

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 & 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

990' F/NL - 990' 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.

16. NO. OF ACRES IN LEASE

2236.44

19. PROPOSED DEPTH

5815'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

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

6264 UG

22. APPROX. DATE WORK WILL START*

April 29, 1978

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	32.00#	250'	Circulate
8-3/4"	7	23.00#	3560'	Cement to 2000'
6-1/4"	4-1/2"	10.50#	5815'	Cement to 3350'

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 2895', Cliffhouse 4995', Menefee 5045', Point Lookout 5365' and Mancos 5505'. A 3000 PSI WP; 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.

Geological Survey

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APR 4 1978

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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.

SIGNED *DeLasso Loos* DeLasso Loos

TITLE District Manager

DATE 4-4-78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Okal

*See Instructions; On Reverse Side

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

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

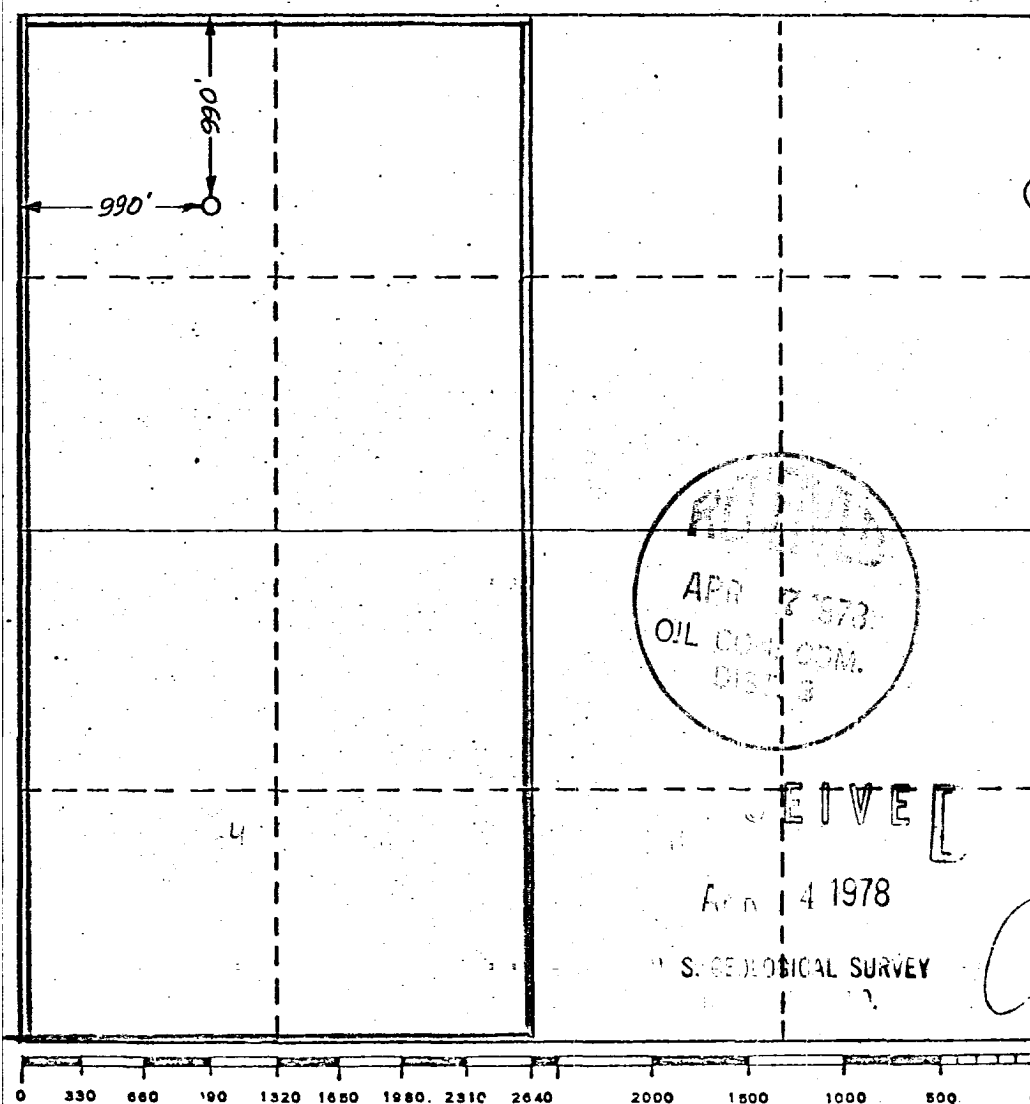
Operator BLACKWOOD & NICHOLS			Lease NORTHEAST BLANCO UNIT		Well No. 4-A
Unit Letter D	Section 21	Township 30 N.	Range 7W., N.M.P.M.	County RIO ARRIBA	
Actual Footage Location of Wells <div style="display: flex; justify-content: space-between;"> 990 feet from the north line and 990 feet from the west line </div>					
Ground Level Elev. 6264 UG	Producing Formation Mesaverde		Pool Blanco-Mesaverde	Dedicated Acreage: 320 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 Commission.



CERTIFICATION

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

Name

DeLasso Loos

Position

District Manager

Company

Blackwood & Nichols Co., Ltd

Date

April 4, 1978

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.

December 14, 1977

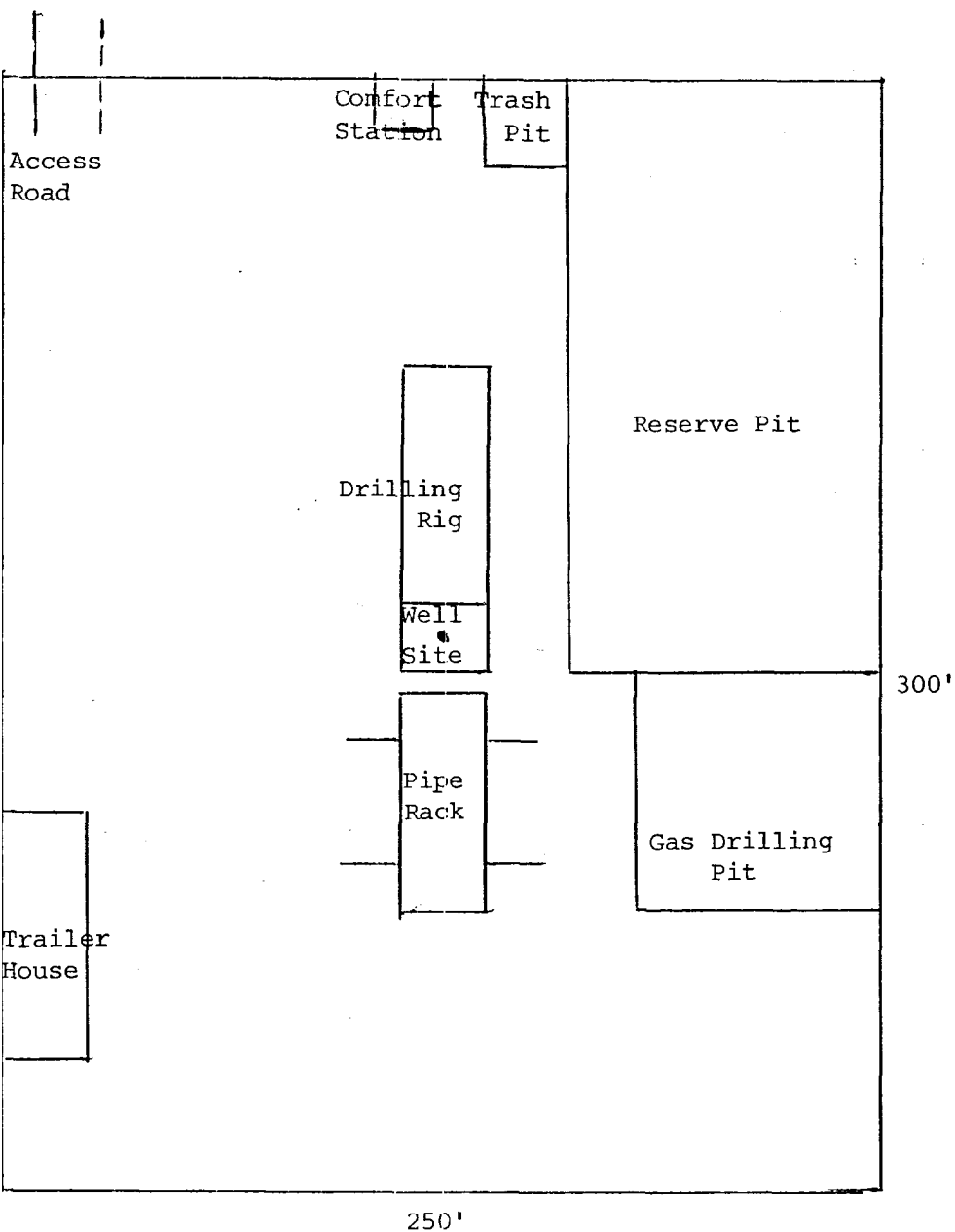
Date Surveyed

Registered Professional Engineer and/or Land Surveyor

**John A. Kroeger, L.S.
Cert. No. 1941**

Certificate No.

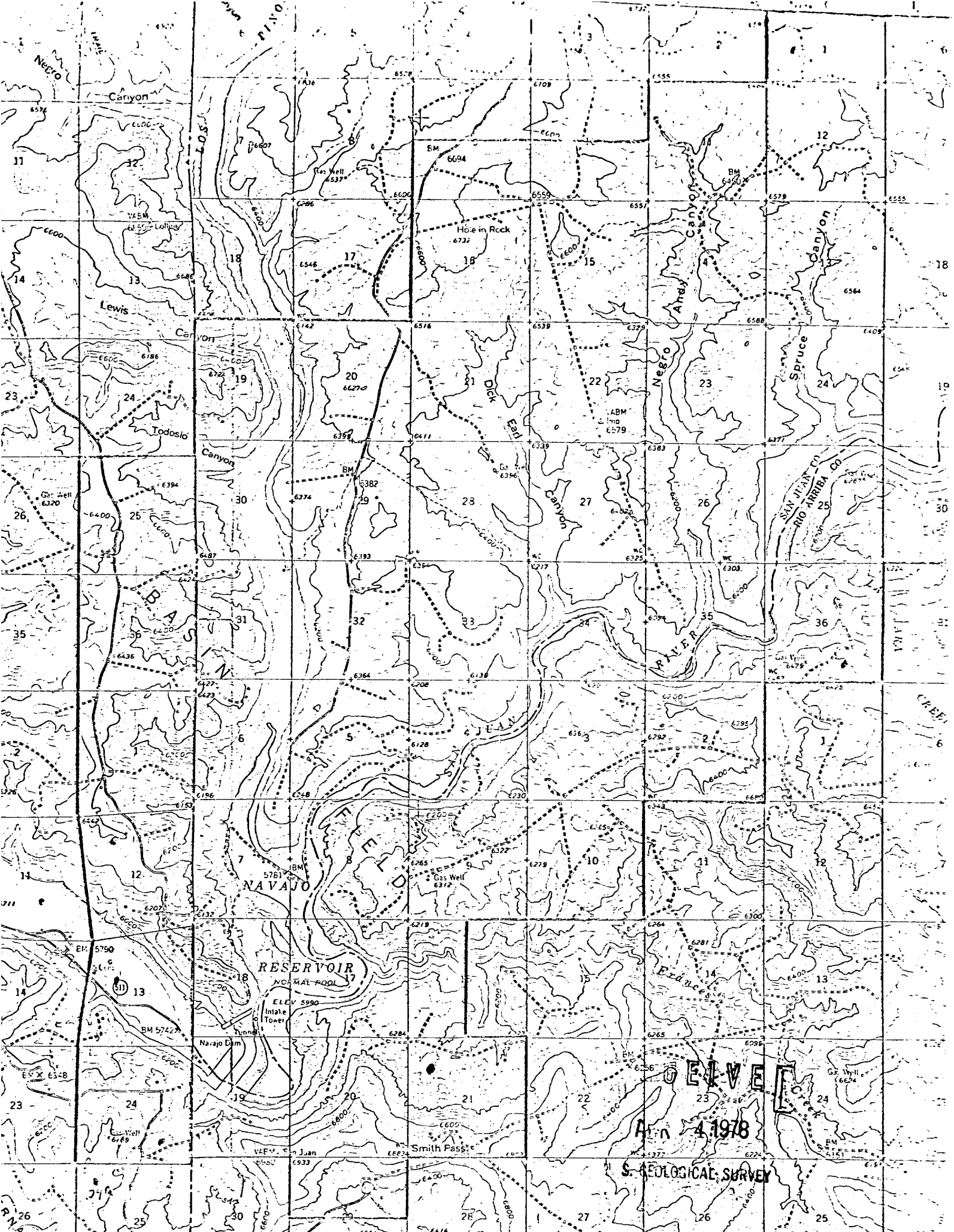
BLACKWOOD & NICHOLS CO., LTD.
Northeast Blanco Unit No. 4A
990' F/NL - 990' F/WL D-21-30N-7W
Rio Arriba County, New Mexico



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BLACKWOOD & NICHOLS Co., LTD.

P. O. BOX 1237

DURANGO, COLORADO 81301

(303) 247-0728

April 4, 1978

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

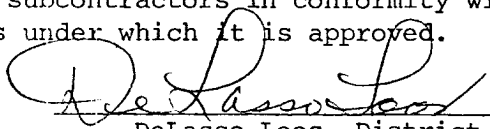
Gentlemen:

Blackwood & Nichols Co., Ltd., as operator of the Northeast Blanco Unit, proposes to drill the Northeast Blanco Unit Well No. 4A to prevent reservoir drainage to the NW/4, Sec. 21-30N-7W, Rio Arriba County, New Mexico. The well is to 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, 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.
- XI. The location is relatively level and covered with Cedar and Pinon trees which will be disposed of as per the Bureau of Land Management 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 4-4-78


DeLasso Loos, District Manager

DL:lr
Attachments

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