

IC Application Note No. C-90

Title: Traces of zinc and iron(II) besides the standard cations

Summary: Determination of traces of zinc and iron(II) besides lithium, sodium, ammonium, potassium, calcium and magnesium in boiler water applying cation chromatography with direct conductivity detection.

Sample: Boiler water spiked with transition metals

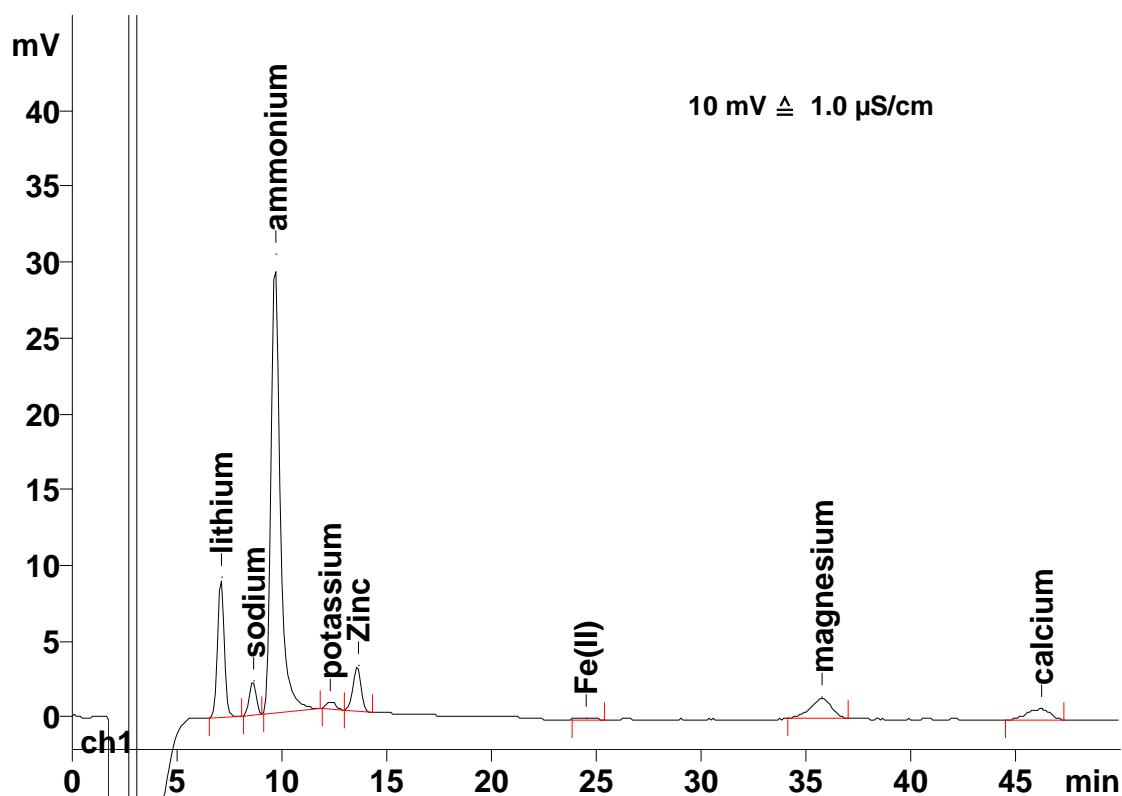
Sample Preparation: Direct injection after inline ultrafiltration

Column: 6.1010.230 Metrosep C 2 – 250

Eluent: 1.75 mmol/L oxalic acid
2.0 mmol/L ascorbic acid

Flow: 0.5 mL/min

Injection Volume: 200 μ L



Results:	Lithium	Sodium	Ammonium	Potassium	Zinc	Iron(II)	Magnesium	Calcium
	μ g/L	μ g/L	μ g/L	μ g/L	μ g/L	μ g/L	μ g/L	μ g/L
	24.6	19.9	25.3	24.7	2.51	19.3	9.42	8.31