Federal Institute for Geosciences and Natural Resources

1. Number of analyses and samples below or above the detection limit

Para-meter	N	N (analysed)	% (analysed)	< DL[1]	% < DL[1]	> DL[1]	% > DL[1]
pH	17,830	17,443	97.83%	-	-	-	-
EC	17,830	17,614	98.79%	-	-	-	-
F_{aqua}	17,830	17,824	99.97%	660	3.70%	340	1.91%
Ag	17,408	8,548	49.10%	7,333	85.79%	0	0.00%
As	17,408	16,654	95.67%	853	5.12%	26	0.16%
B	17,408	17,255	99.12%	93	0.54%	6	0.03%
Ba	17,408	17,147	98.50%	72	0.42%	31	0.18%
Be	17,408	17,363	99.74%	24	0.14%	5	0.03%
Bi	17,408	8,203	47.12%	8,038	97.99%	0	0.00%
Co	17,408	17,394	99.92%	24	0.14%	2	0.01%
Cr	17,408	17,395	99.93%	183	1.05%	19	0.11%
Cu	17,408	17,395	99.93%	3	0.02%	7	0.04%
F_{sed}	17,408	9,945	57.13%	347	3.49%	1	0.01%
Fe	17,408	552	3.17%	0	0.00%	0	0.00%
Ga	17,408	441	2.53%	9	2.04%	0	0.00%
Hg	17,408	9,987	57.37%	0	0.00%	13	0.13%
La	17,408	5,010	28.78%	24	0.48%	1	0.02%
Li	17,408	16,620	95.47%	2,553	15.36%	0	0.00%
Mn	17,408	17,144	98.48%	58	0.34%	109	0.64%
Mo	17,408	17,255	99.12%	15,000	86.93%	0	0.00%
Nb	17,408	8,502	48.84%	16	0.19%	0	0.00%
Ni	17,408	17,395	99.93%	110	0.63%	2	0.01%
Pb	17,408	17,395	99.93%	6	0.03%	91	0.52%
Rb	17,408	8,300	47.68%	13	0.16%	1	0.01%
Sc	17,408	5,842	33.56%	269	4.60%	0	0.00%
Sn	17,408	17,394	99.92%	1,135	6.53%	9	0.05%
Sr	17,408	8,297	47.66%	31	0.37%	9	0.11%
Ti	17,408	17,007	97.70%	1	0.01%	809	4.76%
V	17,408	8,685	49.89%	0	0.00%	0	0.00%
W	17,408	15,453	88.77%	2,836	18.35%	2	0.01%
Y	17,408	5,812	33.39%	1	0.02%	12	0.21%
Yb	17,408	5,845	33.58%	17	0.29%	0	0.00%
Zn	17,408	16,737	96.15%	12	0.07%	33	0.20%
Zr	17,408	17,007	97.70%	2	0.01%	0	0.00%

[1] DL = detection limit

2. Statistical parameters

Parameter	Unit	N	X_{min}	X_{max}	$\bar{X}$	SEM	SD	$\bar{X}_{geom}$	X_{med}	MAD
pH	-	17,443	2.8	10.9	6.36	0.008	1.02	6.27	6.60	0.76
EC	µS/cm	17,614	8	16,800	373	2.9	397	295	320	187
F_{aqua}	mg/L	17,824	< 0.04	10.8	0.270	0.0025	0.337	0.19	0.20	0.152
Ag	mg/kg	8,548	< 1	213	< 1	-	-	< 1	< 1	-
As	mg/kg	16,654	< 2	5,480	36.5	0.80	103	17.6	19.0	27.0
B	mg/kg	17,255	< 20	1,380	74.8	0.38	50.0	66.1	65.0	26.7
Ba	mg/kg	17,147	< 100	29,000	559	5.1	662	492	490	181
Be	mg/kg	17,363	< 1	156	5.43	0.046	6.11	4.16	4.00	2.72
Bi	mg/kg	8,203	< 5	69	< 5	-	-	< 5	< 5	-
Co	mg/kg	17,394	< 1	845	14.4	0.15	20.1	10.0	10.0	8.47
Cr	mg/kg	17,395	< 5	5,000	56.9	0.51	67.5	46.5	50.0	24.1
Cu	mg/kg	17,395	< 2	5,500	44.5	0.72	95.1	28.9	29.0	27.7
F_{sed}	mg/kg	9,945	< 200	56,000	467	9.3	924	392	400	175
Fe	mg/kg	552	490	73,600	27,100	488	11,467	25,100	23,800	8,137
Ga	mg/kg	441	< 5	18	8.43	0.109	2.29	8.12	8.00	1.60
Hg	µg/kg	9,987	15.0	23,700	191	4.69	468	128	120	114
La	mg/kg	5,010	< 30	1,120	78.5	0.567	40.1	73.4	73.0	20.0
Li	mg/kg	16,620	< 30	2,840	65.5	0.534	68.8	51.6	55.0	31.1

N: number of measurements, X_{min}: minimum, X_{max}: maximum, $\bar{X}$: arithmetic mean, SEM: standard error of the arithmetic mean, SD: standard deviation, $\bar{X}_{geom}$: geometric mean, X_{med}: median, MAD: median absolute deviation

Parameter	Unit	N	X_{min}	X_{max}	$\bar{X}$	SEM	SD	$\bar{X}_{geom}$	X_{med}	MAD
Mn	mg/kg	17,144	< 100	73,300	1,190	14.5	1900	766	720	766
Mo	mg/kg	17,255	< 2	235	< 2	-	-	< 2	< 2	-
Nb	mg/kg	8,502	< 5	265	29.1	0.194	17.9	25.7	23.0	10.6
Ni	mg/kg	17,395	< 5	1,500	39.2	0.323	42.5	28.8	29.0	21.8
Pb	mg/kg	17,395	< 5	4,230	73.5	0.607	79.7	58.0	54.0	35.9
Rb	mg/kg	8,300	< 25	3,100	122	0.691	62.9	113	110	35.2
Sc	mg/kg	5,842	< 5	87.0	11.9	0.064	4.86	10.8	12.0	3.8
Sn	mg/kg	17,394	< 3	13,800	24.9	1.54	204	6.96	6.00	21.0
Sr	mg/kg	8,297	< 25	5,940	97.9	1.29	118	88.3	89.0	28.9
Ti	mg/kg	17,007	< 100	63,300	5,060	21.0	2,734	4,580	4610	1,546
V	mg/kg	8,685	7	812	72.7	0.523	48.8	62.1	64.0	30.1
W	mg/kg	15,453	< 2	8,650	10.7	0.603	74.9	5.56	7.00	7.68
Y	mg/kg	5,812	< 5	936	47.4	0.358	27.3	44.3	42.0	11.4
Yb	mg/kg	5,848	< 2	67	4.26	0.027	2.05	4.02	4.00	1.01
Zn	mg/kg	16,737	<10	7,390	196	1.72	223	148	147	102
Zr	mg/kg	17,007	< 30	4,620	485	1.81	237	443	430	154

N: number of measurements, X_{min}: minimum, X_{max}: maximum, $\bar{X}$: arithmetic mean, SEM: standard error of the arithmetic mean, SD: standard deviation, $\bar{X}_{geom}$: geometric mean, X_{med}: median, MAD: median absolute deviation

Para-meter	Unit	P1	P2	P5	P10	P25	P50	P75	P90	P95	P98	P99
pH	-	3.80	3.90	4.20	4.60	5.90	6.60	7.10	7.40	7.70	7.90	8.10
EC	µS/cm	65.0	76.0	96.0	116	177	320	480	660	818	1,020	1,250
F_{aqua}	mg/L	< 0.04	< 0.04	0.040	0.070	0.120	0.200	0.320	0.500	0.700	1.00	1.34
Ag	mg/kg	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.00	1.50	2.00	3.00
As	mg/kg	< 2	< 2	< 2	4.00	10.0	19.0	36.0	68.0	105	198	311
B	mg/kg	22.0	26.0	32.0	38.0	50.0	65.0	87.0	112	140	201	252
Ba	mg/kg	130	178	260	315	399	490	604	778	966	1,290	1,770
Be	mg/kg	1.00	1.50	1.50	2.00	3.00	4.00	5.00	10.0	15.0	23.0	30.4
Bi	mg/kg	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	5.00	6.00
Co	mg/kg	1.50	2.00	3.00	4.00	6.00	10.0	17.0	28.0	37.0	55.0	80.0
Cr	mg/kg	< 5	7.00	15.0	23.0	35.0	50.0	68.0	92.0	115	155	195
Cu	mg/kg	4.50	5.00	8.00	10.0	17.0	29.0	47.0	79.0	113	199	294
F_{sed}	mg/kg	< 200	< 200	200	200	300	400	500	650	800	1000	1,300
Fe	mg/kg	11,000	1,3000	14,900	16,600	19,300	23,800	31,600	42,900	50,700	66,200	68,700
Ga	mg/kg	< 5	< 5	6.00	6.00	7.00	8.00	10.0	11.0	12.9	15.0	16.0
Hg	µg/kg	30.0	35.0	45.0	55.0	76.0	120	194	321	470	820	1,280
La	mg/kg	34.0	37.2	44.0	49.0	61.0	73.0	88.0	107	123	155	203
Li	mg/kg	< 30	< 30	< 30	< 30	38.0	55.0	78.0	111	139	204	280
Mn	mg/kg	132	161	211	270	421	720	1,300	2,390	3,450	5,380	7,940
Mo	mg/kg	< 2	< 2	< 2	< 2	< 2	< 2	< 2	2.00	3.00	5.00	9.00
Nb	mg/kg	11.0	13.0	15.0	16.0	19.0	23.0	33.0	51.0	64.0	83.0	100

Px = x. percentil

Para-meter	Unit	P1	P2	P5	P10	P25	P50	P75	P90	P95	P98	P99
Mn	mg/kg	132	161	211	270	421	720	1,300	2,390	3,450	5,380	7,940
Mo	mg/kg	< 2	< 2	< 2	< 2	< 2	< 2	< 2	2.00	3.00	5.00	9.00
Nb	mg/kg	11.0	13.0	15.0	16.0	19.0	23.0	33.0	51.0	64.0	83.0	100
Ni	mg/kg	5.00	6.00	9.00	12.0	17.0	29.0	46.0	75.0	105	153	200
Pb	mg/kg	17.0	20.0	24.0	28.0	38.0	54.0	82.0	129	178	265	367
Rb	mg/kg	50.0	58.0	65.0	74.0	89.0	110	137	175	228	303	347
Sc	mg/kg	< 5	< 5	5.00	6.00	9.00	12.0	15.0	18.0	20.0	22.0	24.0
Sn	mg/kg	< 3	< 3	< 3	3.00	4.00	6.00	9.00	20.0	55.0	222	470
Sr	mg/kg	33.0	39.0	49.0	57.0	72.0	89.0	108	134	159	202	247
Ti	mg/kg	1,460	1,750	2,280	2,800	3,700	4,610	5,520	7,350	9,900	13,400	16,500
V	mg/kg	16.0	19.0	25.0	30.0	44.0	64.0	88.0	121	148	192	244
W	mg/kg	< 2	< 2	< 2	< 2	3.00	7.00	11.0	18.0	26.0	43.0	65.0
Y	mg/kg	24.0	26.0	30.0	32.0	37.0	42.0	49.0	62.7	80.0	111	146
Yb	mg/kg	2.00	2.50	2.50	3.00	3.50	4.00	4.50	6.00	7.00	9.00	11.0
Zn	mg/kg	27.0	35.0	49.0	64.0	95.0	147	230	355	469	698	967
Zr	mg/kg	182	207	243	275	338	430	568	746	909	1,140	1,320

Px = x. percentil