

**GEOLOGI DAN HUBUNGAN TINGKAT PELAPUKAN TERHADAP
KADAR Ni PADA ZONA LATERIT DENGAN *CHEMICAL INDEX
OF WEATHERING* DI DAERAH TAPUNOPAKA, KECAMATAN
LASOLO KEPULAUAN, KABUPATEN KONAWA UTARA,
PROVINSI SULAWESI TENGGARA**

SARI

Oleh :

BAGUS TRI SETIA AJI

111.190.117

Daerah penelitian berada dalam IUP PT.Antam yang secara administratif berada di Desa Tapunopaka, Kecamatan Lasolo Kepulauan, Kabupaten Konawe Utara, Provinsi Sulawesi Tenggara. Penelitian bertujuan untuk mengetahui pengaruh tingkat pelapukan terhadap kadar Ni pada zona laterit dengan *Chemical Index of Weathering* (CIW) pada lubang bor BG-2, BG-6, dan BG-20. Tingkat pelapukan diperoleh dengan perhitungan secara kuantitatif dengan persamaan yang dikembangkan oleh Harnois pada tahun 1988. Hasil analisis profil geokimia, didapatkan unsur Fe, Al₂O₃, dan Co kandungannya tinggi pada zona limonit, SiO₂ dan MgO memiliki kandungan tinggi Ketika semakin mendekati zona batuan dasar, sedangkan Ni pengayaannya berada pada zona saprolit. Pada BG-2 memiliki ketebalan zona limonit 8 meter dengan kadar Ni 1,14%, zona saprolit 9 meter dengan kadar Ni 1,60% dan batuan dasar 3 meter dengan kadar Ni 1,23%, BG-6 memiliki ketebalan zona limonit 5 meter dengan kadar Ni 1,11%, zona saprolit 7 meter dengan kadar Ni 1,43%, dan batuan dasar 2 meter dengan kadar Ni 1,12%, dan BG-20 memiliki ketebalan zona limonit mencapai 11 meter dengan kadar Ni 1,52%, dan ketebalan zona saprolitnya 14 meter dengan kadar 2,25%. Pelapukan yang bekerja pada ketiga lubang bor berbanding lurus dengan peningkatan kadar Ni sesuai dengan diagram *scatter plot* dan berpengaruh terhadap penebalan zona limonit dan saprolit. Selain itu berpengaruh terhadap tingkah laku unsur/senyawa, mineral, dan apa yang ada pada zona limonit dan saprolit

Kata kunci : Zona laterit, *Chemical Index of Weathering*, kadar, *scatter plot*

**GEOLOGY AND THE RELATIONSHIP OF WEATHERING LEVEL
TO Ni CONTENTS IN THE LATERITE ZONE WITH CHEMICAL
INDEX OF WEATHERING IN THE TAPUNOPAKA REGION,
LASOLO KEPULAUAN DISTRICT, NORTH KONAWA DISTRICT,
SOUTHEAST SULAWESI PROVINCE**

ABSTRACT

Arranged By :

BAGUS TRI SETIA AJI

111.190.117

The research area is within the PT Antam IUP which is administratively located in Tapunopaka Village, Lasolo Islands District, North Konawe Regency, Southeast Sulawesi Province. The research aims to determine the effect of weathering level on Ni content in the laterite zone with Chemical Index of Weathering (CIW) in drill holes BG-2, BG-6, and BG-20. The level of weathering was obtained by quantitative calculations using the equation developed by Harnois in 1988. The results of the geochemical profile analysis showed that the elements Fe, Al₂O₃, and Co content is high in the limonite zone, SiO₂ and MgO has a high content when getting closer to the bedrock zone, while the Ni enrichment is in the saprolite zone. In BG-2, the limonite zone is 8 meters thick with a Ni rate of 1.14%, the saprolite zone is 9 meters with a Ni rate of 1.60% and the bedrock is 3 meters with a Ni rate of 1.23%, BG-6 has a limonite zone thickness of 5 meters with a Ni rate of 1.11%, saprolite zone 7 meters with a Ni rate of 1.43%, and bedrock 2 meters with a Ni rate of 1.12%, and BG-20 has a thickness of limonite zone reaching 11 meters with a Ni rate of 1, 52%, and the thickness of the saprolite zone is 14 meters with a rate of 2.25%. The weathering that works on the three boreholes is directly proportional to the increase in Ni content according to the diagram scatter plot and influencing the thickening of limonite and saprolite zones. In addition, it influences the behavior of elements/compounds, minerals, and what is in the limonite and saprolite zones

Keywords :laterit zone, Chemical Index of Weathering, much, scatter plot