

IC Application Note No. S-238

Title: Sulfur species with «High–Low Detection»

Summary: Determination of sulfide, sulfite, sulfate and thiosulfate besides chloride, nitrate and phosphate using anion chromatography with combination of suppressed and non-suppressed conductivity detection.

Sample: Standard solution in eluent

Sample preparation: –

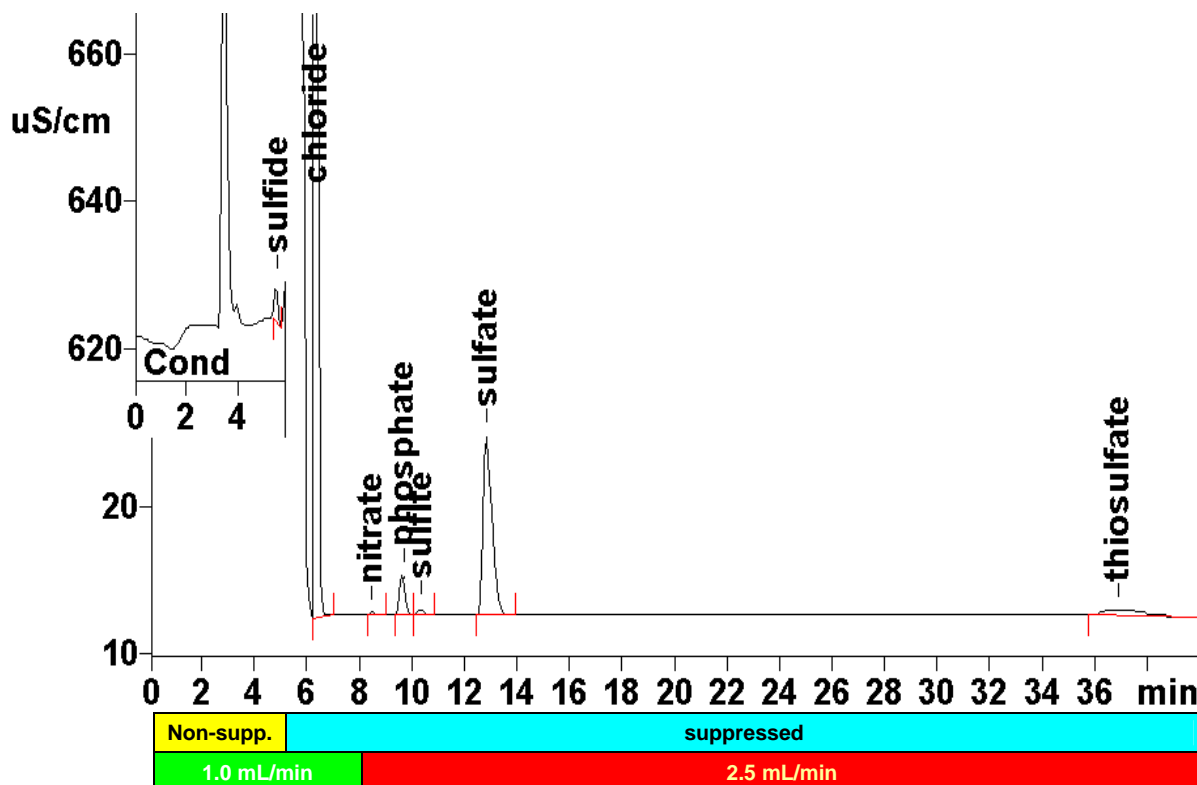
Column: 6.1005.300 Metrosep A Supp 1 – 250,
6.1011.020 Metrosep RP Guard

Eluent: 3 mmol/L sodium carbonate

Suppressor: Metrohm Suppressor Module (MSM, 100 mmol/L H₂SO₄)

Flow: 1.0 mL/min after 8.1 min increased to 2.5 mL/min

Injection Volume: 20 µL



Results:	Sulfide mg/L	Chloride mg/L	Nitrate mg/L	Phosphate mg/L	Sulfite mg/L	Sulfate mg/L	Thiosulfate mg/L
	85.6	n.q.	4.2	86.2	n.q.	216	34.7

Remarks: 0 ... 5.7 min non-suppressed, > 5.7 min with MSM, conductivity detection after suppression.