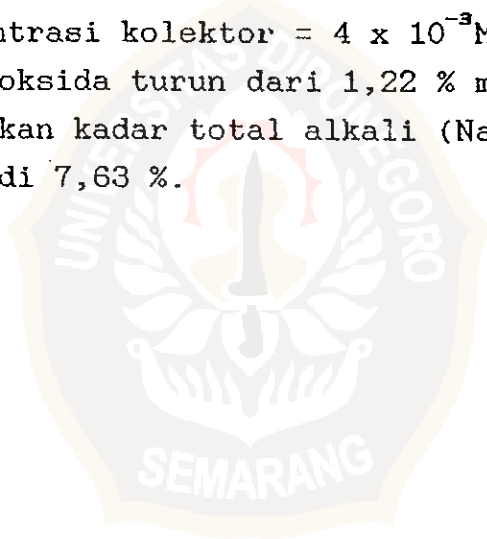


RINGKASAN

Pengurangan kadar besi oksida dari partikel-partikel halus mineral felspar dengan metode *flotasi menggunakan dua media cairan pemisah* telah dilakukan. Metode ini meliputi beberapa tahap. Pertama, felspar dimasukkan ke dalam beaker gelas, kedalamnya ditambahkan aquades, larutan ammonium sulfat, diatur kondisi keasamannya dengan larutan HCl atau NaOH. Kemudian ditambahkan kolektor dan minyak kerosin, larutan diaduk, didiamkan dan terakhir dipisahkan. Flotasi dilakukan dengan berbagai variasi pH, konsentrasi ammonium sulfat, konsentrasi kolektor dan waktu pengadukkan. Kondisi optimum diperoleh pada pH = 6, konsentrasi ammonium sulfat = 8×10^{-3} M dan konsentrasi kolektor = 4×10^{-3} M. Pada kondisi optimum kadar besi oksida turun dari 1,22 % menjadi 0,34 % dan mampu meningkatkan kadar total alkali ($\text{Na}_2\text{O} + \text{K}_2\text{O}$) dari semula 7,40 % menjadi 7,63 %.



SUMMARY

Iron oxide removal from fine particles feldspar mineral by *two-liquid flotation* has been done. These methods included several steps. First, the feldspar was put in the beaker glass, and added by some amount of water, ammonium sulfate solution. After that, added HCl or NaOH to regulate the pH. Next some collector and kerosene was added, mixed, and allowed in several minutes and finally separated. The flotation has been done in variation of pH, concentration of collector, concentration of ammonium sulfate and times stirrer. The optimum result has been founded at pH = 6, concentration of ammonium sulfate = 8×10^{-3} M and concentration of collector = 4×10^{-4} M. At this condition iron oxide decreased from 1.22 % to 0.34 % and capable of increasing both sodium and potasium oxide content from initially 7.40 % up to 7.63 %.

