mesaverde Zone and sand-water fracture with 200,000 gals water and 200,000 lbs. sand in two stages. Estimated tops: Fruitland 2820', Lewis 3320', Cliffhouse 4915', Point Lookout 5275', and Mancos 5440'. 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.



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.

24. *[Signature]* DeLasso Loos TITLE District Manager DATE 3-18-80

(This space for Federal or State office use)

PERMIT NO. APPROVED AS AMENDED APPROVAL DATE

APPROVED BY *[Signature]* TITLE *sk 3ml states* DATE MAR 19 1980

CONDITIONS OF APPROVAL, IF ANY
 ENGINEER *See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY
 DURANGO, COLO.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-12H
Effective 1-1-65

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

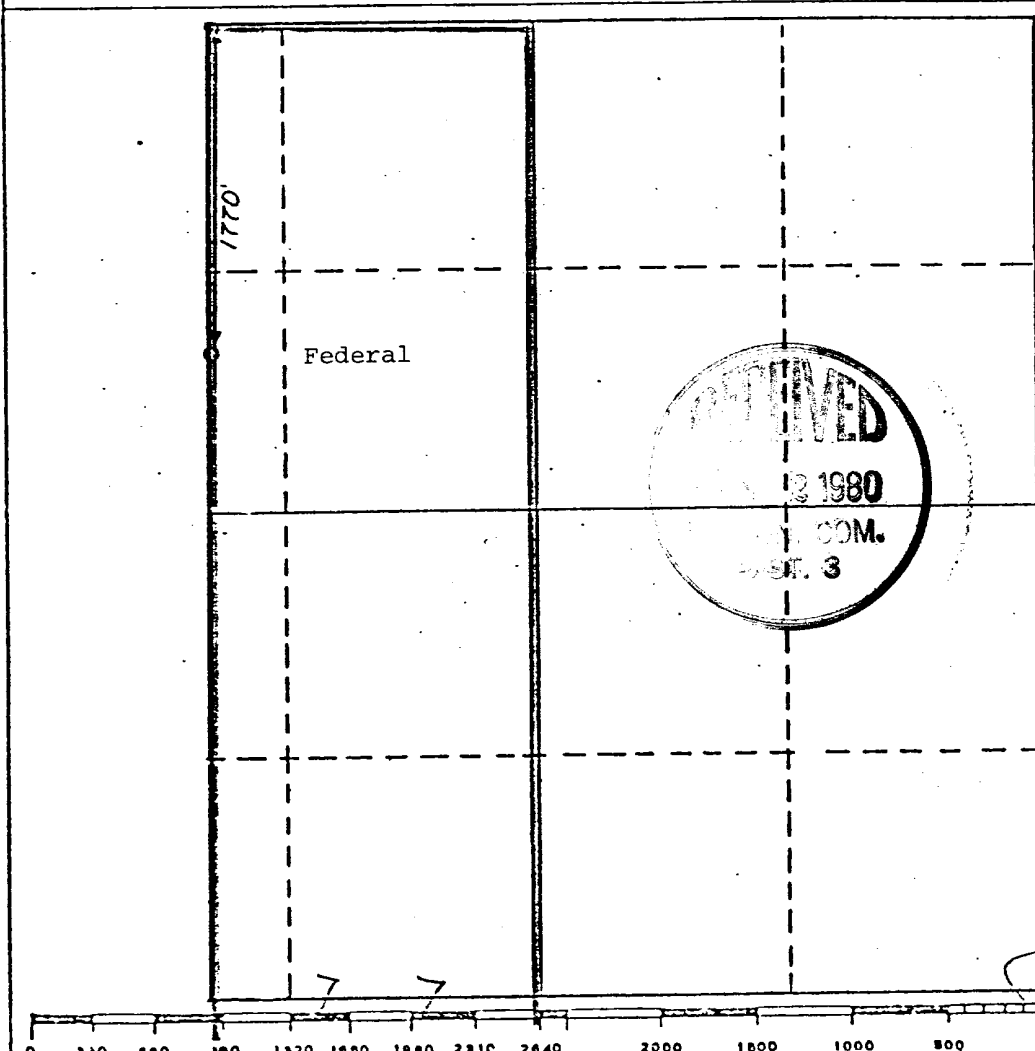
Operator BLACKWOOD & NICHOLS		Lease NORTHEAST BLANCO UNIT		Well No. 31A
Unit Letter E	Section 7	Township 30 N.	Range 7W., N.M.P.H.	County SAN JUAN
Actual Footage Location of Well 1770 feet from the north line and 10 feet from the west line				
Ground Level Elev. 6140 U.G.	Producing Formation Mesaverde	Pool Blanco-Mesaverde	Dedicated Acreage 298.90 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 Commission.



CERTIFICATION

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

DeLasso Loos

Name DeLasso Loos

Position District Manager

Company Blackwood & Nichols Co., Inc.

Date March 14, 1980

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys 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 March 12, 1980

Registered Professional Engineer and/or Land Surveyor
John A. Kroeger, R.L.S.

Certificate No. 1941

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well gas well other

2. NAME OF OPERATOR
Blackwood & Nichols Co., Ltd.

3. ADDRESS OF OPERATOR
P. O. Box 1237, Durango, Colorado 81301

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1770' F/NL - 10' F/WL
AT TOP PROD. INTERVAL: Same
AT TOTAL DEPTH: Same

5. LEASE
SF079042

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
NEBU Agreement No. 1, Sec. 929

8. FARM OR LEASE NAME
Northeast Blanco Unit

9. WELL NO.
31A

10. FIELD OR WILDCAT NAME
Blanco Mesaverde

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
E-7-30N-7W

12. COUNTY OR PARISH
San Juan

13. STATE
NM

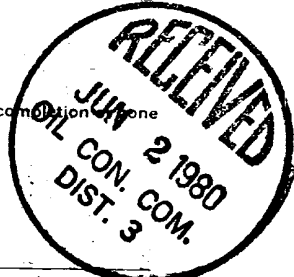
14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
6140 GL

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other) <u>To comply with NTL-6</u>			

(NOTE: Report results of multiple completion or change on Form 9-330.)



17. 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.)*

- (3) San Jose Formation.
 - (8) 9 5/8" - 36.00# - H-40-New; 7" - 23.00# K-55 - New; 4 1/2" - 10.50# - K-55 - New.
 - (6) Top Ojo Alamo 1935'; Top/Kirtland 2070'.
 - (10) See attached schematic diagram: A 3000 PSI WP series 10" - 900 adapted to series 10" - 600 & 6" - 600 hydraulic blowout preventer equipped with blind and all necessary pipe rams will be used including a rotary blowout preventer. Blowout preventer will be pressure tested after each string of casing is run and tested for operating condition on every trip.
 - (12) Compensated Density-Neutron logs will be run in open hole. No testing or coring will occur.
 - (13) Normal Fruitland field pressures are anticipated and will be controlled with weighted mud. No hydrogen sulfide gas is anticipated. The 9 5/8" surface casing to be cemented with sufficient cement with 2% CaCl₂ and 1/4# flocele per sack (over)
- Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct
SIGNED DeLasso Loos TITLE District Manager DATE March 11, 1980

APPROVED BY PROVED
CONDITIONS OF APPROVAL IF ANY:
AS AMENDED

JAMES F. SIMS
JAMES F. SIMS
DISTRICT ENGINEER

(This space for Federal or State office use) ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
TITLE _____ DATE _____
"GENERAL REQUIREMENTS"
NMOCC

RECEIVED
APR 1 1980

U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

*See Instructions on Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and data well site conditioned for final inspection looking to approval of the abandonment.

GPO : 1976 O - 214-140

(continued)

to circulate to surface.

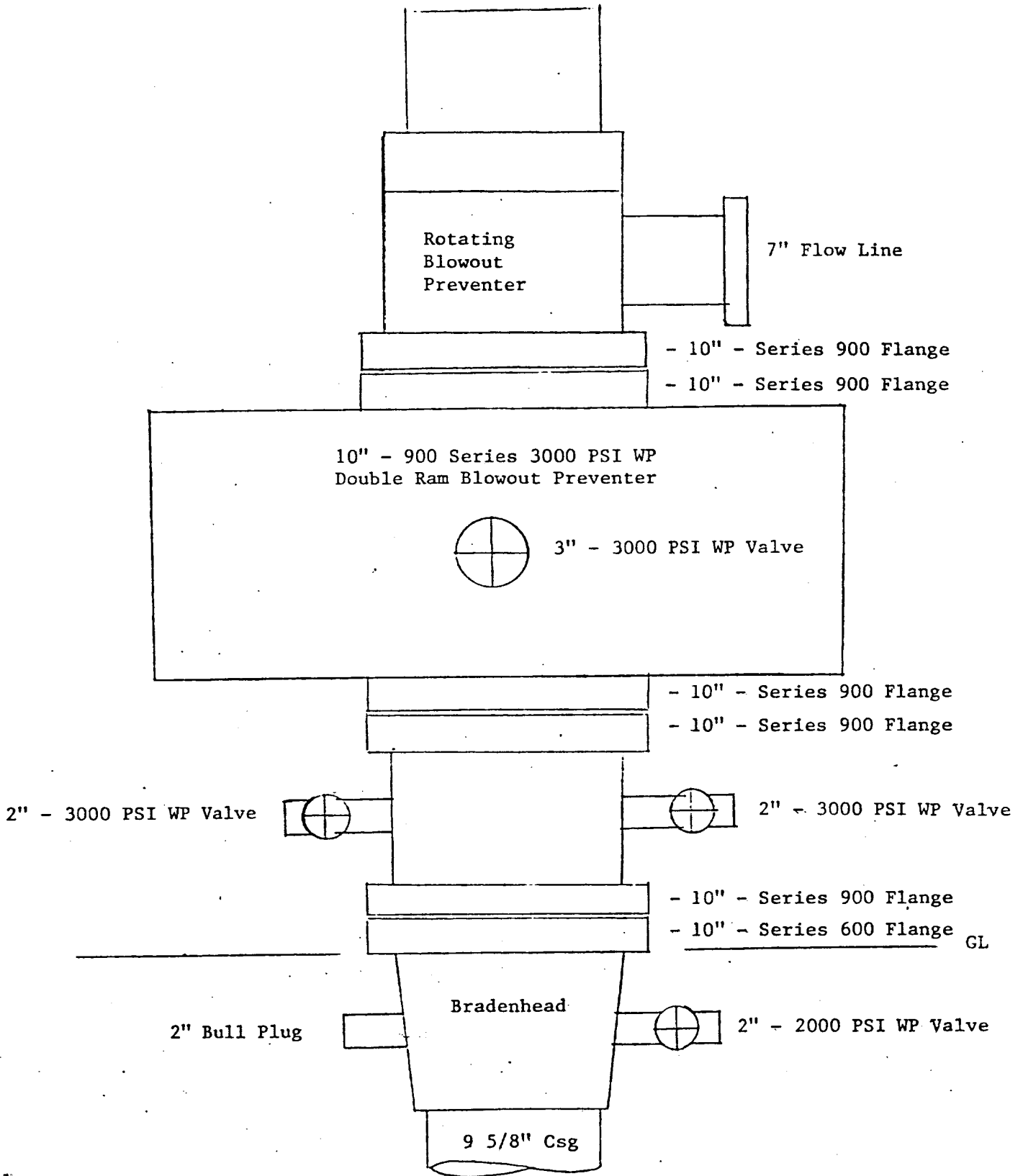
b) The top of Ojo Alamo is 1935'. We propose to cement the 7" casing using 200 sacks Lite cement with 1/4# flocele per sack followed with 100 sacks Class B Cement with 2% CaCl₂ and 1/4# flocele per sack. A two stage tool will be set at approximately 2100'. 200 sacks Lite cement with 1/4# flocele per sack will be used to circulate cement to surface.

The 4 1/2" will be run from 0' to 5725' and cemented with 300 sacks 50-50 Pozmix with 2% Gel, 0.6% CFR, 1/4# flocele per sack and 6 1/4# Gilsonite per sack to bring cement into the 7" analysis.

STATE OF NEW MEXICO
DEPARTMENT OF MINES AND METALLURGY
BUREAU OF MINERAL INVESTIGATION

SURVEY NOTES AND REPORTS

BLOW PREVENTER SCHEMATIC DIAGRAM

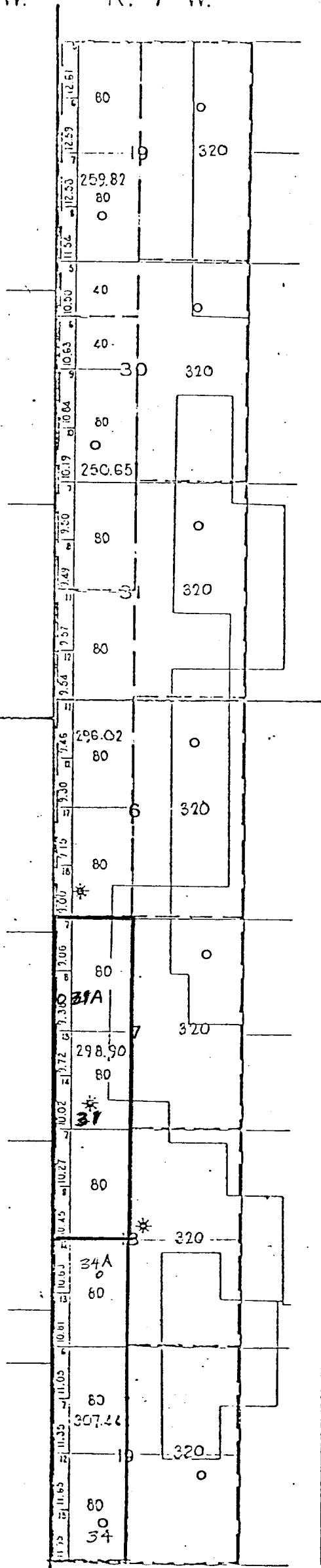


R. 8 W.

R. 7 W.

T. 31 N.

T. 30 N.

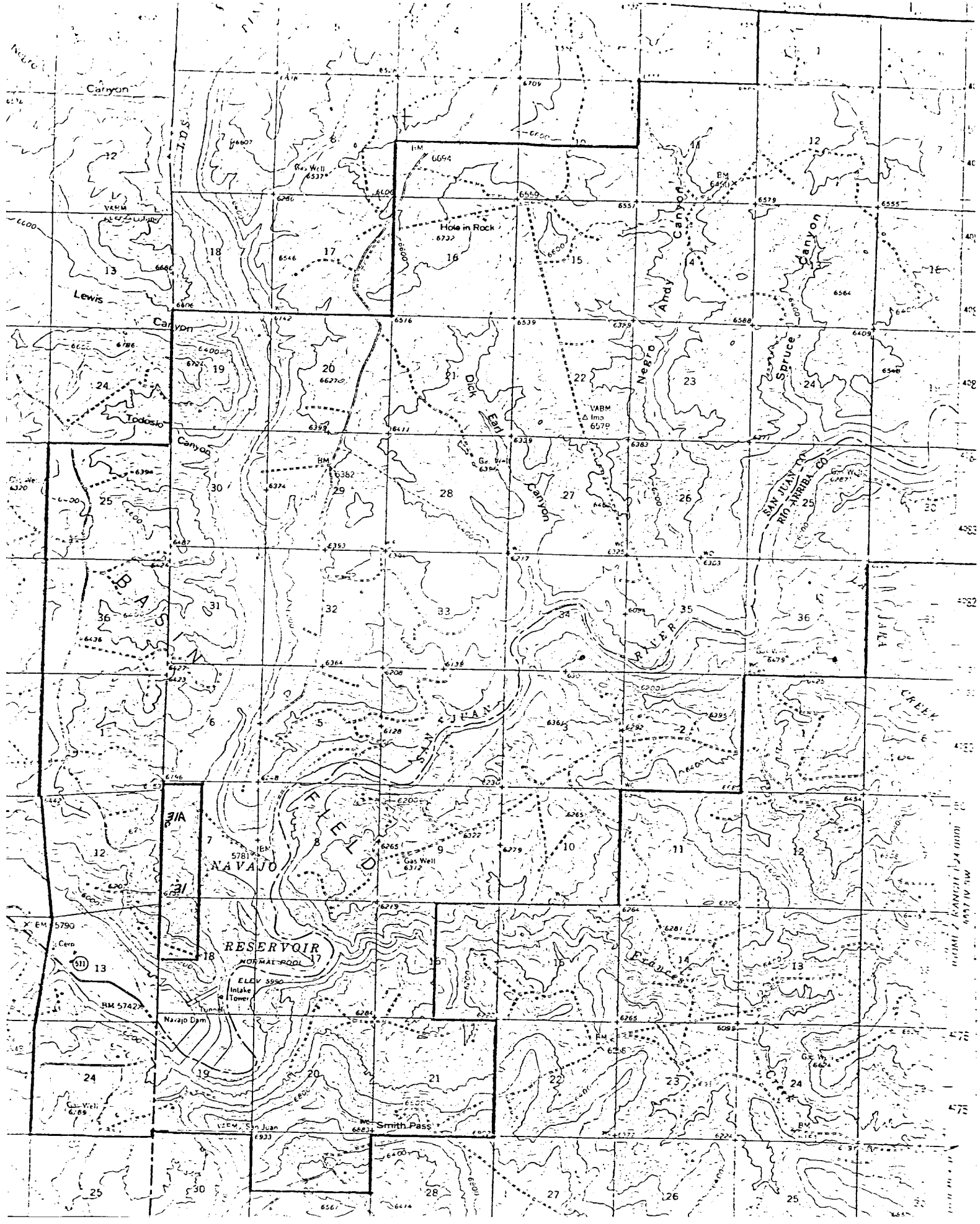


— PORTION OF —
**NORTHEAST
 BLANCO
 UNIT**

SAN JUAN & RIO ARRIBA
 COUNTIES
 NEW MEXICO

- Completed Oil Well
- Location or Drilling Well
- ◇ Dry Hole
- Abandoned Location
- ★ Gas Well

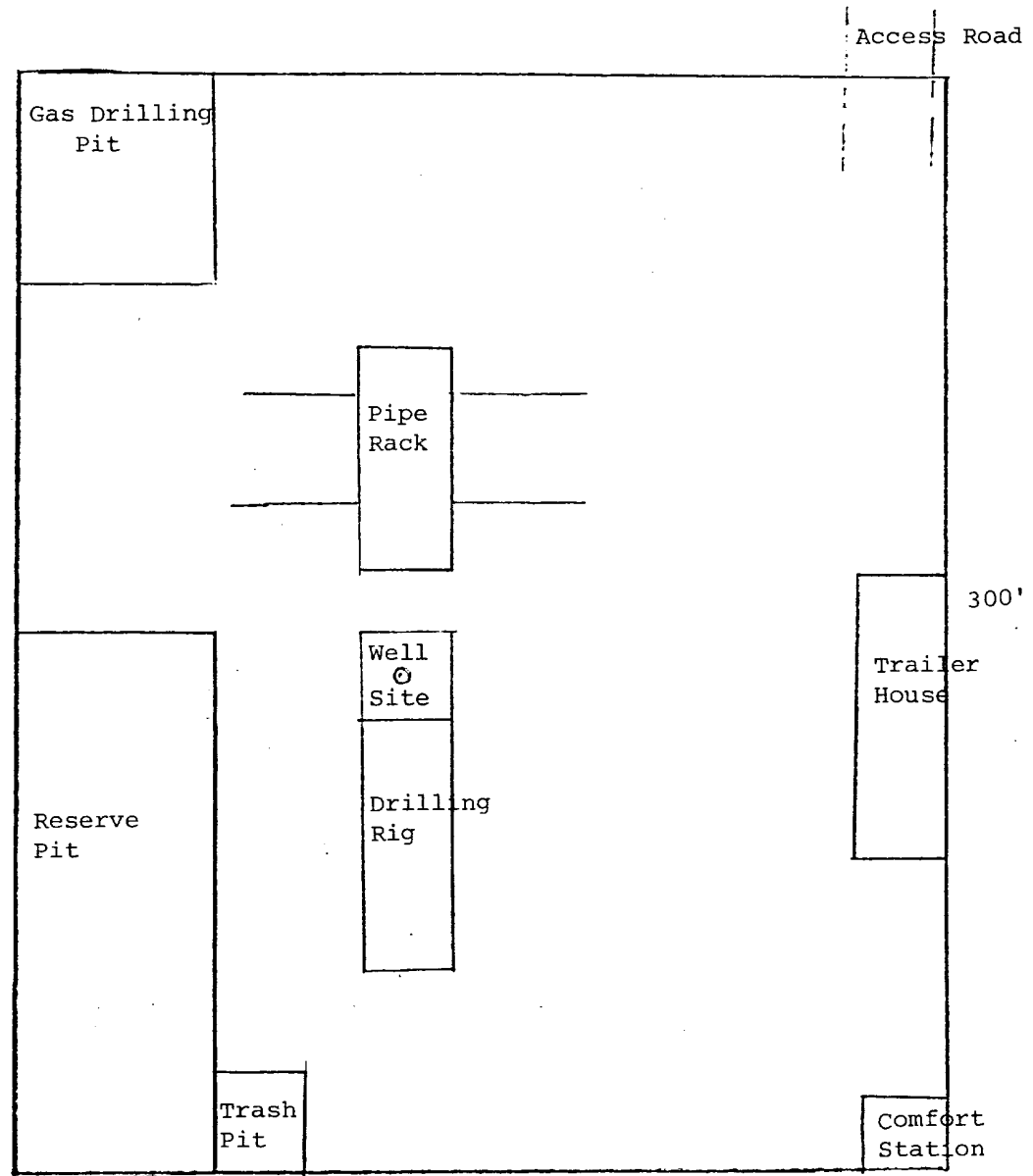
SCALE: 1" = 3000' PAM SITE



SECTION 7 RANCHO 14 N 10 W

475

BLACKWOOD & NICHOLS CO., LTD.
Northeast Blanco Unit No. 31A
1770' F/NL - 10' F/WL E-7-30N-7W
San Juan County, New Mexico
Elevation 6140' GL



250'

BLACKWOOD & NICHOLS Co., LTD.

P. O. BOX 1237

DURANGO, COLORADO 81301

(303) 247-0728

March 18, 1980

United States Geological Survey
Federal Building
701 Camino Del Rio
Durango, Colorado 81301

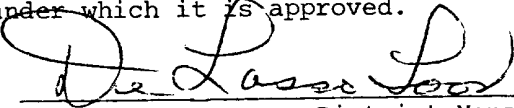
Gentlemen:

Blackwood & Nichols Co., Ltd., as operator of the Northeast Blanco Unit, proposes to drill the Northeast Blanco Unit Well No. 31A as an infill well located 1770' F/NL - 10' F/WL, Section 7 - T30N-R7W, San Juan County, New Mexico. The well will be completed in the Mesaverde Zone.

Attached are maps and other data pertinent to the Development Plan for Surface Use.

- I. Existing Roads; See attached U.S.G.S. topographic map.
- II, III, IV, VI and IX: See attached maps.
- V. Water will be hauled by truck transport from the San Juan River below the Navajo Dam. Approximately four miles southwest of the location.
- VII. Waste material will be placed in a reserve pit and later buried or burned.
- VIII. Camp or airstrip will not be necessary.
- IX. See attached map of well site layout. (Not to scale)
- X. Upon completion the location will be leveled to its original state. The access road will remain. The location will be seeded, as per the Bureau of Land Management requirements and the New Mexico Park and Recreation Commission.
- XI. The location is relatively level and covered with Cedar and Pinon trees which will be disposed of as per the New Mexico Park and Recreation Commission requirements; an archaeological clearance will be obtained.
- XII. DeLasso Loos, 1032½ Main Street, Durango, Colorado 81301; Telephones: Office: 303-247-0728; Home: 303-247-2345.
- XIII. I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Blackwood & Nichols Co., Ltd., and its contractors and subcontractors in conformity with this plan and terms and conditions under which it is approved.

Date March 18, 1980


DeLasso Loos, District Manager

DL:st
Attachments