	Size	Weight	Grade	Setting Depth
Surface	13 3/8"	48#	H40	500'
Intermediate	9 5/8"	40#	K55	2,800'
Production	5 1/2"	17#	<b>L80</b>	12,000'

- 9. Casing Setting Depths and Cementing Program:
  - A. Surface and intermediate 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 "H" cement using a stage collar around 9500'.
- 10. Pressure Control Equipment:

Prior to drilling below surface and intermediate casing, a BOP hook-up for 5000 psi will be installed.

11. Circulating Media:

0 - 500' FW Spud Mud 10,000-12,000 CBW/Gel/KCL 500 - 2,800 FW/Gel Sweeps 2,800 - 10,000 Cut Brine Water

Severe lost returns are anticipated on the surface hole. Many holes in the area are "dry-drilled". Moderate lost returns are expected in the intermediate hole which should be successfully treated with LCM.

12. Testing, Logging, and Coring Program:

A. No drill stem tests are planned.

- B. Open hole logs will be run at total depth.
- C. No cores are 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.
  - B. The presence of 400 ppm Hydrogen Sulfide is anticipated in the Bone Springs. Gas monitors will be installed and fresh air equipment will be on location before drilling below intermediate casing. An  $H_2S$  contingency plan is attached.

**F**