Thesis Title	A Development of and Analysis for Lead in Air Sample by THQ Method.
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ABSTRACT

This study aimed to develop standard color chart inorder to evaluate concentrations of lead in air samples. The samples in forms of lead complex solutions could be compared to the chart.The color of complex solutions were formed by adding THQ into lead solution which collected in form of air sampling using 1% HNO_3 absorbing solution. The color intensities were developed according to lead concentrations in the complex solutions. Then the standard color chart was made by preparing a known solution and developed color in the same manner then mounted on the plastic plate.

This research study revealed that the concentrations of lead could be detected are 3.6, 5.0, and 6.0 µg/ml. The minimum detectable limit was 3.6 µg/ml. The efficiency of this modified method was persented in terms of errors which were not more than ± 25% when compared with standard method using Atomic absorption spectrophotometer.

The Concentration of lead between 3.6, and 5.0 µg/ml were not different from the standard method at a confident limit of 95 % (P-Value more than 0.05), (P = 0.9678 for 3.6 µg/ml, P = 0.9696 for 5.0 µg/ml). The interferences of Al, Fe, Cu, Cr, Mn, Mg, and Hg were not found in this study.