

# IC Application Note No. P-35

**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

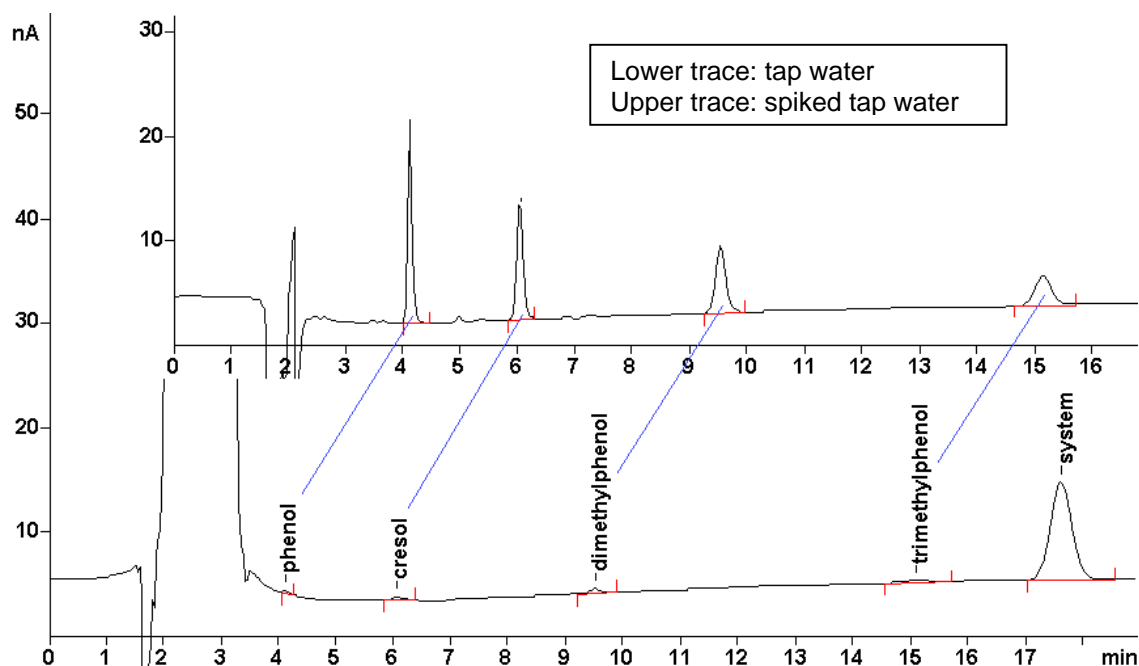
**Eluent:** 20 mmol/L potassium nitrate  
0.5 mmol/L sulfuric acid, 50% methanol

**Voltage:** 1000 mV

**Temperature:** 32 °C

**Flow:** 0.8 mL/min

**Injection Volume:** 200 µL



<b>Results:</b>	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]	<b>4.56</b>	<b>4.97</b>	<b>5.05</b>	<b>5.07</b>
Recovery [%]	<b>91</b>	<b>97</b>	<b>97</b>	<b>96</b>