Cementing Procedure on Production Casing:

The production string will be cemented to surface in two stages with a DV tool or (Halliburton Multiple Stage Cementer) set at 2730'. The first stage will consist of a 240 sack slurry of Class "C" + 2% $CaCl_2$, 14.8 ppg, 132 $ft.^3$/sx. When all the cement is mixed and in the casing, release bottom shutoff plug for stage job. Pump until sharp pressure increase is noted indicating plug has bumped. Drop bomb waiting calculated time until seated and pressure to open ports on stage tool. Circulate out any excess cement around the stage tool. One and half circulations should be adequate. Wait at lease four hours for cement to gain initial strength. Mix and pump second stage consisting of 625 sacks of Class "C" + 2% $CaCl_2$, 14.8 ppg, 132 $ft.^3$/sx. Volumes maybe re-evaluated for these two stages after reviewing the caliper log. All volumes were based on are seven and seven-eights inch hole enlarged to a nine and half inch hole. After all cement is in the casing, release top closing plug and follow with three barrels of cement. Pump until sharp increase is noted indicating plug has bumped. Hold pressure on DV tool for 5-6 minutes and then release to make sure stage tool holds. A period of 18 hours should be allowed for setting of the cement.

Conductor Pipe
40' of 13-3/8" 48# H-40 STC-8RD
Cement with Redi-Mix

Surface Pipe
1. 800' of 8-5/8" 24# K-55 STC-8RD
2. Centralizers (3)
3. Float Collar (1)
4. Guide Shoe (1)

After cementing test w/1000# for 30 minutes.

Production Casing:
1. 3700' of 5-1/2", 14#, K-55, STC-8RD
2. Centralizers (determined after caliper log is run)
3. Float Collar (1)
4. Guide Shoe (1)
5. DV Tool (1)

See attached sheet for cementing procedures, after cementing is completed test w/1500 psi for 30 minutes.

Wellhead:

for 8-5/8" surface casing, 5-1/2" production casing and 2-3/8" tubing

description: 3000 psi Flanged Wellhead w/Single Master and Wing Valve.