

Table S1. Methods of analysis, detection limits, analytical results and recovery of certified reference material “Trace Metals in Drinking Water” (High-Purity Standards, USA).

Element	Detection limit	Method	Found	Certified value. $\mu\text{g L}^{-1}$	Recovery, %
Na	8	AES	5975	6000	100.4
Mg	9	AES	8913	9000	101.0
Al	1	AES	122	120	98.4
Si	26	AES	<DL	-	ND
P	11	AES	<DL	-	ND
S	14	AES	<DL	-	ND
K	8	AES	2474	2500	101.1
Ca	8	AES	34429	35000	101.7
Sc	0.07	MS	<DL	-	ND
Ti	0.6	AES, MS	<DL	-	ND
V	0.07	AES, MS	30.2	30	99.3
Cr	0.5	AES, MS	20.6	20	97.1
Mn	0.06	AES, MS	40.3	40	99.3
Fe	5	AES	100	100	100.0
Co	0.07	AES, MS	25.7	25	97.3
Ni	0.3	AES, MS	61.6	60	97.4
Cu	0.3	AES, MS	21.3	20	93.9
Zn	0.7	AES, MS	68.6	70	102.0
Ga	0.04	MS	<DL	-	ND
Ge	0.04	MS	<DL	-	ND
As	0.05	MS	80.6	80	99.3
Se	0.3	MS	10.5	10	95.2
Br	7	MS	<DL	-	ND
Sr	0.04	AES, MS	249	250	100.4
Ba	0.03	AES, MS	51.8	50	96.5
Hg	0.01	MS	<DL	-	ND
Pb	0.02	MS	40.3	40	99.3
Li	6	AES, MS	20265	20000	98.7
Be	6	MS	20506	20000	97.5
Rb	6	MS	10359	10000	96.5
Y	3	MS	<DL	-	ND
Zr	6	MS	1912	-	ND
Nb	3	MS	29.8	-	ND
Mo	8	MS	102394	100000	97.7
Ru	4	MS	<DL	-	ND
Rh	5	MS	<DL	-	ND
Pd	5	MS	<DL	-	ND
Ag	3	MS	2036	2000	98.2
Cd	6	MS	10374	10000	96.4
In	3	MS	<DL	-	ND
Sn	16	MS	76.7		ND
Sb	5	MS	10367	10000	96.5
Te	6	MS	3017	3000	99.4
Cs	0.7	MS	17.8	-	ND
La	2	MS	8.9	-	ND
Ce	2.1	MS	32.5	-	ND

Pr	0.6	MS	<DL	-	ND
Nd	0.9	MS	<DL	-	ND
Sm	0.6	MS	<DL	-	ND
Eu	0.5	MS	<DL	-	ND
Gd	0.6	MS	115	-	ND
Tb	0.5	MS	<DL	-	ND
Dy	0.5	MS	<DL	-	ND
Ho	0.5	MS	<DL	-	ND
Er	0.5	MS	<DL	-	ND
Tm	0.5	MS	<DL	-	ND
Yb	0.5	MS	<DL	-	ND
Lu	0.5	MS	<DL	-	ND
Hf	2	MS	26.0	-	ND
Ta	1	MS	21.2	-	ND
W	4	MS	34.8	-	ND
Re	0.8	MS	<DL	-	ND
Os	0.6	MS	<DL	-	ND
Ir	0.6	MS	<DL	-	ND
Pt	0.6	MS	<DL	-	ND
Au	2	MS	<DL	-	ND
Tl	0.6	MS	10114	10000	98.9
Bi	1.9	MS	9907	10000	100.9
Th	0.8	MS	27.9	-	ND
U	0.6	MS	10170	10000	98.3

<DL - under limit of detection; ND – not determined

Detection limits for Na- Pb in $\mu\text{g L}^{-1}$, for Li – U in ng L^{-1}