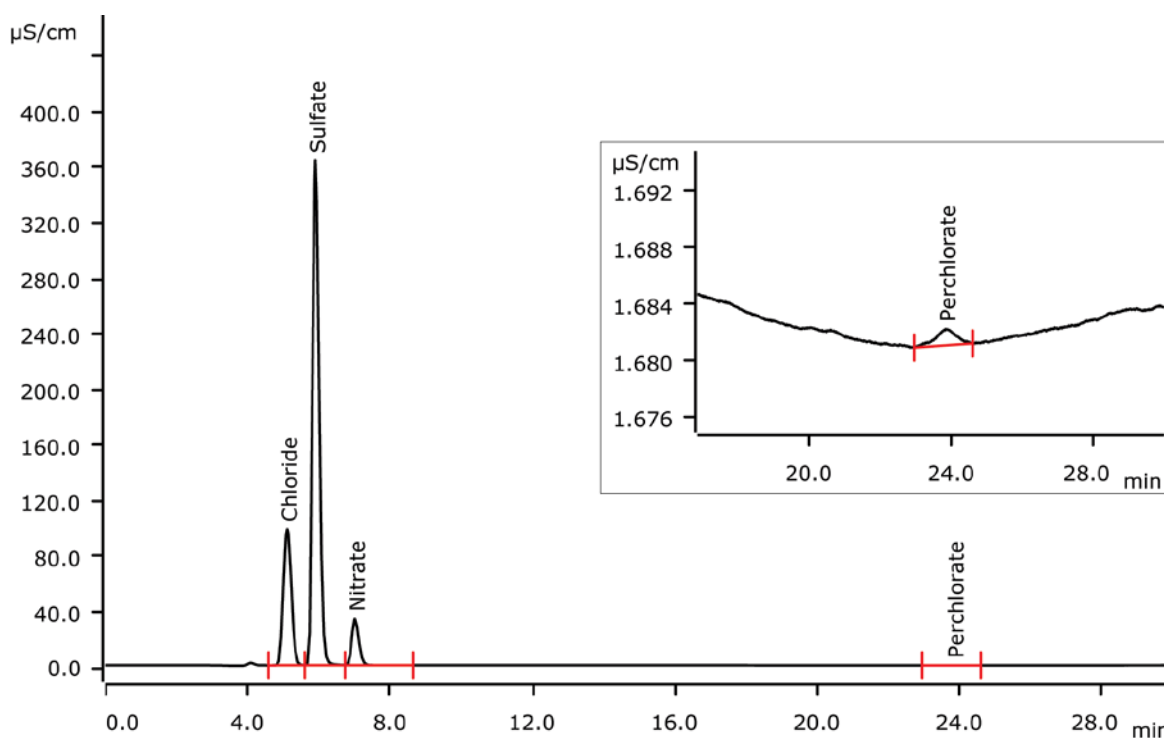


# Traces of perchlorate in drinking water



Perchlorate is known as a potential contaminant in drinking water. Besides very few natural sources, it mainly originates from disinfectants, bleaching, propellants, etc. Perchlorate in drinking water is separated from other anions on a Metrosep A Supp 7 - 150/4.0 column before it is detected with sequential suppression and conductivity detection. This Application Note shows a significantly reduced matrix influence when compared to that of AN-S-324.

## Results

Anion	Concentration [ $\mu\text{g/L}$ ]	RSD [%]
Chloride	n.q.	-
Sulfate	n.q.	-
Nitrate	n.q.	-
Perchlorate (spiked)	1.2	8.3

### Sample

Drinking water

### Sample preparation

None

### Columns

Metrosep A Supp 7 - 150/4.0	6.1006.620
Metrosep A Supp 4/5 Guard/4.0	6.1006.500

### Solutions

Eluent	20 mmol/L sodium carbonate
Suppressor regenerant	100 mmol/L sulfuric acid
Rinsing solution	STREAM

### Analysis

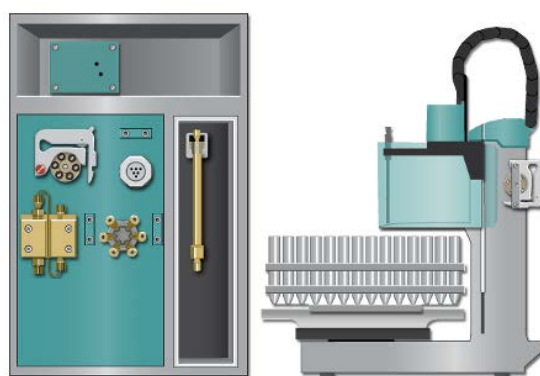
Conductivity detection after sequential suppression

### Instrumentation

940 Professional IC Vario ONE/SeS/PP	2.940.1500
IC Conductivity Detector	2.850.9010
858 Professional Sample Processor	2.858.0020
MSM-HC Rotor A	6.2842.000

### Parameters

Flow rate	0.7 mL/min
Injection volume	250 µL
P <sub>max</sub>	15 MPa
Recording time	28 min
Column temperature	60 °C



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