



SAND CONTENT DETERMINATION

EQUIPMENT REQUIRED:

<u>QUANTITY</u>	<u>DESCRIPTION</u>	<u>PART No.</u>
1	Sieve, 200 Mesh	167-10
1	Funnel	167-20
1	Sand Content Tube	167-30



It is desirable to know the sand content of drilling muds because excessive sand may result in the deposition of a thick filter cake on the wall of the hole, or may settle in the hole about the tools when circulation is stopped, thus interfering with successful operations of drilling tools or setting of casing. High sand content also may cause excessive abrasion of pump parts and pipe connections. Sand sized particles are defined as anything larger than 74 microns. This test can be performed on low solids muds as well as on weighted muds.

PROCEDURE:

1. Fill the sand content tube to the indicated mark with mud. Add water to next mark. Close the mouth of the tube and shake vigorously.
2. Pour the mixture onto the clean, wet screen. Discard the liquid passing through the screen. Add more water to the tube, shake and again pour onto the screen. Repeat until the wash water passes through clear. Wash the sand retained on the screen to free it of any remaining mud.
3. Fit the funnel upside down over the top of the screen. Slowly invert the assembly and insert the tip of the funnel into the mouth of the tube. Wash the sand into the tube by spraying a fine spray of water through the screen. (Tapping on the side of the screen with a spatula handle, may facilitate this process). Allow the sand to settle, from the gradations on the tube, read the volume percent of the sand.
4. Report the sand content of the mud in volume percent. Report the source of the mud sample, i.e., above shaker, suction, pit etc. Coarse solids other than sand will be retained on the screen (e.g., lost circulation material, coarse barite, coarse lignite, etc.) and the presence of such solids should be noted.

NOTE: Use diesel oil instead of water for oil muds.