

Table 1. ED-XRF excitation conditions and minimum determination limits (MDL) for individual elements given as filter concentrations (ng cm^{-2}) and equivalent seawater concentrations (nM) for the average sample filtration volume of 8 L.

Analyte	Limits of Detection		Excitation conditions, 1° X-ray filter, Voltage, and Current
	(ng cm^{-2})	(nM)	
Mg	16.61	1.06	Low Za, Thin graphite, 10 kV, 1.98 mA
Al	9.4	0.54	
Si	4.61	0.25	
P	2.01	0.10	
S	9.01	0.44	
Cl	4.40	0.19	Low Zb, Thick graphite, 12 kV, 1.98 mA
K	3.15	0.12	
Ca	3.99	0.15	
Ti	2.52	0.08	
V	2.41	0.07	Mid Za, Thin Pd, 30 kV, 1.66 mA
Cr	1.39	0.04	
Mn	1.27	0.04	
Fe	0.95	0.03	
Ni	0.77	0.02	
Cu	1.25	0.03	
Zn	1.28	0.03	
As	1.39	0.03	
Br	1.42	0.03	Mid Zb, Thick Pd, 50 kV, 1 mA
Sr	1.98	0.04	
Pb	1.58	0.01	