

8. **Casing Program and Setting Depths:**

	Size	Weight	Grade	Setting Depth
Surface	8 5/8"	23#	M-50	450'
Production	5½"	15.50#	K-55	7,000'

9. **Casing Setting Depths and Cementing Program:**

- A. Surface casing will be cemented to surface using Class "C" cement. Exact volumes and additives will be based on severity of lost returns historically experienced in this area. Top jobs will be performed as necessary to bring cement to surface.
- B. Production casing will be cemented to surface with Class "C" cement. If cement is not circulated a temperature survey will be run to determine cement top.

10. **Prior to drilling below surface and intermediate casing, a BOP hook-up for 2,000 psi will be installed.**

11. **Circulating Media:**

0 - 450'	FW Spud Mud
450' - 7,000'	10ppg BW

12. **Testing, Logging, and Coring Program**

- A. Open hole logs will be run at total depth.
- B. No coring is planned.

13. **Abnormal Pressure or Temperature and Hydrogen Sulfide Gas:**

- A. No abnormal pressure or temperature is anticipated; however, BOP's, as specified in item 10 above will be installed.

14. **Anticipated Starting Date:**

Drilling operations should begin upon approval of this permit.