

GENERAL INFORMATION

The Sand Content Kit is an easy, reliable, efficient, and proven means for determining the sand content of drilling fluid. The kit employs the sieve analysis method for determining the sand content. It uses a 200 mesh sand screen to trap the sand and other coarse particles in the drilling fluid.

The Sand Content Kit contains the sand screen [a sieve mounted in a plastic cylinder, 2-1/4 inches (5.7cm) in diameter x 3-3/4 (9.5cm) long], a plastic funnel that fits over the end of the screen cylinder with the small end fitting into a glass measuring tube, and a wash bottle. The measuring tube has a scale that is graduated from 0 to 20% to measure percentage of sand by the volume of drilling fluid.

The volume of sand, including the spaces between the grains, is expressed as a percentage of the volume of the drilling fluid. The value read from the measuring tube is reported as: "*% by Volume*".

MEASURING THE SAND CONTENT OF DRILLING FLUIDS

PROCEDURE

1. Fill the measuring tube up to the line labeled "**Mud to Here**", and then use the wash bottle to add clear water (or diesel if oil drilling fluid) to the line labeled "**Water to Here**". Close the mouth of the tube with the thumb and shake vigorously.

NOTE: Use diesel oil instead of water in the wash bottle for oil based drilling fluids.

2. Pour the mixture in the tube through the screen. Continue adding wash bottle fluid to the tube, shaking it, and pouring the contents through the screen until all of the drilling fluid has been washed out of the tube.

NOTE: Do not stir or manually force the mixture through the screen. Tapping the side of the screen holder as the diluted drilling fluid is added will help the mixture pass through the screen.

3. Flush the screen with fluid from the wash bottle to wash away the remaining drilling fluid and shale particles until all that remains on the screen is sand.
4. Fit the large end of the funnel over the top of the screen holder and slowly invert the screen and funnel assembly, fitting the tip of the funnel into the mouth of the glass measuring tube.
5. Using a fine spray of fluid from the wash bottle, wash the sand from the screen back through the funnel into the glass measuring tube, and allow the sand to settle.
6. Note the quantity of sand that has settled and, using the scale on the outside of the tube, determine the percentage of the total mud volume that is sand. Report this value on the Drilling Fluid Report as "*% by Volume*" sand.

NOTE: If other coarse solids or lost circulation material are retained on the screen, report the presence of these materials on the Drilling Fluid Report.

CARE OF EQUIPMENT

After each use of the Sand Content Kit, wash any dirt or drilling fluid from the screen, the funnel, and the measuring tube, and dry all equipment. Take special care to clean and dry the screen thoroughly. Refill the wash bottle.

PARTS LIST

PART NO.	DESCRIPTION
209657	Sand Content Kit
209658	Wash Bottle (500 ml)
209659	Carrying Case
209661	Sand Content Screen (200 mesh)
209662	Sand Content Funnel
209663	Sand Content Tube

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