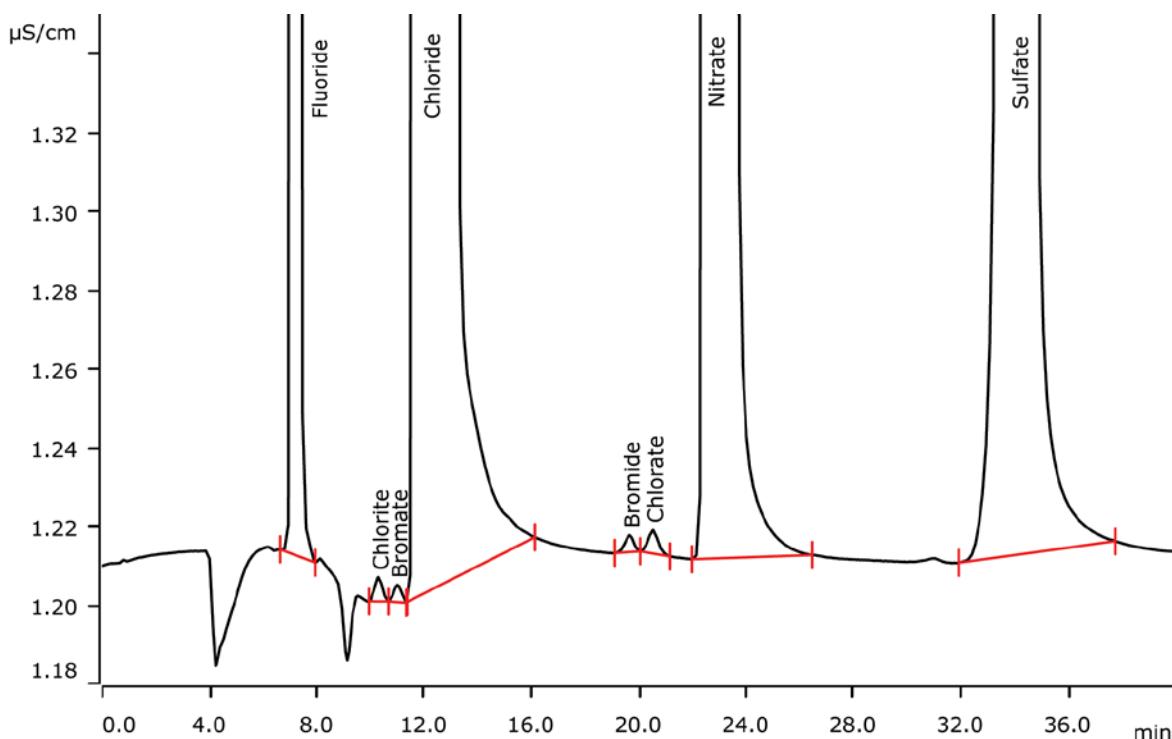


Disinfection by-products and standard anions according to EPA 300.1 A & B on 930 Compact IC Flex



The separation of standard anions and oxyhalides is performed on the 930 Compact IC Flex instrument after Inline Ultrafiltration. Both anions and oxyhalides can be determined in one single run; the determination complies with EPA 300.1 part A and part B.

Results

	Conc. [mg/L] n = 4	RSD [%] n = 4		Conc. [mg/L] n = 4	RSD [%] n = 4
Fluoride	0.065	1.08	Bromide	0.004	2.12
Chlorite	0.004	6.67	Chlorate	0.006	1.87
Bromate	0.006	5.98	Nitrate	7.91	0.35
Chloride	12.44	0.67	Sulfate	3.92	0.32

Sample

Tap water spiked with 5 µg/L of the oxyhalides

Sample preparation

Inline Ultrafiltration

Columns

Metrosep A Supp 7 - 250/4.0	6.1006.630
Metrosep RP 2 Guard/3.5	6.1011.030

Solutions

Eluent	3.6 mmol/L sodium carbonate
Suppressor regenerant	100 mmol/L sulfuric acid
Suppressor rinsing	STREAM

Parameters

Flow rate	0.7 mL/min
Injection volume	100 µL
P _{max}	15 MPa
Recording time	40 min
Column temperature	50 °C

Analysis

Conductivity 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 – Pump	2.858.0020
Rotor MSM-HC A	6.2842.000
IC Equipment for Ultrafiltration	6.5330.110

