

3. The operator's minimum specifications for Blowout Preventer (BOP) and related equipment to be used and schematic diagrams thereof showing sizes, pressure ratings, and the testing procedures and testing frequency. BOP and BOP - related equipment (BOPE) schematics shall include schematics of choke manifold equipment. Accumulator systems and remote controls shall be utilized.

7 1/16" BOP flange system. Tested to 3000 psi.

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.

EXISTING CASING:

17 1/2" hole, 13 3/8" 48# csg, set @ 850'

12 1/4" hole, 8 5/8" 28#/32# csg, set @ 4573'

7 7/8" hole, 5 1/2" 17# csg, set @ 8904'

OPEN HOLE LATERAL:

Top of whipstock is @ 8387'. Window will be cut from 8387'-8400'. Estimated KOP @ 8407' MD. Will use BUR 60°/100'. Length of lateral is to be an estimated 1638'.

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.

EXISTING CEMENT:

- a. 13 3/8" csg: Cmted w/lead-600 sxs 'C' + 2% CaCl₂ + 4% gel + .25 pps flocele, tail w/200 sxs 'C' + 2% CaCl₂ + 2% flocele.
- b. 8 5/8" csg: Cmted in two stages: Lead w/560 sxs 'C' + 9 pps salt + .25 pps flocele + 5 pps gilsonite + 1 pps flocele, tail w/250 sxs 'C' + 2% CaCl₂.
2nd Stage: Lead w/775 sxs 'C' + 9 pps salt + .25 pps flocele, tail w/200 sxs