

### CHLORIDES IN OIL BASED MUD

This test determines the salinity of the drilling fluid and uses the same fluid sample from the Alkalinity test procedure.

#### Supplies

1. Silver Nitrate Solution: 0.282N for high Chloride concentrations
2. Potassium Chromate
3. 250ml Erlenmyer Flask
4. Magnetic stirrer and stir rod
5. 5-ml Pipette
6. Safety Bulb or Pipette Pump

#### TEST PROCEDURE

1. Using the fluid sample from the Alkalinity test procedure add 10 drops of Potassium Chromate while stirring with magnetic stirrer.
2. Titrate with Silver Nitrate while stirring until the color changes from yellow to orange -red occurs and stays for 30 seconds or longer. Do NOT titrate to "brick red."

#### CALCULATIONS

API requires the salt content to be expressed as total chlorides in the mud phase calculated as below:  
Total Cl<sup>-</sup> in mud (mg/l) = ml of 0.282 N Silver Nitrate x 10,000 per ml mud