

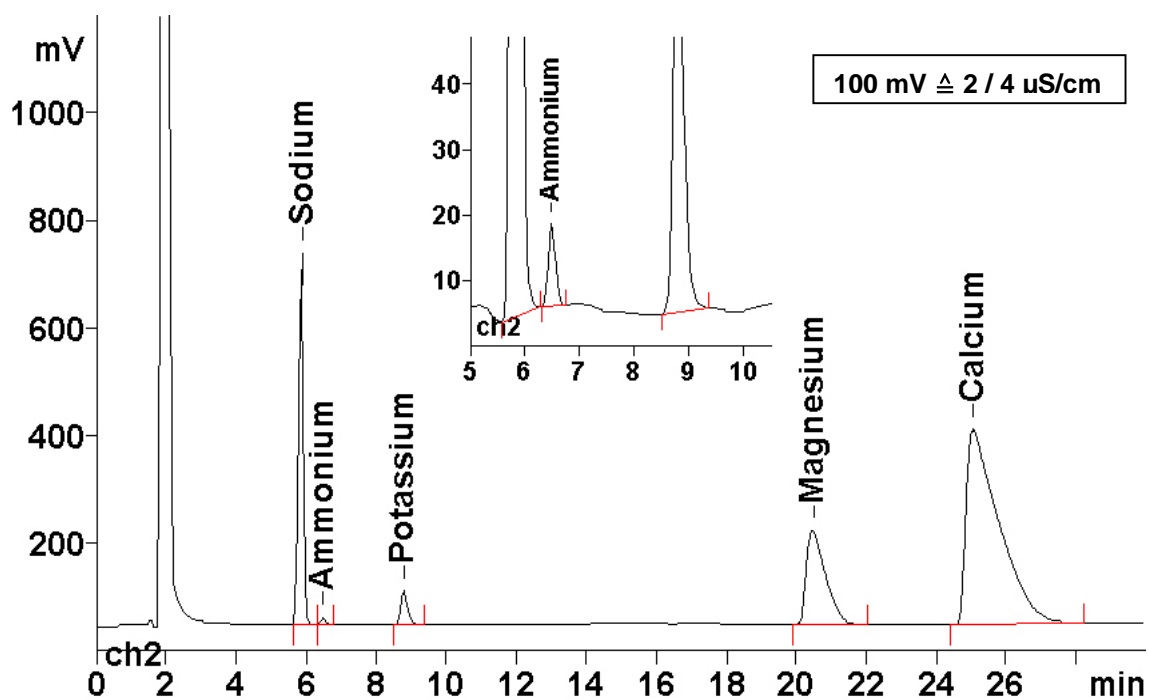
# IC Application Note No. C-104

**Title:** Low levels of ammonium besides standard cations on the Metrosep C 3 – 250 column

**Summary:** Determination of traces of ammonium besides sodium, potassium, magnesium and calcium using cation chromatography with direct conductivity detection.

**Sample:** Standard  
**Sample Preparation:** Direct injection after acidification (pH approx. 2.5) and filtration (0.45 µm)

**Column:** 6.1010.430 Metrosep C 3 – 250  
**Eluent:** 3.5 mmol/L nitric acid  
 0.5 mmol/L 18-crown-6  
**Column Temperature:** 45 °C  
**Flow:** 1.0 mL/min  
**Injection Volume:** 100 µL



0 ... 18 min, Full scale: 20 µS/cm / 1000 mV; 18 ... 30 min, full scale: 40 µS/cm / 1000 mV

<b>Results:</b>	Sodium µg/L	Ammonium µg/L	Potassium µg/L	Magnesium µg/L	Calcium µg/L
	8000	10	2000	1000	60000