

Density Measurement System

Reservoir Fluid Density Determination

The density, or more precisely, the volumetric mass density, of a substance is its mass per unit volume. The density of a material varies with temperature and pressure. Increasing the pressure on an object decreases the volume of the object and thus increases its density. Increasing the temperature of a substance (with a few exceptions) decreases its density by increasing its volume.

Experiment Description

The principle consists of transferring the sample into the cell at desired conditions and weighing it using a high resolution balance. The sample density is calculated by simply dividing the weight of the sample (i.e. weight of the filled cell minus weight of the evacuated cell) by the known, precisely measured cell volume.



Specification	ADM-BR01	HDS-BR01
Working Temperature	Ambient to 90°C	Up to 120 °C
Working Pressure	Atmospheric	Up to 6,000 Psi
Temperature Control System	Water Bath	Force Convection Oven
Wetted Material	Glass	Titanium
Ten Hydrometer (Density Range from 0.7 to 1.2 g/cc)	✓	✗
Downstream Pressure Controller	✗	✓
Digital Balance	✗	✓

Contact info:

+98 71 3624 6968 / +98 71 3624 7604
info@petroazma.com
www.petroazma.com

Address:

Fars Science and Technology Park,
Aryan St., Dr.Hesabi Blvd., Shiraz, I.R.Iran
P.O Code: 7197687811