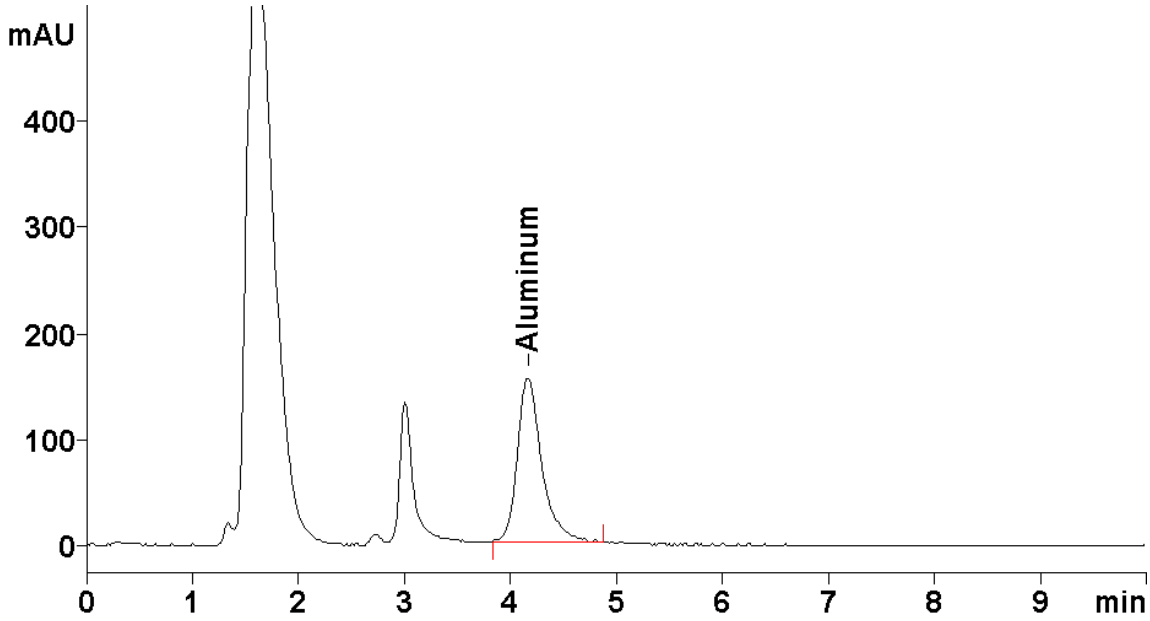
IC Application Note No. U-46

Title:	**Aluminum in an acid extract using UV/VIS detection after post-column reaction with Tiron**

***Summary*:**	Determination of aluminum in an acidic extract containing metals (e.g. alkali, alkaline earth, iron, chromium, molybdenum, etc.) using cation chromatography with UV detection after post-column reaction with Tiron.

Sample:	Acidic extract (4 mol/L nitric acid)
Sample Preparation:	0.1 mL extract diluted in 250 mL eluent, 100 mg ascorbic acid is added to reduce iron(III) to iron(II).

Column:	6.1007.000 Nucleosil 5SA		
Wavelength:	312 nm		
Eluent:	60 mmol/L potassium sulfate, pH = 2 (sulfuric acid)		
Flow:	1.0 mL/min	***PCR Flow:***	1.0 mL/min
PCR Reagent:	0.3 mmol/L Tiron in 3 mol/L ammonium acetate		
Injection Volume:	250 µL		



Results:	Aluminum mg/L
Sample	**1002**
Expected value	**1000**