Supplementary Table 1

	Calibration Standard Material	Quality Control Material	Calculation of LOQ	Mobile Phase
Finland	Chromium(III) chloride hexahydrate (Sigma Aldrich) and Potassium dichromate 99% (Alfa Aesar)	In-house high and low Cr(VI) & Cr(III) standard spike in water	Half of the lowest calibration standard – 6 ng/L quantified with an RSD <20%.	4% v/v ammonia solution & 3.2% v/v nitric acid pH adjusted to pH 2
France	Ammonium dichromate, 99.999% metals basis (Alfa Aesar) and 1000 mg L single standard of Cr(III), PlasmaCAL (SCP Science)	HBM4EU Interlaboratory Cr ICI-EQUAS & In-house 1 µg L Cr(VI) and Cr(III) standard spike in water	Lowest concentration in EBC measured (taking into account the 10 fold dilution) quantified with an RSD <20%. Validated on 10 spiked samples	60 mM ammonia nitrate adjusted to pH 8.3
Italy	100 mg L single standards of Cr(III) and Cr(VI) for ICP (CPAchem)	HBM4EU Interlaboratory Cr ICI-EQUAS & Proficiency testing material for Cr(VI) in drinking water	10x the background equivalent concentration (BEC) of 10 independent speciation analyses	0.25 M ammonium sulfate & 0.1 M ammonium hydroxide
UK	TraceCert 1000 mg L single standards Chromium (III) & (VI) for ICP (Sigma Aldrich)	Proficiency testing material for Cr(VI) in drinking water (QC1453, Lot LRAB7301) (Sigma Aldrich) & In-house 0.5 µg L Cr(VI) & Cr(III) standard spike in water	10x the background equivalent concentration (BEC) of 22 independent speciation analyses	4% v/v ammonia solution & 3.2% v/v nitric acid pH adjusted to between pH 1.8 – 2