

IC Application Note No. S-5

Title: Six anions in cooling water

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

Sample: Cooling water

Sample Preparation: Dilution 1:10

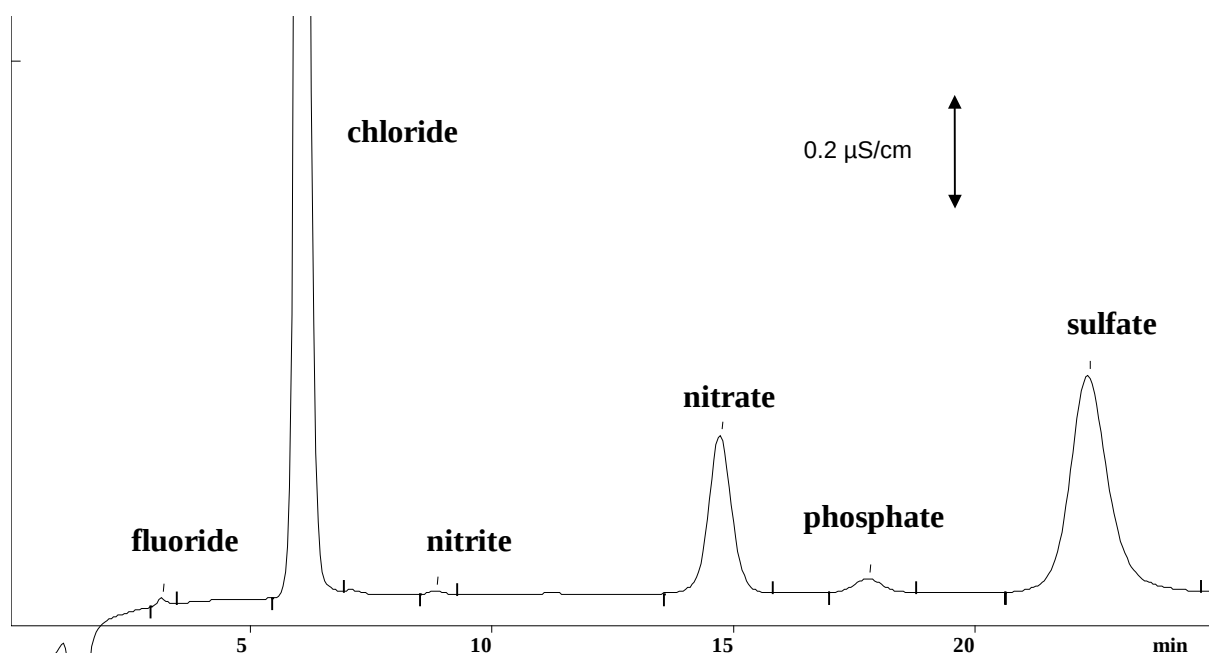
Column: 6.1006.100 Metrosep Anion Dual 2

Eluent: 2 mmol/L sodium hydrogencarbonate,
1.3 mmol/L sodium carbonate

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

Flow: 0.8 mL/min

Injection Volume: 20 µL



Results:	F ⁻ mg/L	Cl ⁻ mg/L	NO ₂ ⁻ mg/L	NO ₃ ⁻ mg/L	HPO ₄ ²⁻ mg/L	SO ₄ ²⁻ mg/L
	0.08	75.3	0.26	18.3	4.3	31.7