



HYDROGEN ION DETERMINATION (PH)

The acidity or alkalinity of a drilling mud is indicated by the hydrogen ion concentration, which is commonly expressed in terms of pH. A perfectly neutral solution has a pH of 7.0 whereas alkaline (basic) solutions have a pH range between 7.0-14.0 and acidic solutions have a pH less than 7.0. The pH measurement is used as well to indicate the presence of contaminants such as cement or anhydrite.

EQUIPMENT & CHEMICALS

Equipment		Product Code
1.	pH Dispenser 1 - 11	E62400
2.	pH Dispenser 10 - 14	E62600
3.	pH Dispenser 6 - 11	E62503
4.	pH Dispenser 6 - 9	E62300
5.	pH Dispenser 8 - 12	E83122
6.	pH Indicator Strips 0 - 14	E83121
7.	pH Indicator Strips 7.5 - 14	E62400

TEST PROCEDURE

The two most common field methods for determining pH are described below:

METHOD ONE, PHYDRION PAPER

1. This method may be used on the mud filtrate or the mud directly.
2. Place a 25 mm strip of indicator paper on the surface of the mud to be tested and allow it to remain until the liquid has wet the surface and the color has stabilized, (approximately one minute).
3. Compare the color standards provided with the test paper (which was not in contact with the mud solids) to the color standards provided with the test paper and estimate the pH of the mud accordingly.

METHOD TWO, COLOR PH STRIP

1. This method applies only to mud filtrates.
2. After obtaining a sample of mud filtrate, totally immerse the colored portion of the colour pH strip into the filtrate and remove immediately.
3. After a short period of color stabilization, (10-15 seconds) compare the color of the wetted strip with the color standards provided in the color pH plastic container. An estimate may be necessary if a color does not exactly match a particular pH value.