

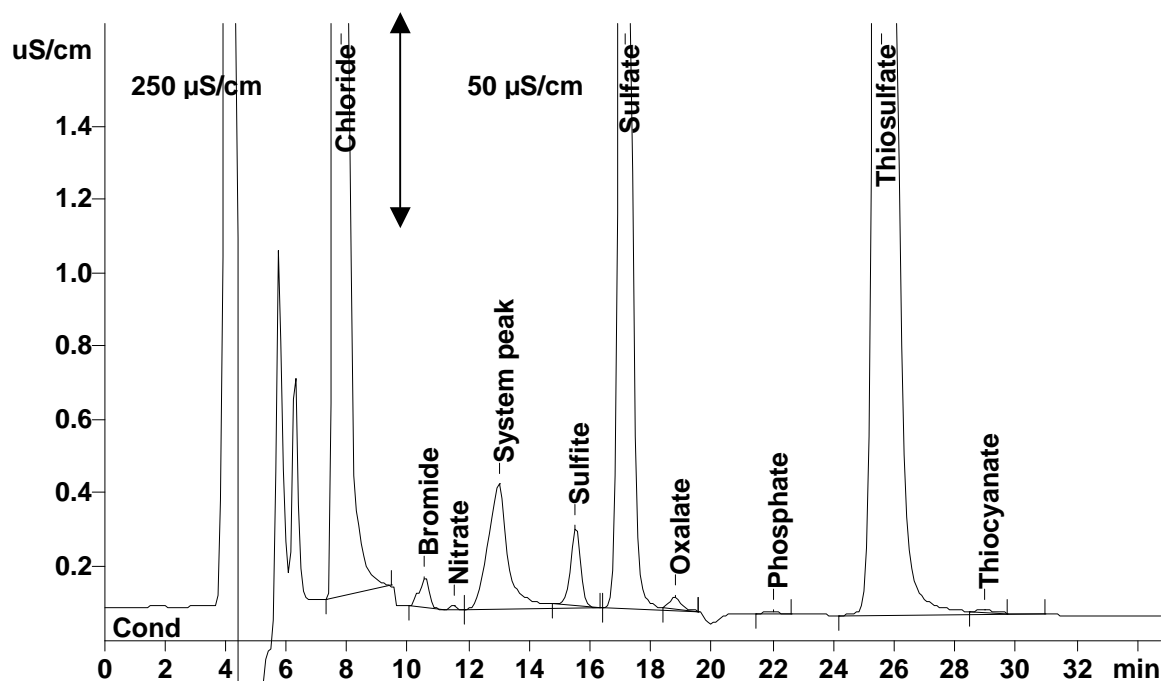
IC Application Note No. S-144

Title: Heat stable salts in scrubber solutions

Summary: Determination of chloride, bromide, nitrate, sulfite, sulfate, phosphate, oxalate, thiosulfate and thiocyanate (heat stable salts) in scrubber solutions using anion chromatography with conductivity detection after chemical suppression.

Sample: Scrubber solution (containing di-isopropanolamine)
Sample Preparation: Dilution 1 : 10 with ultrapure water (formaldehyde added for the stabilization of sulfite)

Column: 6.1006.530 Metrosep A SUPP 5 – 250
Eluent: 4.5 mmol/L sodium carbonate, 3.5 mmol/L sodium hydroxide, 1.0 mmol/L p-cyanophenol, 20 % acetone
Suppressor: MSM (50 mmol/L H₂SO₄)
Flow: 0.6 mL/min
Injection Volume: 20 µL



Results:	Cl ⁻ mg/L	Br ⁻ mg/L	NO ₃ ⁻ mg/L	SO ₃ ²⁻ mg/L	SO ₄ ²⁻ mg/L	Ox ²⁻ mg/L	PO ₄ ³⁻ mg/L	S ₂ O ₃ ²⁻ mg/L	SCN ⁻ mg/L
	429	2.71	0.146	8.85	82.8	1.35	0.466	282	0.251