

IC Application Note No. S-76

Title: Six anions in waste water

Summary: Determination of fluoride, chloride, nitrate, sulfite, phosphate and sulfate in waste water using anion chromatography with conductivity detection after chemical suppression.

Sample: Waste water

Sample Preparation: Dilution 1 : 1000 with $c(\text{NaOH}) = 0.2 \text{ mmol/L}$ (with addition of $10 \mu\text{L}$ formaldehyde / 100 mL)

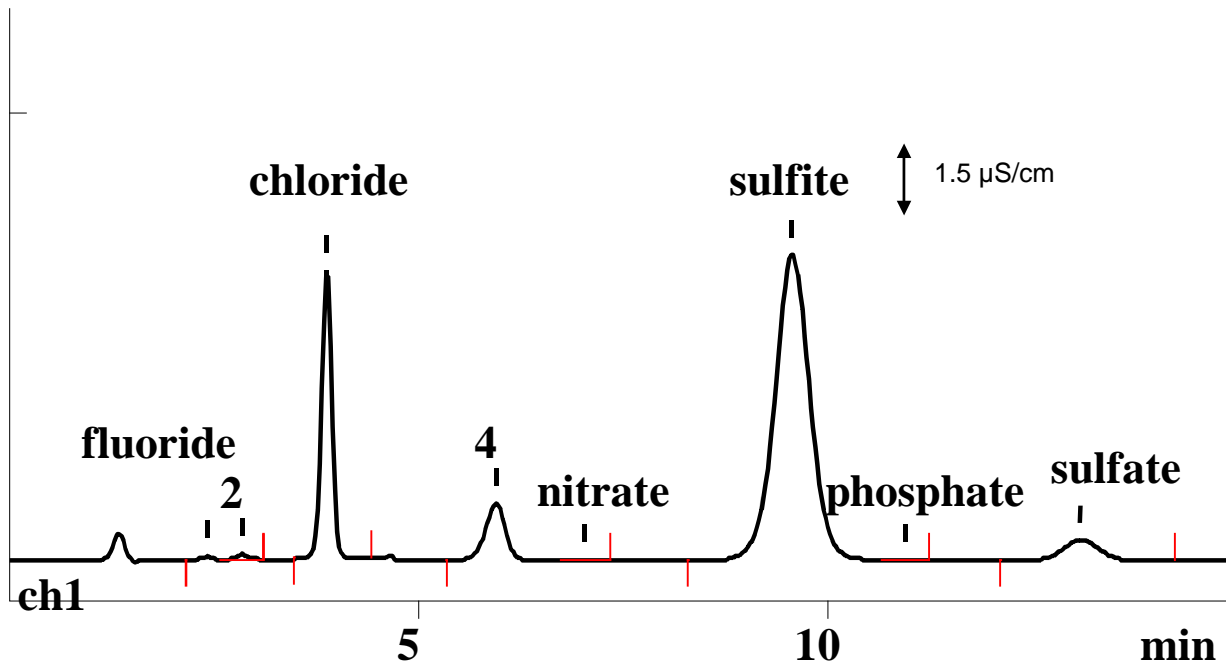
Column: 6.1006.100 Metrosep Anion Dual 2

Eluent: 2.0 mmol/L sodium hydrogencarbonate, 1.8 mmol/L sodium carbonate, 15 % acetone

Suppressor: Metrohm Suppressor Module (MSM, 50 mmol/L H_2SO_4)

Flow: 0.8 mL/min

Injection Volume: 20 μL



Results:	Fluoride mg/L	Chloride g/L	Nitrate mg/L	Sulfite g/L	Phosphate mg/L	Sulfate g/L
	60	83.0	169	118.3	n.d.	2.8

Full scale for chloride 10 time higher (changed by time program). Peaks 2 and 4 not identified.