

SARI

GEOLOGI DAN ANALISIS GEOKIMIA *SOIL* ENDAPAN TIMAH PRIMER DAERAH BAKAM DAN SEKITARNYA KABUPATEN BANGKA, PROVINSI KEPULAUAN BANGKA BELITUNG

Lokasi penelitian berada di daerah Bakam dan sekitarnya, Kecamatan Bakam, Kabupaten Bangka, Provinsi Kepulauan Bangka Belitung. Tujuan penelitian adalah untuk mengetahui kondisi geologi dan kadar endapan timah primer (Sn) serta korelasi timah primer (Sn) dengan unsur *base metal* yang terdapat di daerah tersebut. Metode yang digunakan adalah observasi lapangan yang meliputi pengamatan litologi/stratigrafi, analisis petrografi, analisis *X-Ray Fluorescence (XRF)*, dan analisis geokimia, univariat, bivariat, dan multivariat serta analisis studio berupa pembuatan peta-peta, dan laporan akhir. Hasil penelitian menunjukkan bahwa daerah penelitian terdiri atas morfologi Satuan Dataran Bergelombang (D1) dan Tubuh sungai (F1), tatanan stratigrafi tersusun atas Satuan Sekis Komplek Pemali dan Satuan Granit Klabat. Berdasarkan hasil analisis petrografi dan geokimia univariat ditemukan bahwa batuan sumber timah Primer merupakan batuan sekis dan granit dengan kadar Sn sampel batuan didapatkan nilai *cut off* geologi 131 ppm dan kadar Sn sampel *soil* didapatkan nilai *cut off* geologi 151 ppm. Untuk hasil analisis geokimia bivariat sampel unsur Sn sampel batuan dengan *base metal* kehadiran unsur Sn memiliki hubungan korelasi positif dengan unsur Fe dan As. Namun korelasi tersebut sangat lemah karena nilai koefisien korelasinya yang sangat kecil mendekati 0. Sementara unsur Sn sampel *soil* memiliki hubungan korelasi sangat lemah juga dengan unsur Fe, As, Pb, Zn. karena nilai koefisien korelasinya yang sangat kecil mendekati 0. Kemudian analisis geokimia multivariat pada sampel batuan korelasi sangat lemah terhadap unsur Sn-As-Pb-Zn-Cu, begitu juga dengan sampel *soil* korelasi terhadap unsur Sn-As-Pb-Zn-Cu sangat lemah.

Kata kunci : Timah primer, Unsur Sn, *X-Ray Fluorescence (XRF)*, Geokimia.

ABSTRACT

GEOLOGY AND SOIL GEOCHEMICAL ANALYSIS OF PRIMARY TIN DEPOSIT AT BAKAM REGIONS, BANGKA DISTRICT, PROVINCE BANGKA BELITUNG ISLANDS

The research location is in the Bakam area and its surroundings, Bakam District, Bangka Regency, Bangka Belitung Islands Province. The research objectives were to determine the geological conditions and levels of primary tin (Sn) deposits as well as the correlation of primary tin (Sn) with base metal elements found in the area. The methods used were field observation which includes lithological/stratigraphic observation, petrographic analysis, X-Ray Fluorescence (XRF) analysis, and univariate, bivariate, and multivariate geochemical analysis as well as studio analysis in the form of making maps and final reports. The results showed that the study area consist of the morphology Wavy Plain Unit (D1) and Body of the River (F1). The stratigraphic order were composed of the Pemali Complex Schist Unit and the Klabat Granite Unit. Based on the results of univariate petrographic and geochemical analysis, it were found that Primary tin source rocks were schist and granite with Sn content in the rock samples obtained a geological cut-off value of 131 ppm and Sn content in soil samples obtained a geological cut-off value of 151 ppm. For the results of bivariate geochemical analysis of elemental samples Sn rock samples with base metal presence of Sn elements have a positive correlation with Fe and As elements. However, this correlation was very weak because the value of the correlation coefficient was very small, close to 0. Meanwhile, the Sn element in the soil sample also has a very weak correlation with the elements Fe, As, Pb, Zn. because the value of the correlation coefficient is very small, close to 0. Then the multivariate geochemical analysis of the rock samples has a very weak correlation to the elements Sn-As-Pb-Zn-Cu, as well as the soil samples the correlation to the elements Sn-As-Pb-Zn-Cu was very weak.

Keywords: Primary Tin, Sn Elements, X-Ray Fluorescence (XRF), Geochemistry.