

Supplementary data for the article:

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Supplementary material

S1. Quality control of analysis using a certified reference material

Element	LOD (mg/kg)	Certified value (mg/kg)	Determined value n = 3 (mg/kg)	Recovery %
As	0.005	310 ± 32.0	221.81 ± 6.8	71.55
Cd	0.001	226 ± 8.06	164.10 ± 6.8	72.61
Co	0.006	228 ± 6.88	161.62 ± 7.5	70.88
Cr	0.001	354 ± 7.08	258.94 ± 9.7	73.15
Cu	0.001	458 ± 23.2	312.50 ± 7.1	68.23
Mo	0.001	300 ± 8.37	268.51 ± 4.5	89.50
Ni	0.005	287 ± 8.82	203.80 ± 4.2	71.01
Pb	0.001	221 ± 18.8	162.84 ± 5.8	73.68
Sb	0.001	116 ± 12.4	133.48 ± 1.1	115.07
Sn	0.009	219 ± 28.7	247.99 ± 2.2	113.24
V	0.005	57.3 ± 7.08	45.55 ± 1.3	79.49
Zn	0.01	1180 ± 67.2	859.79 ± 5.96	72.86

S2. Enrichment factor for the Great War Island sediments

Sample	As	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Sn	V	Zn
K1	4.3	36.3	7.5	3.5	34.1	36.5	2.7	19.2	291	44	7.5	21.9
K2	9.0	42.5	9.0	4.2	124.3	43.4	3.5	29.0	283	189	9.1	29.2
K3	17.2	29.4	7.6	2.7	47.6	42.2	1.8	14.7	236	328	4.3	25.5
K4	16.1	24.3	6.4	2.4	25.8	36.9	1.6	12.6	249	33	4.0	21.6
K5	12.1	57.8	8.8	2.1	84.9	46.2	2.4	47.2	93	29	6.2	34.3
K6	15.2	23.6	7.0	2.7	42.9	36.3	2.1	11.3	213	59	4.1	23.1
L1	19.5	35.2	6.8	2.6	57.0	41.5	1.4	23.0	212	61	4.3	32.6
L2	14.5	51.6	5.9	3.3	20.9	37.7	1.2	22.8	226	22	4.4	29.9
L3	19.7	34.2	8.6	3.3	68.9	65.4	1.8	20.5	261	80	6.8	34.5
L4	11.9	18.2	5.3	1.8	37.6	33.1	1.0	10.8	162	31	3.7	18.1
VG1	12.2	31.6	4.8	2.2	15.3	32.5	1.1	14.1	208	13	4.0	23.0
VG2	1.8	49.9	6.6	3.5	60.7	26.3	2.4	27.5	281	48	7.5	28.3
VG3	0.3	55.1	6.8	3.9	32.5	29.8	2.5	31.5	290	24	8.2	31.5
MG1	4.2	28.2	7.1	3.3	20.8	27.2	2.7	18.4	237	22	7.9	14.9
MG2	3.8	23.0	6.4	3.1	16.6	26.1	2.5	13.9	244	22	7.4	10.3
MG3	4.5	22.9	6.8	3.4	14.6	24.7	3.0	13.3	242	19	7.2	9.6
MG4	6.7	36.3	9.5	4.5	75.4	29.4	3.8	27.5	303	114	10.6	16.8

S3. Contamination factor for the Great War Island sediments

Sample	As	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Sn	V	Zn
K1	0.4	3.6	0.8	0.3	3.4	3.7	0.3	1.9	29.2	4.4	0.8	2.2
K2	1.0	4.5	1.0	0.4	13.2	4.6	0.4	3.1	30.1	20.1	1.0	3.1
K3	1.8	3.0	0.8	0.3	4.9	4.3	0.2	1.5	24.3	33.7	0.4	2.6
K4	1.7	2.5	0.7	0.3	2.7	3.9	0.2	1.3	26.1	3.5	0.4	2.3
K5	1.3	6.1	0.9	0.2	8.9	4.8	0.2	4.9	9.8	3.0	0.6	3.6
K6	1.7	2.6	0.8	0.3	4.7	4.0	0.2	1.2	23.4	6.5	0.5	2.5
L1	2.0	3.5	0.7	0.3	5.7	4.2	0.1	2.3	21.3	6.1	0.4	3.3
L2	1.6	5.5	0.6	0.4	2.2	4.1	0.1	2.4	24.3	2.4	0.5	3.2
L3	1.5	2.6	0.7	0.3	5.3	5.0	0.1	1.6	20.1	6.2	0.5	2.7
L4	1.2	1.8	0.5	0.2	3.7	3.2	0.1	1.1	15.9	3.0	0.4	1.8
VG1	1.3	3.4	0.5	0.2	1.6	3.5	0.1	1.5	22.2	1.4	0.4	2.5
VG2	0.2	5.3	0.7	0.4	6.4	2.8	0.3	2.9	29.6	5.1	0.8	3.0
VG3	0.0	6.0	0.7	0.4	3.5	3.2	0.3	3.4	31.4	2.6	0.9	3.4
MG1	0.5	3.1	0.8	0.4	2.3	3.0	0.3	2.0	25.8	2.4	0.9	1.6
MG2	0.4	2.4	0.7	0.3	1.8	2.8	0.3	1.5	25.9	2.4	0.8	1.1
MG3	0.5	2.5	0.7	0.4	1.6	2.6	0.3	1.4	25.9	2.1	0.8	1.0
MG4	0.7	3.7	1.0	0.5	7.7	3.0	0.4	2.8	30.9	11.7	1.1	1.7

S4. Degree of contamination and Pollution load index for the Great War Island sediments

Samples	K1	K2	K3	K4	K5	K6	L1	L2	L3
Cd	51	82	78	45	44	48	50	47	47
PLI	1.70	2.80	2.08	1.05	2.05	1.77	1.87	1.68	1.72
Samples	L4	VG1	VG2	VG3	MG1	MG2	MG3	MG4	
Cd	33	39	57	56	43	40	40	65	
PLI	1.17	1.26	1.81	1.52	1.51	1.30	1.31	2.27	

S5. Geoaccumulation index for the Great War Island sediments

Samples	As	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Sn	V	Zn
K1	-1.80	1.28	-1.00	-2.10	1.19	1.29	-2.49	0.36	4.28	1.55	-0.99	0.55
K2	-0.65	1.59	-0.65	-1.75	3.14	1.62	-2.01	1.04	4.32	3.74	-0.63	1.05
K3	0.24	1.01	-0.94	-2.42	1.71	1.53	-3.01	0.02	4.02	4.49	-1.75	0.80
K4	0.17	0.76	-1.17	-2.57	0.85	1.36	-3.15	-0.18	4.12	1.21	-1.85	0.59
K5	-0.24	2.01	-0.70	-2.80	2.57	1.69	-2.59	1.72	2.70	0.99	-1.21	1.26
K6	0.15	0.79	-0.97	-2.33	1.65	1.41	-2.71	-0.28	3.96	2.12	-1.73	0.76
L1	0.39	1.24	-1.13	-2.49	1.93	1.48	-3.40	0.63	3.83	2.03	-1.79	1.13
L2	0.06	1.89	-1.23	-2.09	0.58	1.44	-3.48	0.71	4.02	0.66	-1.68	1.10
L3	0.02	0.81	-1.18	-2.56	1.82	1.75	-3.43	0.07	3.74	2.04	-1.51	0.82
L4	-0.36	0.25	-1.52	-3.08	1.30	1.11	-3.98	-0.50	3.41	0.99	-2.05	0.24
VG1	-0.21	1.16	-1.54	-2.66	0.11	1.20	-3.68	0.00	3.89	-0.11	-1.82	0.71

VG2	-2.96	1.81	-1.11	-2.02	2.09	0.89	-2.57	0.95	4.30	1.75	-0.93	0.99
VG3	-5.62	1.99	-1.02	-1.83	1.23	1.10	-2.46	1.19	4.39	0.81	-0.76	1.18
MG1	-1.71	1.04	-0.94	-2.04	0.59	0.99	-2.37	0.42	4.10	0.71	-0.81	0.11
MG2	-1.90	0.71	-1.13	-2.18	0.23	0.89	-2.48	-0.02	4.11	0.66	-0.93	-0.46
MG3	-1.63	0.71	-1.05	-2.05	0.06	0.82	-2.21	-0.07	4.11	0.45	-0.95	-0.54
MG4	-1.14	1.30	-0.63	-1.72	2.36	1.00	-1.94	0.91	4.37	2.96	-0.47	0.20