

Barbara Federal #1

Mud Program - Typical

Set 16" csg @ 400'. Drill to approx 500 ft w/brine water thru salt section with mud properties. MW 10#/gal, vis 29-35 cc/liter. Set approx 500' 10-3/4" casing.

Drill to approx 8000 ft w/fresh water having properties MW 8.4#/gal, vis 28 cc/liter changing to brine water to 12,300 ft having MW 9.1 - 9.3, Vis 32-35 WL N/C. Set approx 12,300' of 7-5/8" csg.

Drill to approx 14,100' thru the Strawn and Morrow sections w/mud properties as follows:

MW 11 - 12.5#/gal, Vis 34-38 cc/liter, WL 10. Set Approx 2,200 ft of 5-1/2" as liner thru Morrow to approx. 14,100'.

Drill to approx. 15,000' to test Devonian w/mud as follows:

MW 8.4 - 8.6#/gal, Vis 34-38, WL 10 or less, Ph 8.5 - 5.0., oil 2 - 3%.

The Strawn and Morrow sections historically can be high pressure and low volume gas zones - we plan to use the necessary surface equipment as, degasser, and adjustable chokes along with pit volume totalizers, flow indicators and pump stroke counters to help provide the safety in the drilling of these zones.

