ANALYSIS MINERAL AND GEOCHEMISTRY OF MINERAL SAND IRON BUBU DISTRICT, KAMBOWA DISTRICT, NORTH BUTON DISTRICT, SOUTH SULAWESI PROVINCE

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Abstract

The research area is located in the Bubu area of the Kambowa subdivision, North Buton Regency, Southeast Sulawesi province, which contains iron sands potential. Geographically, the study area is 4°57’30" - 4°58’15" LS and 122°57’15" - 122°58’00" East. Mineragraphic and geochemical analysis aims to identify the group of minerals contained in iron sand and identify the source rocks of the Based on the results of the total mineragraphic and geochemical analysis, the dominant iron sand mineral in the study area is the magnetite mineral, because these magnetite minerals are formed by oxidation in the form of changes in ferrous minerals and washing or washing out of waves and currents these minerals remain on the surface during the wash-out process or other minerals such as corundum, chromite and rutile Washwaves and streams are transported and dissolved Chemical compound content based on the results of RFA analysis Based on the XRF analysis results, some of them are of the above compound contents, including the iron mineral components, Fe₂O₃ (magnetite), SiO₂ (quartz) and Cr₂O₃ (chromite) hematit (Fe₂O₃), and TiO₂ (rutile). Iron sand in the study area is part of placer iron deposits formed by maritime and terrestrial processes from fe-containing boulders on the coast so that the mineral collection contained in the sediment erosion and weathering of terrestrial rocks and different transport or sedimentation processes reflects. The spectrum ranges from traction currents, salt formation and suspension to washing by ocean waves.

Keywords: iron sand, magnetite, quartz, chromite, hematite, rutile