

# IC Application Note No. Q-3

**Title:** Online monitoring of trace levels of anions in boiler feed water

**Summary:** Determination of trace levels of chloride, nitrate, phosphate and sulfate in a boiler feed water using anion chromatography with conductivity detection after chemical suppression.

**Sample:** Boiler feed water

**Sample Preparation:** Preconcentration (Metrosep A PCC, 6.1006.300)

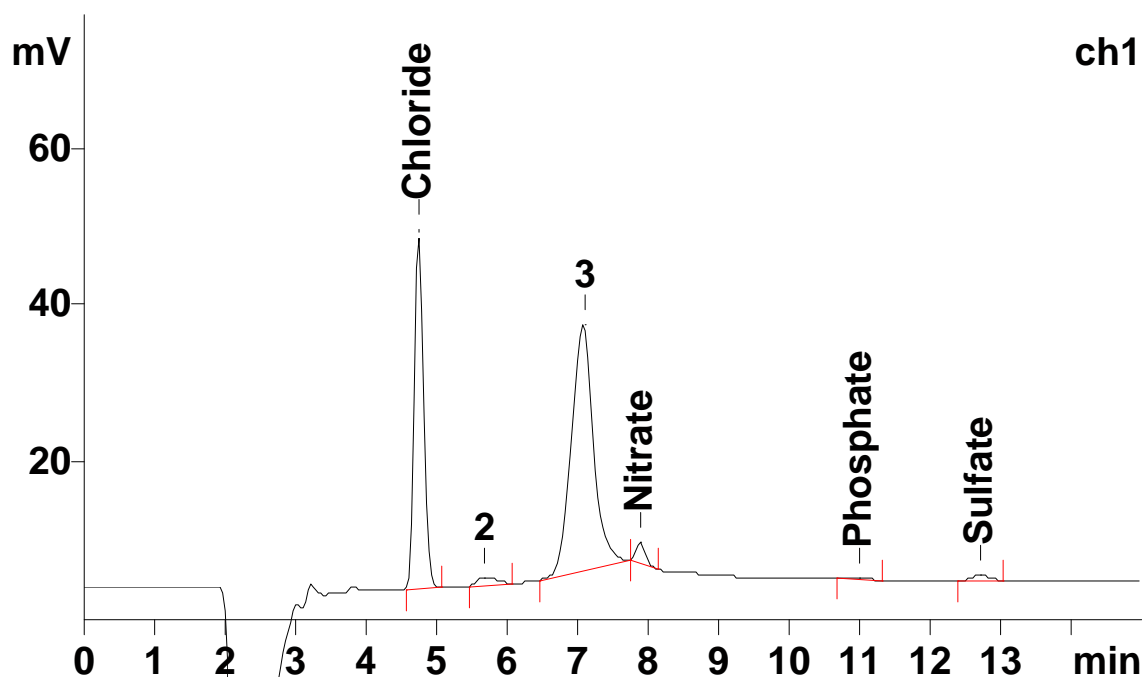
**Column:** 6.1006.520 Metrosep A Supp 5 – 150

**Eluent:** 3.2 mmol/L sodium carbonate  
1.0 mmol/L sodium hydrogencarbonate

**Suppressor:** Metrohm Suppressor Module (MSM, 50 mmol/L sulfuric acid)

**Flow:** 0.7 mL/min

**Injection Volume:** 10 mL



Results:	Chloride µg/L	Nitrate µg/L	Phosphate µg/L	Sulfate µg/L
	0.86	0.17	n.q.	0.002

See AN Q-2 for the determination of cations and AN Q-1 for the determination of silicate in boiler feed water