

APPLICATION TO DRILL

Liberty Oil & Gas  
Lee Federal No. 1  
2310' FSL & 660' FWL  
Sec. 25, T20S, R28E  
Eddy County, N.M.

NM-17103

The following items supplement Form 9-331C in accordance with instructions contained in NTL-6:

1. Geologic Name of Surface Formation: Aeolian
2. Drilling Tools and Associated Equipment: Conventional rotary drilling tools using mud for the circulation medium.
3. Proposed Drilling Depth: 5700'
4. Estimated Geological Marker Tops:

Rustler	195'	Queen	1450'
Salt	385'	Grayberg	1950'
Tansill	475'	San Andres	2582'
Yates	641'	Delaware	2710'
7 Rivers	1117'	Bone Springs	5142'
5. Mineral Bearing Formation: Oil bearing at 5400'.
6. Casing Program:

8 5/8" Casing - Set 350' of 8 5/8", 24#, ST&C casing. Cement to surface using 300 sx Class 'C' cement with 2% CaCl.

4 1/2" Casing - Set 4 1/2", 10.5#, ST&C casing to total depth. Cement to cover pay zone with 400 sx Class 'C' cement with 2% CaCl.
7. Pressure Control Equipment: Blowout preventer will consist of double-ram preventer rated to 300 psi WP. BOP sketch is attached.
8. Proposed Circulation Medium:

0-350' Fresh water spud mud.

350-5400' Brine water: add paper if needed for seepage.

5400-TD. Salt mud; 32-34 viscosity; water loss 20 cc or less.