# OIL & WATER RETORT 10ml

Knowledge of water, oil and solids content is fundamental to proper control of mud properties. Monitoring the water, oil, and solids content throughout the drilling process allows close control of oil/water ratio, rheology, density, filtration and salinity of aqueous phase. Knowledge of solids in oil mud is essential to evaluation of solids control equipment.



A retort is used to determine the quantity of liquids and solids in a drilling fluid. In a retort test, a measured sample of fluid is placed in a cup and heated until the liquid components have been vaporized. The vapors are passed through a condenser and collected in a graduated cylinder or centrifuge tube that has been calibrated to record the volume of the condensed liquids at 20°C. The distillate is read directly as volume percent of the solids sample's original volume. Suspended and dissolved solids are determined by subtracting these from 100 percent of the initial sample. For fresh-water fluids, the relative amount of barite and clay can be estimated. Corrections must be made for salt in the calculation for solids content by volume.

## **10ml Retort Kit**

Oil and Water Retorts provide a simple, direct field method for determining the percent by volume of oil and water in samples in drilling mud or in core samples of the formation. The Retort has been found to be especially useful in determining the oil content of emulsion muds. Industry standard procedures for proper testing of water, oil and solids analysis are detailed in the *American Petroleum Institute Publications;* API Recommended Practice 13B-1, ANSI/API 13B-1 & API Recommended Practice 13B-2

Fann Retorts are enclosed in stainless steel cases for greater portability and safety.

## Specially Designed Cylindrical Glassware

Fann has designed special receiver tubes, called JP-Tubes for use when retorting oil muds. These JP-Tube receivers are especially designed cylindrical glassware with rounded bottom to facilitate cleaning and funnel-shaped top to catch falling drops. These **API** approved receiver tubes are precision graduated and can be used with existing Retorts.

> JP-Tube, 10ml – Part No. 205240 JP-Tube, 20ml – Part No. 205241 JP-Tube, 50ml – Part No. 205258



JP-Tubes

## **Ordering Information**

Oil & Water Retort Kit, 10ml, 115 Volt, 350 Watts	Part No. 210442
Oil & Water Retort Kit, 10ml, 230 Volt, 350 Watts	Part No. 210443
Oil & Water Retort Removable*, 10ml, 115 Volt, 350 Watts	Part No. 210485

\*The Removable model is designed to be used as a replacement in field kits or as stand-alone units.

## **Oil and Water Content of Cuttings**

The API recommends using a **50ml Retort** to measure the amount of oil from cuttings generated during a drilling operation. The *50ml Retort Test* measures all oil and water released from a cuttings sample when heated in a calibrated and properly operating retort instrument.

## Available 50ml Retorts

Oil & Water Retort Kit, 50ml, 115 Volt, 700 Watts	
Oil & Water Retort Kit, 50ml, 230 Volt, 700 Watts	

Part No. 210465 Part No. 210463

Fann Instrument Company is a worldwide supplier of instrumentation and fluid analysis systems for oil and gas well drilling, cementing, fracturing, completion and workover operations.

Fann offers a complete line of testing equipment and products for all types of industrial drilling; including water well, geothermal, mining and minerals exploration, construction and foundation, tunneling/HDD, and environmental monitoring.

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