

MIOCENE SANDSTONE OF MUREE FORMATION, RAWALAKOT, AZAD KASHMIR, PAKISTAN: GEOTECHNICAL PROPERTIES EVALUATION OF GEO-MATERIAL

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ABSTRACT

Geological mapping was prepared at the scale 1:12,500 for Rawalakot area about 100 square kilometers. The results show that the material strength is related to the mineral assemblage and the aggregate composition of Muree sandstone. Los Angeles value, impact value, specific gravity, water absorption, flakiness index and elongation index were performed and co-related according to the ASTM standards, and the parameters of the material strength were deduced according to the mineral assemblage of the Muree sandstone. It was seen that the percentage of quartz and cementing material like calcite in favorable conditions provide strength to the material and deleterious material like clays due to its swelling potential, damage the material when in contact with water. Reserves of the Muree sandstone as geo-material at different localities were also estimated for the quarry purpose.

KEYWORDS: Geological Mapping, Engineering Characteristics, Geo-Material, Muree Sandstone