Studi pengaruh proses pelindian oleh asam sulfat terhadap presentase peningkatan kadar tembaga pada bijih malasit = The study of influence sulfuric acid leaching in malachite ore

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Abstrak

Malasit merupakan salah satu bijih sekunder tembaga yang memiliki rumus kimia CuCO3.Cu(OH)2., Bijih malasit termasuk dalam batuan karbonat dan biasanya berwarna biru dan hijau. Pelindian merupakan proses pengambilan logam berharga secara selektif dari bijih dengan pelarut sehingga didapatkan suatu larutan kaya. Pelindian juga bertujuan menaikan kadar dari bijih. Laju proses pelindian dipengaruhi oleh beberapa faktor diantaranya yaitu ukuran partikel, konsentrasi, temperatur dan waktu pelindian.
Bahasan penelitian ini ialah pengaruh proses klasifikasi air terhadap kenaikan persentase kadar tembaga dan pengaruh konsentrasi pelarut terhadap persentase peningkatan kadar tembaga pada bijih malasit. Penelitian ini melakukan beberapa pengujian yaitu uji karakterisasi bijih malasit menggunakan EDX dan AAS, uji anilsis filtrat hasil pelindian menggunakan AAS.
Hasil dari peneltian ini, penambahan metode proses klasifikasi air menaikkan persetase kadar tembaga dan pengaruh konsentrasi pelarut pada proses pelindian yang berpengaruh terhadap persentase peningkatan tembaga pada bijih malasit.
.....Malachite is a secondary ore of copper which has chemical formula CuCO3.Cu (OH)2. Malachite ore included in carbonate rocks and usually colored blue and green. Leaching is the process of making precious metals from ore by selective leaching agents until get a rich solution. Leaching is also increasing the content of ores. The rate of leaching process is influenced by several factors including the particle size, concentration, temperature and time leaching.
Discussion of this study is the influence of the classification process water to increase the percentage of copper content and the influence of the lixiviant concentration to the percentage recovery of copper in malachite ores. Some of the testing performed in this study are malachite ore characterization testing using EDX and AAS, analysis filtrate testing which is the result of leaching, using AAS.
The result of this study is the addition method of water classification process (float sink) can increase the copper content and the influence of lixiviant concentration in the leaching process which can increase the percentage recovery of copper in malachite ores.