

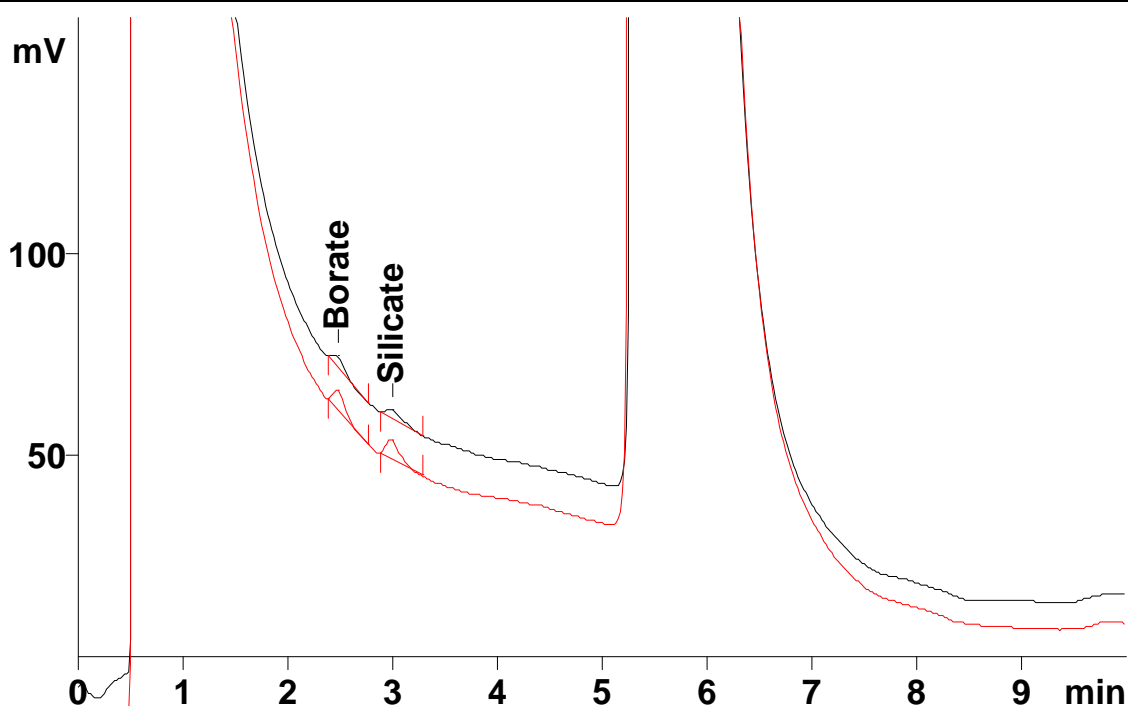
IC Application Note No. N-54

Title: Borate and silicate in ultrapure water

Summary: Determination of borate and silicate in ultrapure water using anion chromatography with direct conductivity detection.

Sample: Ultrapure water
Sample Preparation: –

Column: 6.1005.000 Hamilton PRP-X 100
 6.1005.020 PRP-X 100 Guard used as preconcentration column
Eluent: 3.2 mmol/L sodium hydroxide,
 0.5 mmol/L sodium carbonate
Flow: 1.5 mL/min
Injection Volume: 7 mL preconcentrated



Results:	Borate µg/L	Silicate µg/L
Standard (red trace)	0.5	0.5
Blind value (black trace)	< 0.1	<0.1

Fluoride coelutes with silicate. Method suitable for fluoride-free samples only.