

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.

11" 3M BOP stack to be installed on the 8 5/8" csg. The BOP stack will consist of one blind ram BOP, one pipe ram BOP, and a rotating head. Tested to 1500 psi before drilling the 8 5/8" casing shoe.

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.

12 1/4" hole, 8 5/8" K-55 28# csg set @ 550'

7 7/8" hole, 4 1/2" 11.6# K-55 LTC csg set @ 3150'

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. 8 5/8" csg: Cmt w/300 sxs Class 'C' + 2% CaCl<sub>2</sub>. Circ to surface.
- b. 4 1/2" csg: Cmt w/lead - 500 sxs Class 'C' + 6% gel + 5 pps salt.  
Tail w/150 sxs Class 'C' + .7% CF-19

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:

0-400' fresh water, gel and lime system, MW 8.6-9.0

400'-3150' Brine, MW 9.4-10.0 ppg

7. The anticipated testing, logging, and coring procedures to be used, including drill stem testing procedures, equipment, and safety measures.

- a. DST Program: None

- b. Core: None

- c. Mud Logging: Two-man unit 2550' to TD.

- d. Logs to be run: CNL/FDR/GR/DLL/MSFL

8. The expected bottom-hole pressure and any anticipated abnormal pressures, temperatures or potential hazards that are expected to be encountered, such as lost circulation zones and hydrogen sulfide. The operator's plans for mitigating such hazards shall be discussed. Should the potential to encounter hydrogen sulfide exist, the mitigation procedures shall comply with the provisions of Onshore Oil and Gas Order No. 6.

No abnormal pressures are anticipated. Bottom hole pressures at TD expected to be 1300 psi. Bottom hole temperature 110 F. There is no anticipated Hydrogen Sulfide in this known drilling area

9. Any other facets of the proposed operation which the operator wishes for BLM to consider in reviewing the application.

Anticipated drilling time expected to be 6 days from surface to TD.

5/3/96

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