Petroleum Engineering	Formal name	Course	Layouts	Max student capacity	Assignable Area (Sq. m.)
	Drilling Fluid and Cementing Laboratory	PET13226- Drilling Fluid (+Labs)	Lab	24	110

Location: 2nd floor, PVU

Link: http://www.pvu.edu.vn/en/departments/petroleum-faculty/petroleum-engineering/labs/pe-labs/2-drilling-fluid-and-cementing-laboratory





Lab layout



Device: pH Meters – Digital

Function: Measure pH of drilling fluid



Device: Model 653B Resistivity Meter Function: Measure the resistivity of fluids



Device: Resistivity Meter Model 88C Function: Measure drilling fluid resistivity



Device: Retort 10ml Oil and Water Kit Model 871Function: determine the quantity of liquids and solids in a drilling fluid





Device: Fann 35SA viscometer Function: Measure drilling fluid viscosity



Device: HPHT Filter Presses Function: Evaluating the filtration properties of drilling mud at high temperatures

Device: Low Temperature (LPLT) Filter Presses Function: Determining the filtration properties of

drilling muds and cement slurries



Device: Balance Density TruWate Model 141 Function: Measuring the absolute density of a fluid sample



Device: Velocity distribution of flowing fluid in

Function: Study fluid flow velocity profiles in pipe



Device: Scale Balance digital

Function: Measure weight with high accuracy for

experiments



Device: Constant Speed Mixer Model 686CS

Function: Mix. compute to comply with American

Function: Mix cements to comply with American Petroleum Institute (API) Spec 10A



Device: Multi-Mixer® Model 9B

Function: Mixing of drilling fluids in preparation for

laboratory tests of mud materials



Device: Circulating bath 60 Celcius

Function: Maintain constant temperature of samples



Device: Cement mold

Function: Create the shape the finished concrete



Device: Circulating bath 36 Celcius

Function: Maintain constant temperature of samples



Device: Model 140 Mud Balance

Function: Determination of fluid density



Device: HPHT Consistometer Model 290Function: Measure cement slurry viscosity or consistency under elevated



Device: Compressive Strength TesterFunction: measuring the maximum amount of compressive load a material can bear before fracturing