

ONDURANT FEDERAL COM #1
SUPERIOR OILHOLE SIZE AND CASING PROGRAM20" Casing to 50' ⁺

Set 40' ⁺ of 20" casing using rat hole equipment. Cement to surface with Redi-mis cement.

17-1/2" Hole to 500' ⁺

Run 13-3/8" casing as per program. Cement to surface with 520 sxs Class "C" Cement + 2% S-1 (CaCl₂), Water Ratio: 6.32 gals/sx, Slurry Density: 14.8 ppg Slurry Yield: 1.32 FT³/sx. Displace cement @ 8-10 BPM with fresh water. Bump top plug with 500 psi over final pumping pressure. Cement volume based on 100% open hole excess. If cement does not circulate, top off with Class "C" neat cement. Reciprocate casing during cementing operation.

Land 13-3/8" casing. Install 3,000 psi casing head spool. NU 5,000 psi BOP's and 3,000 psi Hydril. Test rams to 3,000 psi, Hydril to 2500 psi and casing to 600 psi.

12-1/4" Hole to 5200' ⁺

Drill 12-1/4" hole to 5200' ⁺. Have mud logger on location beginning at depth of 5000'. Log as per program. Run 9-5/8" casing as per program. Stage collar to be set at top of salt section.* Pump 24 bbls chemical wash 100 followed by cement. Cement bottom stage with 730 sxs 65/35 Class "C" Cement: Litepoz III + 6% D-20 (Bentonite) + 5#/sx D-42 (Kolite) + 8.5#/sx D-44 (salt) + 1/4 #/sx D-29 (Celloflake), Water Ratio: 9.65 gals/sx, Slurry Density: 12.75 #/sx, Slurry Yield: 1.94 FT³/sx, Thickening Time: 5+ hrs @ 90° F, Compressive Strength: 600 psi in 24 hrs. @ 100° F. Follow with 200 sxs Class "H" Cement + 2% S-1 (CaCl₂), Water Ratio: 5.2 gals/sx, Slurry Density: 15.6 ppg, Slurry Yield: 1.18 FT³/sx, Thickening Time: 2 hrs 55 min @ 99°F, Compressive Strength: 1500 psi in 24 hrs @ 105°F. Displace cement at 8-10 BPM rate with drilling fluid. Bump plug with 500 psi over final pumping pressure. Reciprocate casing during cementing operation. Cement volumes based on 60% excess in open hole, actual volumes to be calculated using caliper log + 30%.

Open stage collar. Cement to surface with 425 sxs 65/35 Class "C" Cement: Litepoz III + 6% D-20 (Bentonite) + 5#/sx D-42 (Kolite) + 5#/sx D-44 (Salt) + 2% S-1 (CaCl₂), Water Ratio: 9.65 gals/sx, Slurry Weight: 12.75#/gal, Slurry Yield: 1.94 FT³/sx, Thickening Time: 4 hrs. 30 mins. @ 85° F, Compressive Strength: 610 psi in 24 hrs @ 85° F. Follow with 100 sxs Class "C" Cement + 2% S-1 (CaCl₂), Water Ratio: 6.32 gals/sx, Slurry Density: 14.8 ppg, Slurry Yield: 1.32 FT³/sx, Thickening Time: 2 hrs. 20 mins. @ 85°F, Compressive Strength: 1,650 psi in 24 hrs @ 85° F. Displace cement @ 8-10 BPM with drilling fluid. Bump plug with enough pressure to close stage collar. Cement volumes based on 60% excess in open hole, actual volumes to be calculated using caliper log + 30%.