

Table S1. Potential ecological risk index (PERI) of Potentially Toxic Elements (V, Cr, Co, Ni, Cu, Zn, As, Cd and Pb) from the lake sediments of North Aral Sea.

Depth	year	V	Cr	Co	Ni	Cu	Zn	As	Cd	Pb	Total
1	2018	5.7	5.7	14.5	17.1	20.9	6.6	23.1	108.9	15.6	218.1
2	2017	6.6	6.9	17.2	20.6	25.5	7.9	26.4	126.9	18.3	256.4
3	2016	6.7	6.9	17.6	21.3	26.3	8.4	27.7	139.4	18.8	273.1
4	2015	6.8	6.8	17.2	20.9	26.1	7.9	27.8	141.1	18.4	272.9
5	2014	6.8	7.0	17.8	21.8	27.1	8.3	31.9	146.2	19.2	286.0
6	2013	6.8	7.2	18.0	22.5	27.9	8.4	33.4	133.9	19.7	277.8
7	2012	6.9	7.2	18.0	22.8	28.5	8.6	30.2	167.6	20.0	309.8
8	2010	7.0	7.1	18.2	22.7	28.8	8.6	24.8	141.0	20.0	278.3
9	2009	6.8	7.0	17.8	22.2	28.2	8.4	24.6	149.7	19.7	284.4
10	2007	6.4	6.5	16.1	18.8	22.3	7.2	20.7	112.5	16.6	227.1
11	2005	6.7	6.5	16.0	18.8	21.6	7.1	21.3	94.7	16.6	209.4
12	2003	6.7	6.8	16.4	19.3	22.0	7.3	21.6	99.3	16.8	216.3
13	2001	7.1	7.0	16.9	19.3	21.6	7.5	21.0	94.6	17.4	212.4
14	1999	7.1	6.8	16.7	18.9	20.6	7.7	22.3	94.4	16.5	211.1
15	1996	6.9	6.4	15.8	17.7	19.1	6.8	22.2	94.6	15.2	204.6
16	1993	6.9	6.8	16.6	18.1	19.0	6.9	25.5	84.9	15.5	200.1
17	1990	7.4	7.2	17.4	19.1	20.5	7.3	27.4	105.5	16.4	228.1
18	1986	7.0	6.8	16.8	18.8	20.2	7.2	26.1	91.7	16.2	210.7
19	1982	6.5	6.4	15.7	17.7	19.0	6.7	23.8	100.6	15.5	212.0
20	1978	6.1	5.9	14.7	17.0	18.1	6.6	23.0	86.6	14.6	192.6
21	1974	6.1	5.9	15.2	16.9	18.1	6.4	28.4	90.1	14.5	201.6
22	1970	2.7	2.7	6.4	6.8	7.0	2.6	11.5	38.5	6.3	84.4
23	1966	1.8	1.6	4.1	4.3	4.3	1.7	6.9	21.0	4.1	49.8
24	1963	1.9	1.8	4.8	4.7	4.6	1.8	8.5	28.7	4.4	61.2
25	1960	2.1	2.1	5.4	5.4	5.2	2.1	10.5	29.0	4.9	66.7
26	1958	2.3	2.1	5.8	5.9	5.8	2.3	11.8	31.9	5.5	73.5
27	1956	1.7	1.7	4.5	4.4	4.0	1.7	9.9	29.2	4.2	61.1
28	1954	1.9	2.0	4.8	4.5	4.4	1.8	9.4	28.5	4.7	62.1
29	1952	2.1	2.2	5.0	5.3	5.7	2.2	9.4	30.8	5.5	68.2
30	1950	2.0	2.1	4.9	4.9	5.1	2.0	9.4	29.7	5.1	65.1