

PRODUCTION: 11,000' of 5 1/2"

Suggest drilling out below intermediate with fresh water and D-D (a drilling detergent), using Lime for pH control.

This type drilling fluid should be sufficient to drill and run D.S.T.s down to 7,000'.

At 7,000' suggest displacing the fresh water system with a 9.0 - 9.2 lbs/gal. controlled brine water system and mudding up with a controlled brine water, Polymer, Drispac type drilling fluid with the following characteristics:

Weight:	9.0 to 9.2 lbs/gal.
Funnel Viscosity:	32 to 36 sec/1000 cc
Plastic Viscosity:	2 to 6 C.P.
Yield Point:	4 to 10 lbs/100 ft <sup>2</sup>
Initial Gel:	1 to 5
10 Min. Gel:	4 to 10
pH:	9.0 to 10.0
Water Loss:	15.0 cc or less
Solids Content:	2.0 to 4.0 % by volume

This type drilling fluid should be sufficient to drill to 11,000', with exception of weight and viscosity which may need altering as hole conditions dictate.

COMMENTS:

1. There is a possibility you may encounter high pressure, low volume gas in the Strawn-Atoka that will require a drilling fluid weight in excess of 9.2 lbs/gal. to control. However, a large amount of gas can be flared allowing drilling to continue with an under balanced system.

In the event gas pressures are encountered that you can not control with mechanical equipment and flare, suggest raising weight of drilling fluid with brine water and sack salt.

2. There is a possibility you may encounter a complete loss circulation around 8,800'. This loss is not predominate in this area. Some operators try to control loss with loss circulation material. We suggest sealing loss zone with some type plug (cement, Polymer, etc.).
3. The following Swaco blowout control equipment will aid you in drilling under balance, successfully control gas kicks after trips, detecting gas kick and loss of drilling fluid: mud-gas separator, d-gasser, adjustable or super choke, pit volume totalizer, and flow sensor.