عنوان مقاله:

Geotechnical analysis of igneous rocks (Andesite) from west of Yazd for Engineering Uses

محل انتشار:

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نویسنده:

Hoseinali Bagi - *Department of Civil engineering, Technical and Vocational University, Tehran, Iran*

خلاصه مقاله:

Andesite Rocks are highly distributed and available in huge quantities in west of Yazd in central Iran. The objective of this study is to determine the Evaluation of resistance and those relevant to engineering aims in central Iran., which is related to the Upper Eocene basaltic flows and to conduct a comparison of the results with the standard specifications. Ten random samples of west of Yazd, were collected representing five locations. The laboratory investigation included measurements of point load strength, splitting tensile strength (MPa), Los Angeles, abrasion value (%), slake durability, abrasion, porosity, and saturation degree. In addition, the chemical and mineralogical composition of the basalt was identified utilizing X-ray fluorescence (XRF), and X Ray Diffraction respectively.The laboratory investigation included measurements of point load strength, splitting tensile strength (MPa), Los Angeles,abrasion value (%), slake durability, abrasion, porosity, and saturation degree. In addition, the chemical and mineralogical composition of the basalt was identified.The results of properties related to engineering indicate that these rocks have mainly compressive strength values ranging from ۴۰ to ۱۳۰ Mpa. Los Angles Abrasion ranges between ۳.۶۶% and ۴.۸۳%, and splitting tensile strength (MPa) is between ۱.۹۵۴ and ۳.۳۳۱.The results show that the Andesiteof west of Yazd complies with the international standards, and the standards.used for classifying the decorative and building stones .and some not recommended

کلمات کلیدی:

Andesite, west of yazd, Geotechnical, Building stones, Engineering properties