Table S1. ICP-MS instrumental parameters	
RF Power	1400 W
Plasma gas flow rate	14.5 l min^{-1}
Auxiliary gas flow rate	1.65 l min^{-1}
Nebulizer	PFA-ST microconcentric
Spray chamber	single pass, heated at 70°C
Nebulizer gas flow rate	0.8 l min^{-1}
Sheathing gas flow rate	0.1 l min^{-1}
Sample uptake rate	20 µl min^{-1}
Injector tube	Quartz (2.0 mm id)
Sampler cone	1.1 mm diameter Pt
Skimmer come	0.9 mm diameter Pt
RF amplitude	150 V
Axial field voltage	300 V
Cell path voltage	-28 V
Cell rod offset	-8.0 V (standard) -1.0 V (DRC)
Mass analyzer rod offset	0.0 V (standard) -8.0 V (DRC)
Reaction gas	NH_3
Reaction gas flow rate	1.0 ml min^{-1} (Fe) 0.4 ml min^{-1} (Cr,Mn,V)
Stability parameters [a]	RPa=0.0 RPq=0.25 (standard) RPq=0.60 (DRC)
Dwell time	50 ms (100 ms for Fe)
Sweeps	20
Replicates	10
Measured ions	$^{51}V^+$, $^{52}Cr^+$, $^{55}Mn^+$, $^{56}Fe^+$, $^{59}Co^+$, $^{63}Cu^+$, $^{64}Zn^+$, $^{114}Cd^+$, $^{208}Pb^+$

Note: [a] Mathieu stability parameters of the cell's quadrupole: a=1.9*RPa; q=0.95*RPq.

Table S2. ICP-AES instrumental parameters	
RF Power	1100 W
Plasma gas flow rate	15.0 l min^{-1}
Auxiliary gas flow rate	1.5 l min^{-1}
Nebulizer	concentric K-style
Spray chamber	cyclonic
Nebulizer gas flow rate	0.75 l min^{-1}
Sample uptake rate	0.78 ml min^{-1}
Internal standard uptake rate	0.22 ml min^{-1}
Integration time	15 s
Replicates	7
Selected wavelengths (nm)	Al (236.705; 237.312; 396.152); Ca (315.887; 370.602; 373.690); Fe (234.350; 240.489; 258.588); K (766.491; 769.897); Lu (291.139); Mg (279.550; 280.270; 285.213); Na (568.821); Sr (346.445; 407.771; 421.552); Zn (202.548; 206.200; 213.857)

Table S3. Analysis of the certified reference material MURST-ISS-A1 [a]

	Certified	Found
Al	67100±3300	67000±4400
Ca	(17236±1202)	19500±500
Cd	0.538±0.027	0.653±0.077
Co	6.87±0.31	7.94±0.69
Cr	42.1±3.4	39.8±3.7
Cu	(5.79±1.59)	5.00±0.61
Fe	24400±700	24500±1400
K	(30289±4325)	27200±1500
Mg	(15200±1292)	11700±900
Mn	446±18	460±34
Na	(21390±1547)	20200±1600
Ni	9.56±0.04	10.3±0.7
Pb	21±3	18±1
Sr	(217±1)	223±13
V	(47.0±5.7)	51.4±3.7
Zn	53.3±2.7	56.3±4.2

Note: [a] mean values ± SD (n=8); values in μg g^{-1}. Indicative values in brackets.

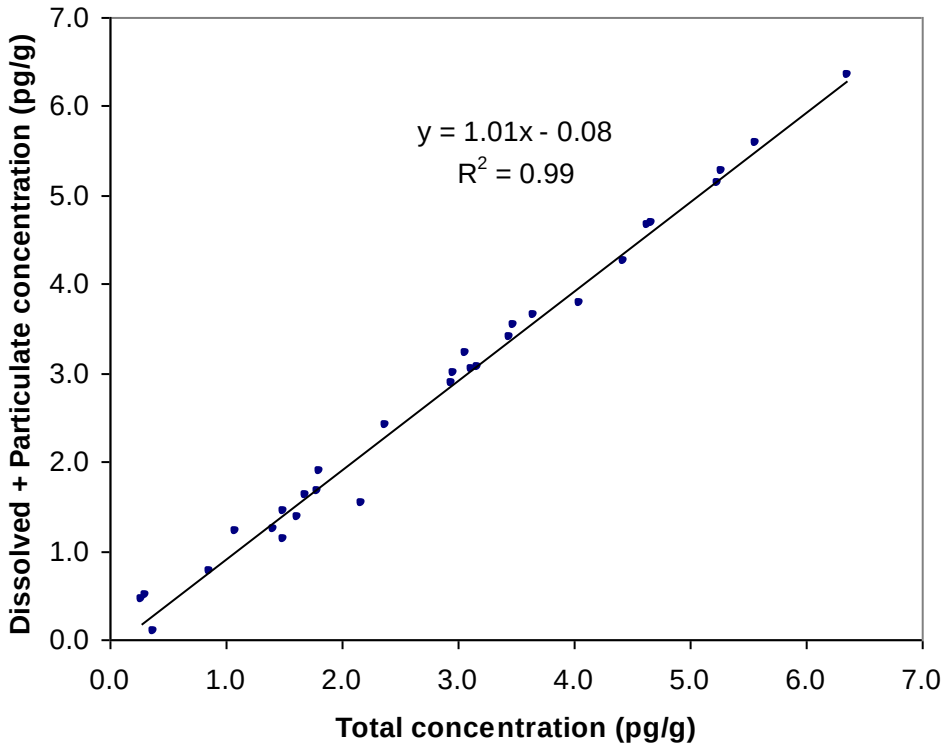

Figure S1