

IC Application Note No. S-86

Title: Five anions in mineral extracts

Summary: Determination of fluoride, chloride, bromide sulfate and iodide in mineral extracts using anion chromatography with conductivity detection after chemical suppression.

Sample: Mineral extracts

Sample Preparation: Dilution 1 : 1000 with HNO₃ (pH = 3)

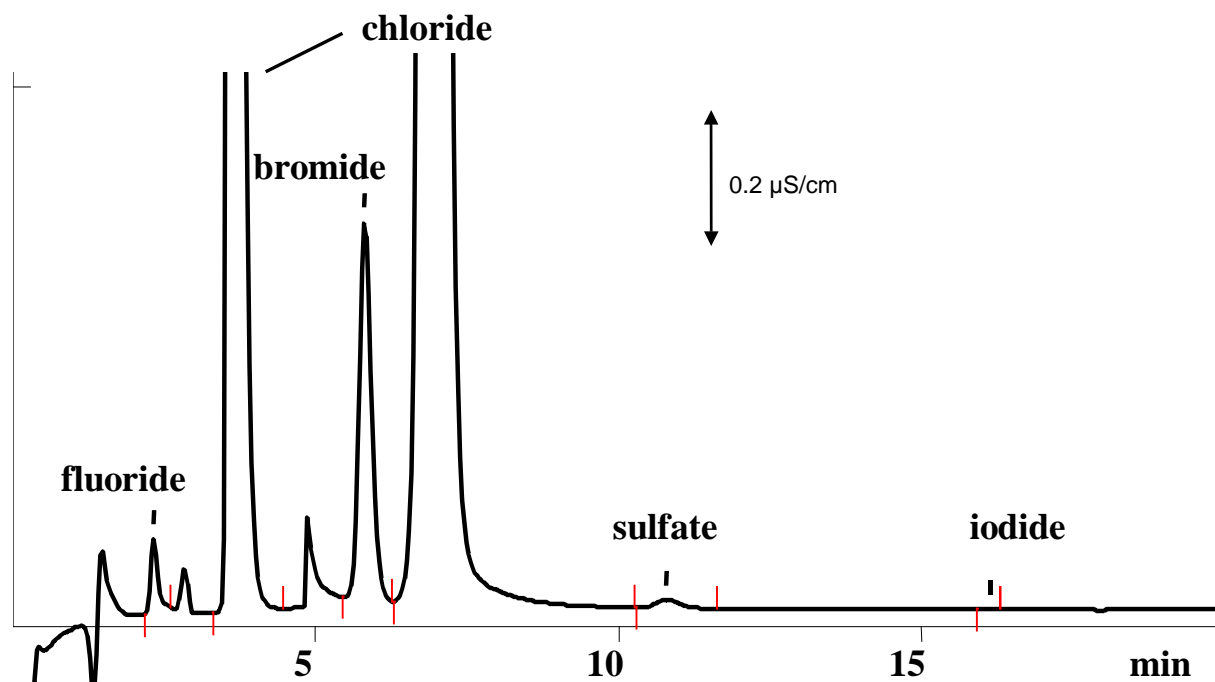
Column: 6.1006.100 Metrosep Anion Dual 2

Eluent: 3.7 mmol/L sodium hydrogencarbonate, 1.7 mmol/L sodium carbonate, 9% acetone

Suppressor: Metrohm Suppressor Module (MSM, 50 mmol/L H₂SO₄)

Flow: 0.8 mL/min

Injection Volume: 20 µL



Results:	Fluoride mg/L	Chloride g/L	Bromide mg/L	Sulphate mg/L	Iodide mg/L
	97.7	146	2750	84.1	n.d.

Full Scale changes at 2.9 and 4.8 min (chloride measured with 20 times higher full scale).