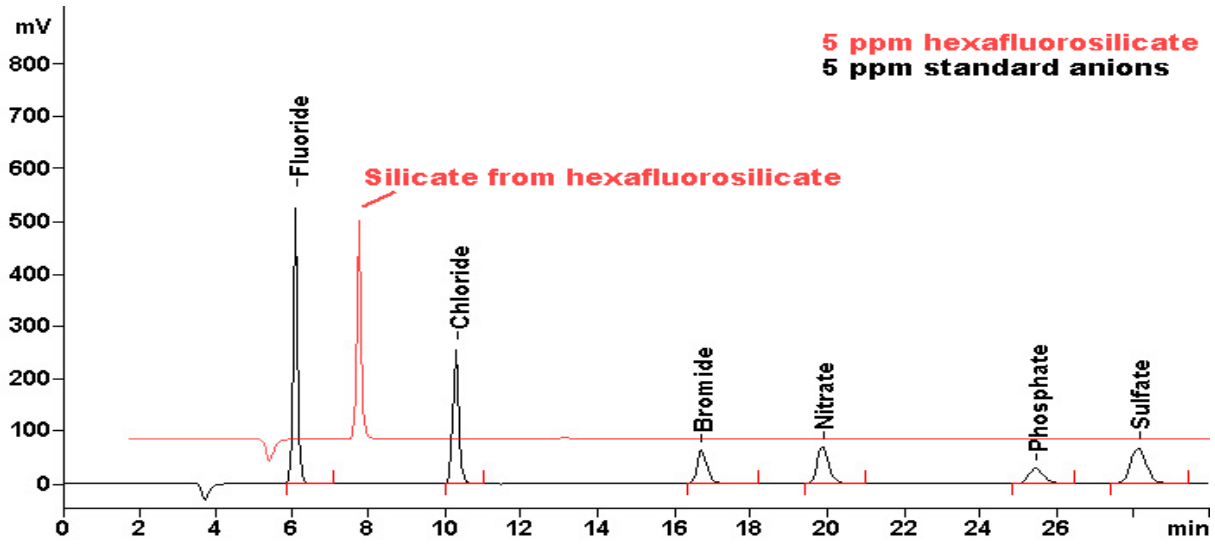
IC Application Note No. S-277

Title:	**Hexafluorosilicate besides standard anions**

***Summary*:**	Determination of fluoride, chloride, nitrate, phosphate, sulfate, silicate and hexafluorosilicate (calculated) using anion chromatography with conductivity detection after chemical suppression and subsequent UV/VIS detection with post-column reaction (see AN U-48). Hexafluorosilicate is hydrolyzed into fluoride and silicate. Both anion concentrations can be used for the calculation of the SiF_6^{2-} concentration.

Sample:	Standard solution
Sample Preparation:	–

Column:	6.1006.630 Metrosep A Supp 7 – 250
Temperature:	45 °C
Eluent:	3.6 mmol/L sodium carbonate
Suppressor:	Metrohm Suppressor Module MSM (50 mmol/L H_2SO_4)
Flow:	0.7 mL/min
Injection Volume:	20 µL



Results:	Fluoride mg/L	Chloride mg/L	Bromide mg/L	Nitrate mg/L	Phosphate mg/L	Sulfate mg/L
Standard anions	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**
Hexafluorosilicate (5 mg/L)	**3.98**	–	–	–	–	–

See AN U-48 for silicate determination.