

ESI 1. Matrix pattern in CRMs of fish tissue, soil and sediment

Sample	Factor dilution	Metals concentration ( $\mu\text{g L}^{-1}$ )											Anions concentration ( $\text{mg L}^{-1}$ )				TOC ( $\text{mg L}^{-1}$ )	Hg Recovery (%) <sup>a</sup>	
		Cu	Pb	Zn	Fe	Mn	Co	Ni	Ag	Cd	As	Cr	Cl <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	F <sup>-</sup>			PO <sub>4</sub> <sup>3-</sup>
Fish																			
BCR463	1000	0.09	0.005	0.4	1.4	0.04	0.009	0.05	0.004	0.02	0.06	0.02	0.1	0.04	51	-	0.03	1.6	98.6±2.8
DOLT-4	1000	0.6	0.001	2.3	36	0.2	0.004	0.07	0.01	0.5	0.2	0.02	0.1	0.07	53	-	0.06	1.6	98.1±2.8
TORT-2	100	20	0.05	32	19	2.5	0.1	0.5	0.04	5.2	3.3	0.1	0.3	0.2	277	-	0.3	18	96.3±3.9
Soil																			
LGC6135	250	1.6	6.4	5.0	640	5.2	0.4	4.3	0.02	0.01	1.1	5.8	0.2	0.08	300	63	0.06	10	96.9±6.5
LGC6141	100	2.0	3.0	7.0	1275	20	0.8	2.3	0.05	0.03	0.8	10	0.8	0.2	725	165	0.1	4.3	100±5.0
CRM025-050	12500	0.003	0.3	0.02	3.1	0.06	0.005	0.005	0.007	0.1	0.1	0.2	0.005	0.007	6.5	1.3	0.001	0.03	99.5±1.0
CRM048-50G	5000	0.2	0.07	0.6	10.0	1.0	0.2	0.07	0.06	0.1	0.07	0.2	0.01	0.001	16	3.2	0.001	0.05	100±3.5
BCR280R	100	2.0	2.3	9.0	1550	25	1.0	3.0	0.03	0.03	1.5	5.5	0.5	0.1	715	150	0.1	3.3	98.6±2.8
NCS	25	8.2	12	40	5800	150	2.6	4.6	0.1	0.4	9.2	15	1.8	1.0	2160	525	0.2	6.5	104.5±8.7
DC78301																			

<sup>a</sup> – 95% confidence level (n = 5)