

As drilling progresses post 5,000', some loss of fluid should occur. Minor seepage can be controlled with additions of **Paper**. Complete lost circulation is also possible during this interval. Should complete loss of returns occur while drilling, we recommend following the same procedure described in the previous section.

Severe seepage in the Bone Springs may require alternative methods of combating losses, such as:

- $\Rightarrow$  Heavy bentonite pills
- ⇒ Diesel/Loloss pills
- ⇒ Drill-out pills spotted or squeezed

Crooked hole can be a problem in this area.

Utilize Horizon Poly-Vis II and Prehydrated Gel for periodic sweeps while drilling, prior to mud-up.

## We recommend that the surface pit system include the following:

- $\Rightarrow$  <u>Flo-line Cleaner</u> This will allow removal of a wider range of solids and will assist in optimizing the efficiency of the de-sander and de-silter (or scale shaker).
- $\Rightarrow$  <u>Centrifuge</u>- removal of fine solids and Barite recovery

By 8,400', return to the working and add brine to increase the mud weight to 9.2-9.4 ppg for the Wolfcamp. Then, continue to add brine to increase the mud weight by mud-up point.

Close attention should be paid to the possibility of a kick in the lower Wolfcamp or Canyon formations.

By 9,500', we recommend displacing with the stored XC Polymer/MF-55 system to achieve the following properties:

Mud Weight	9.7-9.8
Viscosity	32-34
Fluid Loss	<10

The superior shear-thinning properties of the XC Polymer system will provide excellent penetration rates as well as **Barite** suspension should it be required.

Lost circulation could occur after mud-up. We recommend using fibrous-type LCM to control seepage. Should complete loss of returns occur, we recommend following the same procedure as described in the previous section.