

PETROLEUM RESERVOIR FLUIDS LABORATORY

This laboratory is equipped with latest equipment covering a wide range of Reservoir Fluids Engineering experiments. Equipment details are given below:

DENSITY AND SPECIFIC GRAVITY METER

This “Density and Specific Gravity Meter” is used to measure the density, specific gravity of oil samples. It works on the basis of natural oscillation period. It is the time taken by the molecule in the measuring cell to reach from one end of the cell to the other end. When a measuring cell is filled with a liquid sample, its natural oscillation period varies depending on the density of a sample.



FLASH POINT TESTER

The automatic Pensky-Martens closed-cup tester is uniquely designed for determination of flashpoint of liquids. It uses flash point detection method of measuring the instantaneous pressure increase inside the continuously closed chamber due to hot flame.

Flash Point is the lowest temperature at which the application of an ignition source causes the vapors of sample to ignite.



GAS CHROMATOGRAPH

The gas chromatograph is used to conduct qualitative and quantitative analysis of petroleum product(s) to determine different components present in oil sample.



INTERFACIAL TENSIOMETER

Interfacial tensiometer is used to measure interfacial/surface tension between two fluids. It employs pendant drop method for the calculation of interfacial/surface tension.



POUR AND CLOUD POINT TESTER

The Mini – Pour/ Cloud Point Tester is used to measure the pour and cloud point of oil samples. This tester is equipped with a “Constant Temperature Refrigerated Circulator” to provide cold water circulation.



AUTOMATIC KINEMATIC VISCOMETER MEASURING SYSTEM

Automatic kinematic viscosity measuring system is used to measure the kinematic viscosity of oil samples. Kinematic viscosity is the ratio of absolute viscosity to the density.



SULFUR METER

Sulfur meter is used to determine sulfur contents present in crude oils in percentage of weight using the X-ray fluorescence analyzer.

