

## RINGKASAN

Pengambilan logam nikel dari sampel tanah Soroako telah dilakukan secara elektrosis dengan melewati beberapa tahapan prosedur antara lain destruksi sampel, elektrolisis penentuan potensial dekomposisi nikel, elektrolisis sampel hasil destruksi dan pengukuran dengan spektrometer serapan atom. Destruksi dilakukan pada temperatur  $180^{\circ}\text{C}$  selama 40 menit menggunakan kombinasi pelarut asam nitrat dan asam klorida.

Penentuan potensial dekomposisi dilakukan dengan melakukan elektrolisis blanko dan larutan  $\text{NiCl}_2$  0,2 M pada potensial 0,0 volt sampai potensial 3 volt. Elektrolisis sampel hasil destruksi dilakukan pada potensial 2,5 volt selama 240 menit.

Disimpulkan bahwa kadar nikel dari sampel tanah 1,59% dan potensial dekomposisi nikel 2,15 volt. Berat endapan 0,074 gram dengan kadar Ni 81,42%, efisiensi elektrolisis 94,37% dan rendemen Faraday 5,31%.



## SUMMARY

Removal nickel metal in sample of Soroako soil had been done by electrolysis process through some stage of procedure namely sample destruction, electrolysis determining decomposition potential of nickel, electrolysis sample result destruction and measuring with spectroscopy atomic absorption. Destruction treatment was conducted at  $180^{\circ}$  C for 40 minutes using combination of nitric acid and chloride acid solvents.

Determining of decomposition potential was done by electrolysis of blanko and solution of  $\text{NiCl}_2$  0,2 M with potential from 0,0 volt to 3 volt. Electrolysis of sample resulted from the destruction was carried at 2,5 volt for 240 minutes.

It was concluded that the content nickel in soil sample was 1.59% and decomposition potential of nickel was 2,15 volt. Resulting 0,074 grams of deposit with Ni content 81,42%, nickel content in the deposit was 95,37% and Faradays rendemen was 5,31%.

