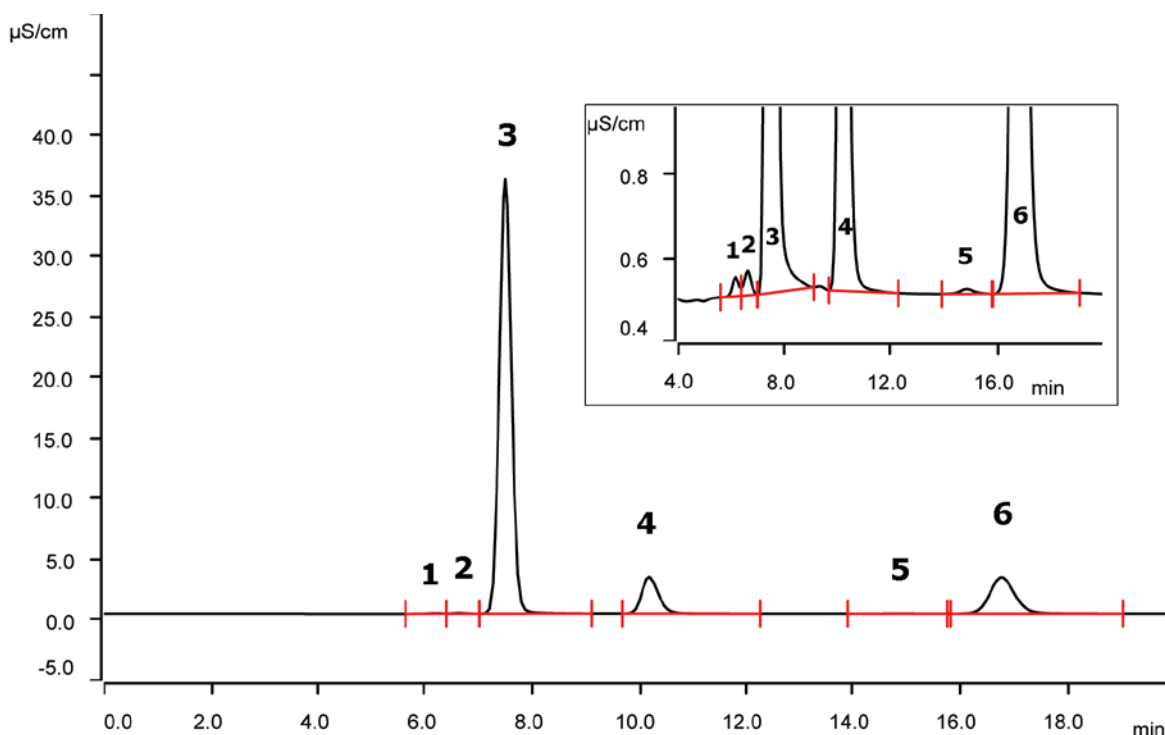


Wastewater from treatment plant: anions using Metrosep A Supp 4 - 250/2.0



The microbore Metrosep A Supp 4 - 250/2.0 column is especially suited for the analysis of anions in critical samples. In the actual application a wastewater sample is analyzed. The sample required filtration only prior to the injection on to the Metrosep A Supp 4 - 250/2.0. Anions are quantified applying conductivity detection after sequential suppression.

Results

Anion	Conc. [mg/L]	Anion	Conc. [mg/L]
1 Fluoride	0.2	4 Nitrate	26.8
2 Unknown	-	5 Phosphate	1.0
3 Chloride	113.7	6 Sulfate	30.7

Sample

Waste water (last treatment stage)

Sample preparation

Dilution 1:10 after 0.2 µm filtration at sampling.

Columns

Metrosep A Supp 4 - 250/2.0	6.01021.230
Metrosep A Supp 4 Guard/2.0	6.01021.600

Solutions

<u>Eluent</u>	1.8 mmol/L sodium carbonate 1.7 mmol/L sodium hydrogen carbonate
Suppressor regenerant	100 mmol/L sulfuric acid
Rinsing solution	STREAM

Analysis

Conductivity detection after sequential suppression

Instrumentation

930 Compact IC Flex Oven/SeS/PP/Deg	2.930.2560
IC Conductivity Detector	2.850.9010
858 Professional Sample Processor	2.858.0010
Dosino (sample feed)	2.800.0010
Dosing Unit 5 mL	6.3032.150
MSM Rotor A	6.2832.000
Adapter sleeve for Suppressor Vario	6.2842.020

Parameters

Flow rate	0.25 mL/min
Injection volume	20 µL
P _{max}	12 MPa
Recording time	20 min
Column temperature	ambient



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