

IC Application Note No. N-44

Title: Silicate in tap water

Summary: Determination of silicate in tap water using anion chromatography with direct conductivity detection.

Sample: Tap water

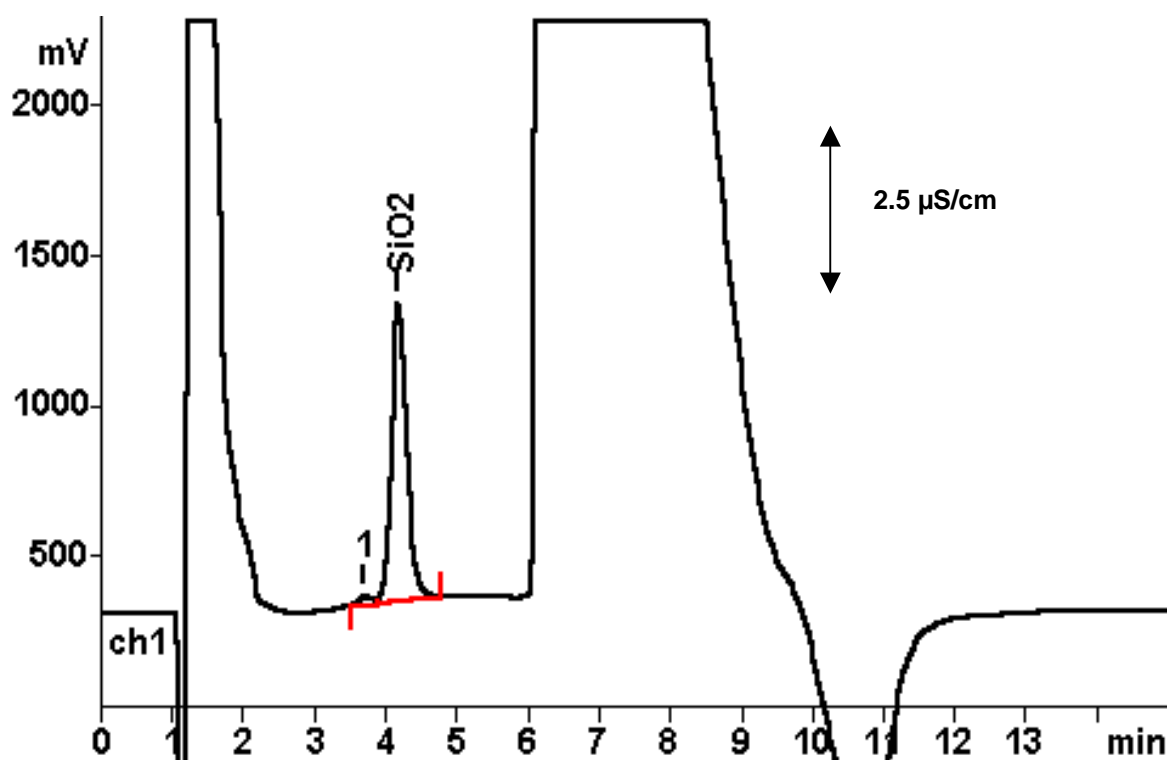
Sample Preparation: Addition of 3.2 mL/L of 1 mol/L NaOH

Column: 6.1005.000 Hamilton PRP-X 100

Eluent: 3.2 mmol/L sodium hydroxide, 0.5 mmol/L sodium carbonate

Flow: 1.0 mL/min

Injection Volume: 100 μ L



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| Results: | Silicate mg/L |
| | 5.32 |

Comments: Limit of detection (LOD) = 20 ppb (100 μ L loop), preconcentration possible with PRP-X 100 precolumn cartridge, using a 709 IC Pump. Fluoride coelutes with silicate. Silicate separated from Fluoride – see Application Note N-5