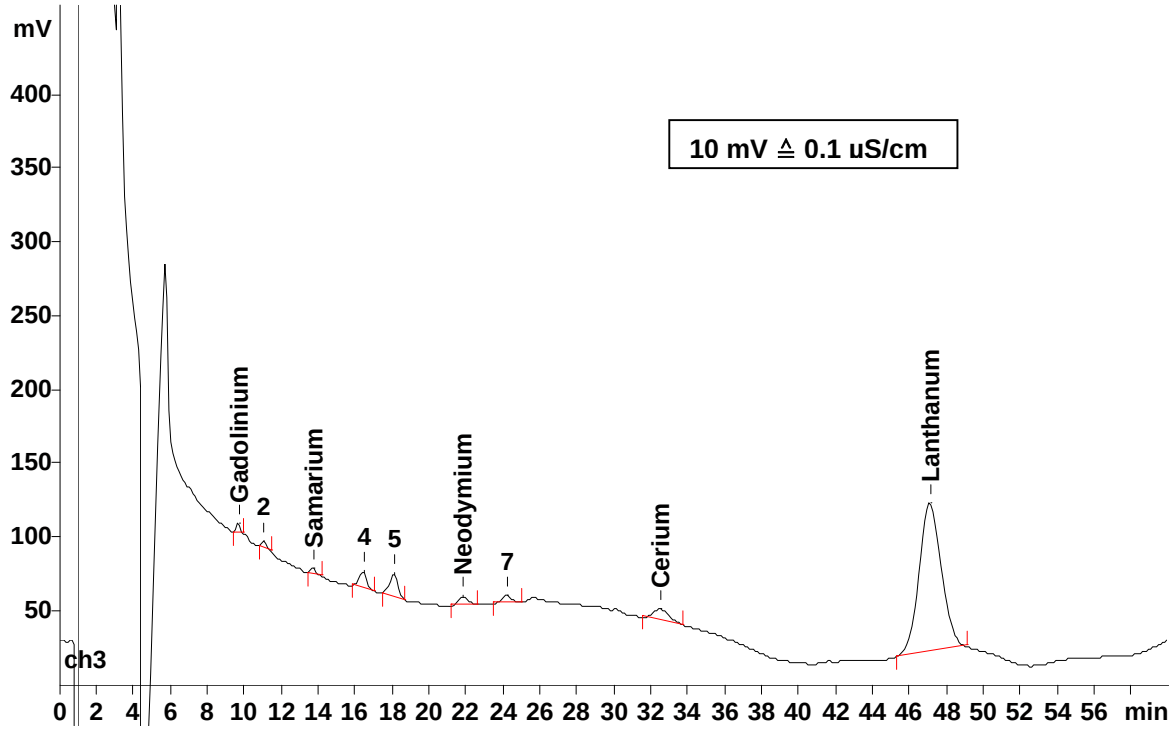
IC Application Note No. C-99

Title:	**Lanthanides in a rock sample by Ion Chromatography applying non-suppressed conductivity detection**

***Summary*:**	Determination of traces of gadolinium, samarium, neodymium, cerium and lanthanum using cation chromatography with direct conductivity detection applying Metrohm Inline Filtration.

Sample:	Digested rock sample
Sample Preparation:	Nitric acid digestion, direct injection after Inline Filtration

Column:	6.1007.000 Nucleosil 100-5-SA
Eluent:	12.0 mmol/L 2-hydroxyisobutyric acid 2.0 mmol/L ethylene diamine, pH = 4.6 (ammonia)
Flow:	1.0 mL/min
Injection Volume:	200 µL



Lanthanides:	Gadolinium mg/kg	Samarium mg/kg	Neodymium mg/kg	Cerium mg/kg	Lanthanum mg/kg
	78.0	**60.6**	**147.1**	**368.4**	**6161**