

IC Application Note No. N-66

Title: Four phenols in tap water by amperometric detection

Summary: Determination of phenol, m-cresol, 2,6-dimethylphenol and 2,3,6-trimethylphenol in tap water applying amperometric detection using a glassy carbon electrode.

Sample: Tap water

Sample Preparation: 0.1 g sample dissolved in 100 mL ultrapure water

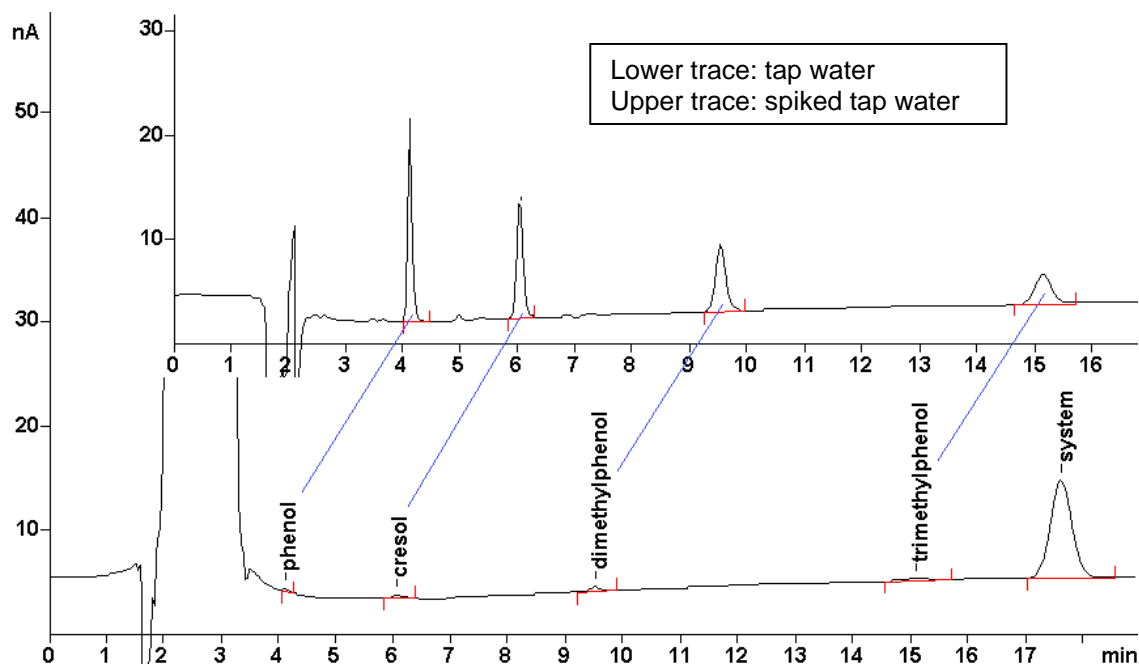
Column: 6.1008.100 ProntoSil 120-5-C18 AQ

Eluent: 20 mmol/L potassium nitrate
0.5 mmol/L sulfuric acid, 50% methanol

Voltage: 1000 mV **Temperature:** 32 °C

Flow: 0.8 mL/min

Injection Volume: 200 µL



Results:	Phenol	m-Cresol	2,6-Dimethylphenol	2,3,6-Trimethylphenol
Tap water [µg/L]	< 0.1	<0.1	0.19	0.28
Tap water + 5 µg/L [µg/L]	4.56	4.97	5.05	5.07
Recovery [%]	91	97	97	96