

APPLICATION FOR PERMIT TO DRILL

1. The geologic surface formation is Quaternary.

2. The estimated tops of important geologic markers are:

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|-----------------------------------|---------------------------------|
| 1. <u>Delaware Sand 3950</u> | 6. <u>Atoka 11100</u> |
| 2. <u>Bone Spring Lm 6450</u> | 7. <u>Morrow Clastics 11880</u> |
| 3. <u>3rd Bone Spring Sd 9350</u> | 8. _____ |
| 4. <u>Wolfcamp 9800</u> | 9. _____ |
| 5. <u>Strawn Lm 10970</u> | 10. _____ |

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

Wolfcamp Limes	9800-10350
Strawn Lime	10970-11120
Atoka Sand	11680-11700
Morrow Sands	11880-12700

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

Drill stem test as necessary
Gamma Ray: Surface-TD
Sonic and/or Neutron Density: Top Del Sd-TD
Dual Lateralog: Top Del Sd-TD
Mud Logger: Top Del Sd-TD
No coring anticipated

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

Possible abnormal pressures from Wolfcamp through the Atoka.
No H₂S zones expected.