

IC Application Note No. S-55

Title: Reproducibility of 18 injections in the ppb range on the Metrohm IC System using the MSM

Summary: Reproducibility of fluoride, chloride, nitrite, bromide, nitrate and sulfate in the ppb range using anion chromatography with conductivity detection after chemical suppression.

Sample: Standard solution

Sample Preparation:

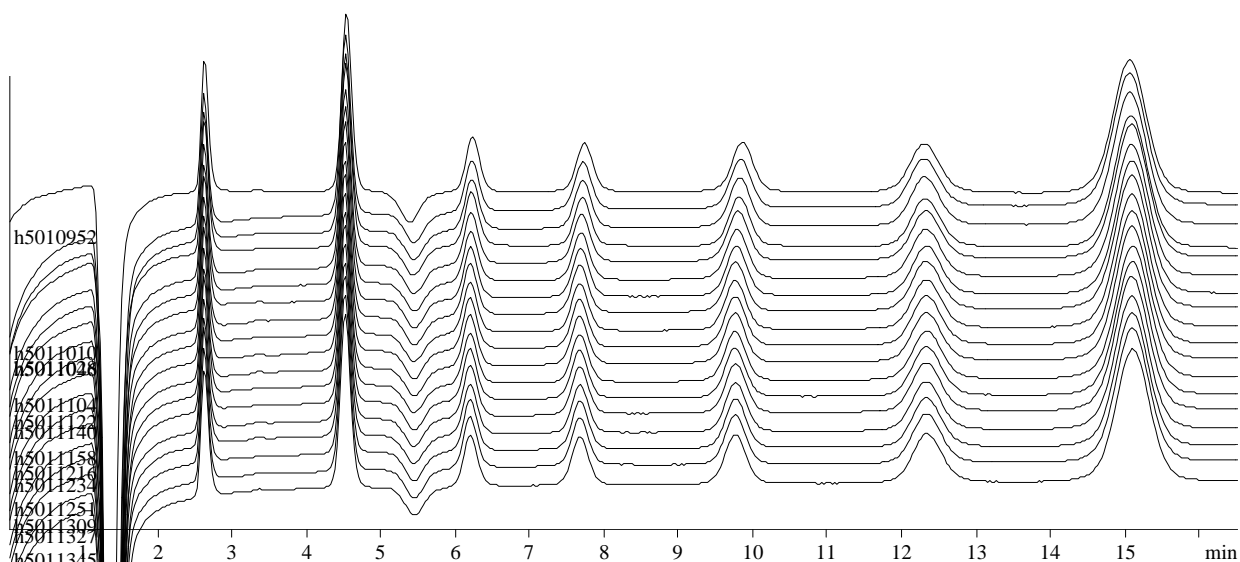
Column: 6.1006.100 Metrosep Anion Dual 2

Eluent: 2.0 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 ⁻	Cl ⁻	NO ₂ ⁻	Br ⁻	NO ₃ ⁻	HPO ₄ ²⁻	SO ₄ ²⁻
Concentration (µg/L)	50	150	100	150	150	500	500
Rel.std.dev. (% , n=18)	0.66	0.70	1.92	0.78	0.84	0.97	0.78