

BEHAVIOUR OF TWO JORDANIAN OIL SHALES AT DRYING

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The drying kinetics of two oil shales from different deposits was investigated over a temperature range of 70–150 °C in thermogravimetric analyser (TGA) and under direct insolation. A series of experiments in a convection-drying oven was carried out with particles of similar size and at the final temperature applied in TGA. The weight loss and drying rates of the samples were determined gravimetrically. It has been observed that drying rate falls off at a critical temperature of about 120 °C and approaches zero beyond this temperature. For both types of oil shale, there is a slight increase in the surface-water yield upon increasing the final drying temperature.