

APPLICATION FOR PERMIT TO DRILL

1. The geologic surface formation is Quaternary.

2. The estimated tops of important geologic markers are:

1. <u>Yates</u>	<u>1500'</u>	6. <u>Strawn</u>	<u>10,200'</u>
2. <u>Queen</u>	<u>2500'</u>	7. <u>Atoka</u>	<u>10,500'</u>
3. <u>San Andres</u>	<u>3400'</u>	8. <u>Lower Morrow</u>	<u>11,000'</u>
4. <u>3rd Bone Spring Sd</u>	<u>7950'</u>	9. <u>Devonian</u>	<u>11,925'</u>
5. <u>Wolfcamp</u>	<u>8200'</u>	10. <u>Fusselman</u>	<u>12,300'</u>

3. Depths at which oil, water, or gas bearing formations are expected to be encountered.

Atoka Shale 10,500' - 10,600'

Atoka Sand 10,600' - 10,635'

Atoka Lime 10,635' - 11,925'

Devonian 11,925' - 12,300'

4. Brief description of testing, logging, and coring programs.

Drill stem test as necessary

Gamma Ray: Surface - TD

Sonic and/or Neutron Density: Top Delaware sand - TD

Mud Logger: Top Delaware sand - TD

No coring anticipated

5. Any anticipated abnormal pressures or temperatures expected? Any potential hazards - H₂S?

Possible abnormal pressures from Wolfcamp

No H₂S zones expected