

## Drilling Fluids 1: A Quick Start for Beginning Mud Technologists

**Goal:** The drilling fluids technologist will be able to monitor the chemical and physical properties of the drilling fluids and recommend treatment to maintain them within specified ranges.

**Objectives:** The student will be able to:

1. Learn the parts and functions of a drilling rig, emphasizing the circulating system.
2. Analyze the composition of water-based drilling fluids
3. Outline each function of a drilling fluid and the nature of its importance.
4. Check the chemical and physical properties that require monitoring.
5. Summarize the chemical and physical tests and calculations employed to evaluate the properties of fluids. (Calculations derived both longhand & on Pegasus Vertex, Inc's MUDPRO daily mud reporting software.)
6. Evaluate and adjust properties that fall outside acceptable ranges.
7. Create an inventory product list and determine cost.
8. Construct a standard, water-based mud report.