## APPLICATION FOR DRILLING

SNOW OIL & GAS. INC. Duffield Federal Com., Well No. 2 1880' FNL & 2230' FEL. SEC. 21-T16S-R27E Eddy County, New Mexico Lease No.: NM-76988 (Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well. Bran Oil Corporation submits the following items of pertinent information in accordance with BLM requirements:

- 1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
- 2. The estimated tops of geologic markers are as follows:

Grayburg	1100'	Penn	6700'
San Andres	2300'	Morrow Sand	8500'
Wolfcamp	6080'	<b>T.D</b> .	8 <b>7</b> 00'

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Possible surface water between 100-200'. Possible sulfur water flow at 560'.

Oil: Possible in the Grayburg below 1100' and the San Andres below 4892'.

Gas: Possible in the Morrow below 8500'.

- 4. Proposed Casing Program: See Form 3160-3.
- 5. Proposed Control Equipment: See Form 3160-3 and Exhibit "E".
- 6. Mud Program: See Form 3160-3.
- 7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.
- 8. Testing, Logging. and Coring Program:

Drill Stem Tests: One possible in the Morrow at 8600'.

Logging: T.D. to surface casing: Gamma Ray CNL-LTD and DIL-SFL.

Coring: None planned.

- 9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated BHP = 3680 psi with a temperature of 124°.
- 10.  $H_{o}S$ : None encountered in previous wells drilled in the area.
- 10. Anticipated starting date: December 1, 1993. Anticipated completion of drilling operations: Approximately 4 weeks.