SARI

GEOLOGI DAN KARAKTERISTIK ENDAPAN *SEDIMENT HOSTED GOLD* KECAMATAN LINGE, ACEH TENGAH, PROVINSI ACEH

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Pulau Sumatra adalah salah satu pulau yang berada di area subduksi akibat pengaruh lempeng Eurasia dan Hindia. Wilayah yang mengalami aktivitas tektonik yang aktif cenderung menghasilkan struktur geologi yang kompleks. Keberadaan mineralisasi umumnya berkaitan erat dengan aktivitas magmatisme. Daerah Lumut, Kecamatan Linge, Kabupaten Aceh Tengah, Provinsi Aceh merupakan salah satu daerah di Sumatra yang memiliki potensi mineralisasi dengan jenis endapan *sediment hosted gold.* Tujuan penelitian ini, yaitu untuk mengetahui kondisi geologi, alterasi, dan mineralisasi di daerah penelitian. Metode penelitian yang digunakan untuk menunjang penelitian tersebut berupa pemetaan geologi dan analisis data lapangan meliputi analisis petrografi, analisis stereografis, analisis mineragrafi, dan analisis *assay*. Pada daerah penelitian dijumpai satuan batugamping Sise (Jura Akhir) yang dihasilkan dari kolisi Kelompok Woyla pada Kapur Akhir, satuan batulempung Rampong terbentuk hasil dari transgresi kala Oligosen Akhir, dan intrusi *sill* basalt yang lebih muda dari batulempung. Satuan tersebut sebagai salah satu penciri endapan *sediment hosted gold*. Karakteristik endapan *sediment hosted gold* memiliki alterasi silisik dan mineralisasi yang berukuran sangat kecil (mikron). Geometri endapan ini tersebar di antara kontak satuan batulempung dan batugamping. Endapan *sediment hosted gold* di daerah ini termasuk ke dalam fase magmatik Neogen yang tersebar NW-SE sepanjang sistem Sesar Sumatra dan berasosiasi dengan sistem porfiri di sebelah tenggara. Jenis endapan *sediment hosted gold* pada daerah penelitian memiliki karakteristik dengan endapan *carlin type*, tetapi memiliki perbedaan tatanan tektonik sehingga hanya bisa disebut *carlin like* atau *distal sediment hosted epithermal gold.*

Kata kunci: Alterasi, Geologi, Linge, Mineralisasi, *Sediment Hosted*

ABSTRACT

GEOLOGY AND CHARACTERISTICS OF THE LINGE SEDIMENT HOSTED GOLD DEPOSIT, CENTRAL ACEH, ACEH

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Sumatra Island is one of the islands located in a subduction area due to the influence of the Eurasian and Indian plates. Regions with active tectonic activity tend to produce complex geological structures. The presence of mineralization is generally closely related to magmatic activity. The Lumut area, Linge District, Central Aceh Regency, Aceh Province, is one of the regions in Sumatra that has mineralization potential with a sediment-hosted gold deposit type. The purpose of this study is to determine the geological, alteration, and mineralization conditions in the research area. The research methods used to support this study were geological mapping and field data analysis, including petrographic analysis, stereographic analysis, mineragraphic analysis, and assay analysis. In the research area, the Late Jurassic Sise limestone unit was found, which resulted from the collision of the Woyla Group in the Late Cretaceous, the Rampong claystone unit formed from a Late Oligocene transgression, and a basaltic sill intrusion that is younger than the claystone. These units are one of the characteristics of sediment-hosted gold deposits. The characteristics of sediment-hosted gold deposits include silicic alteration and mineralization of very small size (micron). The geometry of this deposit is distributed between the contact of the claystone and limestone units. The sediment-hosted gold deposit in this area belongs to the Neogene magmatic phase, which is distributed NW-SE along the Sumatra Fault system and is associated with the porphyry system to the southeast. The type of sediment-hosted gold deposit in the research area has characteristics similar to a Carlin-type deposit but has a different tectonic setting, so it can only be called Carlin-like or distal sediment hosted epithermal gold deposit.

***Keywords**: Alteration, Geology, Linge, Mineralization, Sediment Hosted*