


drilling into the Pennsylvanian formation or when well is mudded up and used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- (1) A recording pit level indicator to determine pit volume gains and losses.
  - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
  - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
6. When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 150 feet. The volume of mud required to fill the hole shall be watched, and any time there is an indication of swabbing, or influx of formation fluids, proper blowout prevention precautions must be taken. The mud shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running the pipe to bottom.
7. A copy of these requirements shall be posted on the rig floor or in the dog house during the drilling of the well.

  
James A. Knauf  
District Engineer

Lease No.	NM-7039	
Well	Charles A. Dean	2-Northwest Indian Basin Unit
Drillsite	1980/S&W	28-20S-23E
Depth	9200' Morrow	
Approved	July 25, 1973	