

IC Application Note No. C-63

Title: Five cations in lithium bromide using post column reaction

Summary: Determination of nickel, zinc, cobalt, iron(II) and manganese in lithium bromide using cation chromatography with UV/Vis detection (520 nm) after post column reaction with PAR.

Sample: Lithium bromide
Sample Preparation: 1 g sample dissolved in 100 mL ultrapure water, further dilution 1 : 45 with 20 mmol/L ascorbic acid

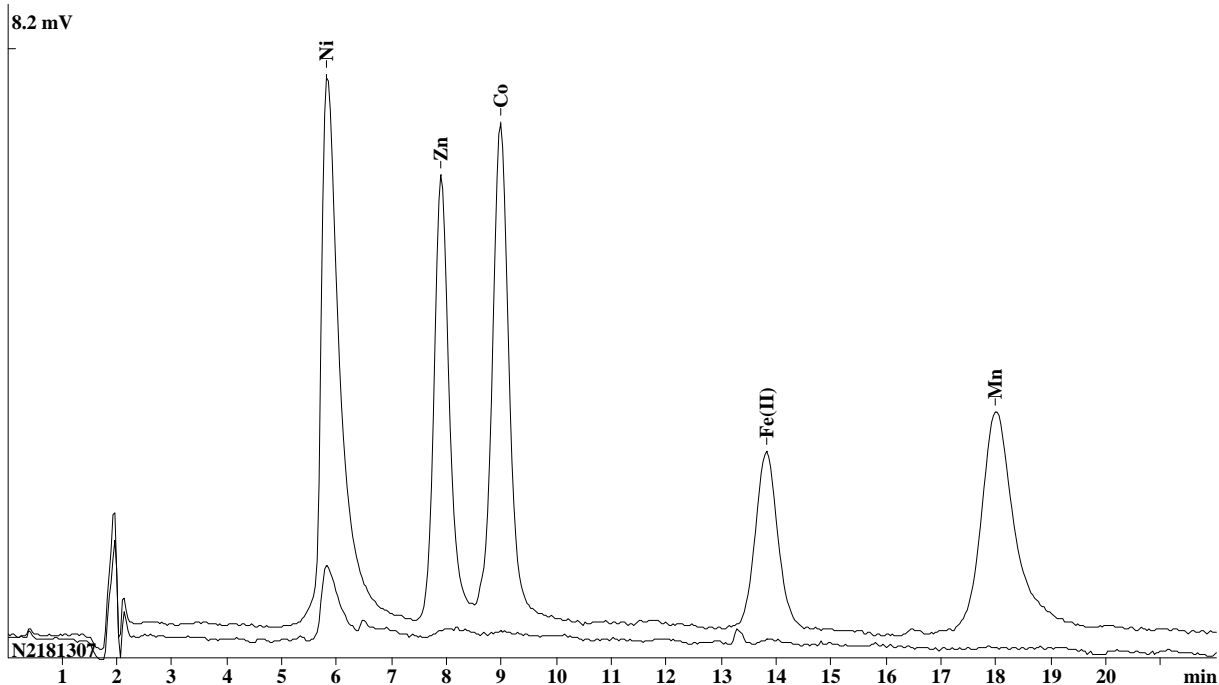
Column: 6.1010.220 Metrosep C 2 – 150

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

Flow: 1.0 mL/min

PCR Flow: 0.4 mL/min

Injection Volume: 20 µL



Results:	Nickel µg/kg	Zinc	Cobalt	Iron (II)	Manganese
	995	n.d.	n.d.	n.d.	n.d.

Spiked chromatogram: injected sample solution spiked with 150 µg/L each (corresponding to approx. 7 mg/kg in the sample).