

PROPOSED CASING & CEMENTING PROGRAM

Ranger Well No. 17

20" 94 lb/ft H-40 Surface Casing Set at 400' - 26" Hole:

Circulate to surface with 1200 sacks of Class "C" + 2% CaCl_2 .

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| Slurry Weight: | 14.8 ppg |
| Slurry Yield: | 1.32 ft ³ /sx |
| Water Requirement: | 6.3 gals/sx |

13 3/8" 61 lb/ft J-55 Intermediate Casing Set at 4200' - 17 1/2" Hole:

Lead: 1600 sx Class "C" + 20% Diacel "D" + 10% Salt. TOC = Surface.

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| Slurry Weight: | 12.0 ppg |
| Slurry Yield: | 3.07 ft ³ /sx |
| Water Requirement: | 16.99 gals/sx |

Tail: 150 sx Class "C" Neat.

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| Slurry Weight: | 14.8 ppg |
| Slurry Yield: | 1.32 ft ³ /sx |
| Water Requirement: | 6.2 gals/sx |

9 5/8" 53.5 lb/ft L-80 & P-110 Production Casing Set at 13800' - 12 1/4" Hole:

450 sx Class "H" + 0.5% Halad 344 (or equivalent) + 0.3% HR-5 (or equivalent). TOC = 12500'.

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| Slurry Weight: | 15.5 ppg |
| Slurry Yield: | 1.18 ft ³ /sx |
| Water Requirement: | 5.2 gals/sx |