

APPLICATION FOR DRILLING

MERIT ENERGY COMPANY
MM Federal, Well No. 12
660' FNL & 660' FWL, Sec. 31-T9S-R26E
Chaves County, New Mexico
Lease No.: NM-0559993
(Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Merit Energy Company 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:

San Andres	690'
Glorieta	1815'
Yeso	1900'
Abo	4055'
T.D.	4800'
3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Random fresh water sands from surface to - 300'+/-.
Oil: None expected.
Gas: Possible in the Abo below 4055'.
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: None, unless warranted

Logging: T.D. to surface casing: CNL-LDT, and DLL w/selected RXO.
T.D. to surface: GR-CNL.

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 = 1200 psi with 120°.

H₂S: None expected. None in the previously drilled wells in vicinity.
10. Anticipated starting date: October 15, 1992.
Anticipated completion of drilling operations: Approximately 30 days.