BENEFICATION OF FELDSPAR FROM YOZGAT REGION GRANITES

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ABSTRACT.- In this study, a feldspar beneficiation work was performed of the granite deposits of Sanhacih and Kayabağı samples found in Yozgat region. Main impurities in these granitic rocks are mica and iron-oxide minerals which cause iron contents to increase (2.37 and 1.76 % Fe_2O_3). For decreasing the iron content of granites, magnetic separation and flotation methods were applied. After magnetic separation, the iron contents of granites were reduced down to 0.22 and 0.20 % Fe_2O_3 respectively. Flotation tests were carried out in two stages that were mica and oxide flotation. In mica flotation, amine type cationic collector and in oxide flotation anionic collectors i.e. Na-oleate and sulphonate were tried. Iron contents of the samples were reduced down to 0.08 % and 0.12 Fe_2O_3 respectively by flotation method. Firing button tests were also performed on the concentrates at 1250 ˚C and the products had satisfactorily bright and white color tones for both methods.