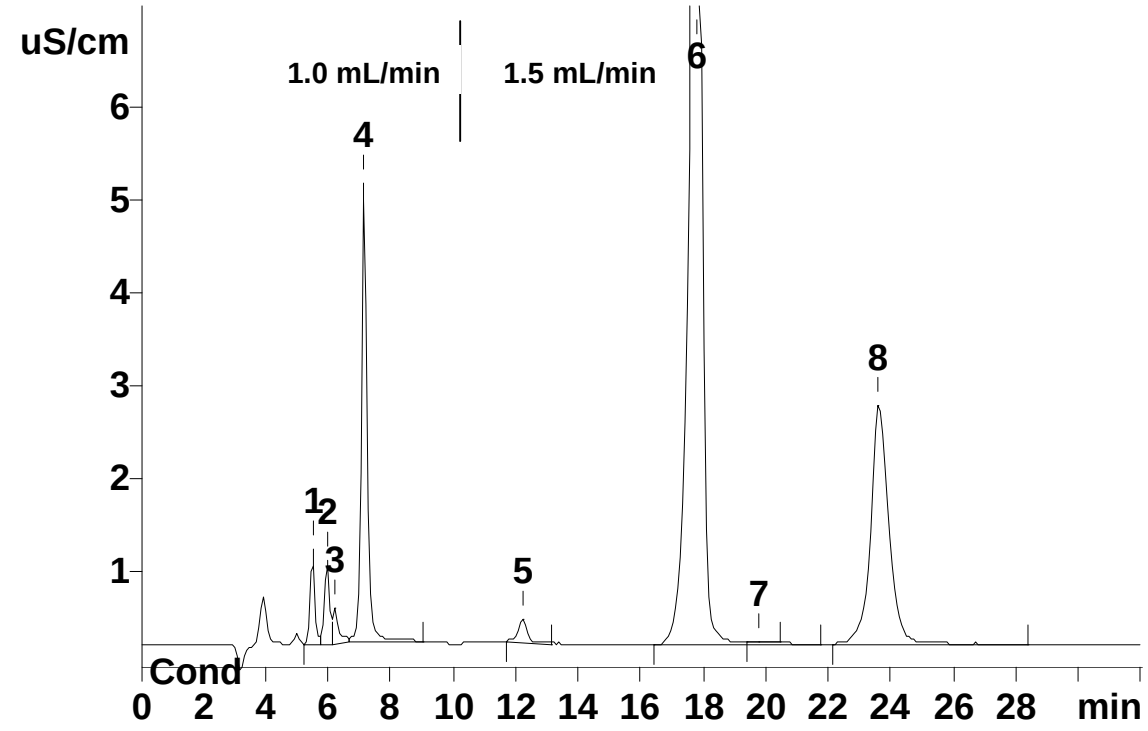
IC Application Note No. S-147

Title:	**Ten anions in an extract of explosives**

***Summary*:**	Determination of chloride, nitrite, cyanate, azide, nitrate, chlorate, sulfate, thiocyanate, thiosulfate and perchlorate in an extract of explosives using anion chromatography with conductivity detection after chemical suppression.

Sample:	Extract of explosives
Sample Preparation:	Direct injection after filtration (0.45 µm)

Column:	6.1005. 230 Metrosep A SUPP 3
Eluent:	1.0 mmol/L sodium carbonate, 1.0 mmol/L sodium hydrogencarbonate, 0.5 mmol/L p-cyanophenol, 10% acetone
Suppressor:	MSM (50 mmol/L H_2SO_4)
Flow Gradient:	1.0 mL/min (0 … 10 min); 1.5 mL/min (10 … 30 min)
Injection Volume:	20 µL



Results:	Chloride mg/L (**1**)	Nitrite mg/L (**2**)	Cyanate mg/L (**3**)	Nitrate mg/L (**4**)	Sulfate mg/L (**6**)	Thiocyanate mg/L (**7**)	Thiosulfate mg/L (**8**)
	0.66	**0.11**	**1.00**	**8.22**	**64.8**	**0.11**	**19.8**

The remaining components have not been quantified. Retention times (min): azide = 6.85; chlorate = 7.99; perchlorate = 27.6