

4. The proposed casing program including size, grade, weights, type of thread and coupling, and the setting depth of each string and its condition (new or acceptably reconditioned). For exploratory wells, or for wells as otherwise specified by the authorized officer, the operator shall include the minimum design factors for tensions, burst, and collapse that are incorporated into the casing design. In cases where tapered casing strings are utilized, the operator shall also include and/or setting depths of each portion.
- New 17½" 13 3/8", H-40, 48# csg. set @ 600'.
 - New 12¼" 8 5/8", K-55, 28#, 32# csg. set @ 4500'.
 - New 7 7/8" 5½", K-55 & N-80, 17# csg. set @ 9900'.
5. The amount and type(s) of cement, including anticipated additives to be used in setting each casing string, shall be described. If stage cementing techniques are to be employed, the setting depth of the stage collars and amount and type of cement, including additives, and preflush amounts to be used in each stage, shall be given. The expected linear fill-up of each cemented string, or each stage when utilizing stage-cementing techniques, shall also be given.
- a. 13 3/8" csg: Cmt w/350sxs. Class "C" + 4% GEL & 2% CaCl₂, tailed w/200 sxs class "C" + 2% CaCl₂.
 - b. 8 5/8" csg.: Cmt w/1250 sxs "C" Lite, tail w/250 sxs "C" + 2% CaCl₂.
 - c. 5½" csg.: First Stage: Cmt. w/400 sxs C + 8#/sk Silicalite + 2#/sk KCL + .5% Halad-344; Second Stage: cmt. w/300 sxs class C Lite, tail w/250 sxs Class C + 8#/sk Silicalite + 2#/sk KCL + .5% Halad-344.
6. The anticipated characteristics, additives, use, and testing of drilling mud to be employed, along with the types and quantities of mud products to be maintained, shall be given. When air or gas drilling is proposed, the operator shall submit the following specific information:

Mud Program:

0-600' fresh water gel and lime
600-4500' Brine MW - 10-10.1 #/gal.
4500-6700' fresh water MW 8.5-8.7 #/gal.
6700-9900' fresh water & polymer 8.6-8.9 #/gal.

- (a.) Length and location of blowout line, including the automatic igniter or continuous pilot light.

Not applicable

- (b.) Location of compressor equipment, including safety devices, and the distance from the wellbore.