

Table of assigned values

Parameter	Sample	Unit	Assigned value ± U (k=2)	Criterion	Criterion [%]
Alkalinity Ks 4,3	N180 A	mmol/l	7.31 ± 0.0254	0.146	2
	N180 B	mmol/l	3.5 ± 0.0202	0.0699	2
Ammonium (as NH ₄)	N180 A	mg/l	0.0867 ± 0.00322	0.0104	12
	N180 B	mg/l	0.29 ± 0.0086	0.0348	12
Boron	N180 A	mg/l	0.0592 ± 0.00162	0.00652	11
	N180 B	mg/l	0.0162 ± 0.000839	0.00179	11
Calcium	N180 A	mg/l	168 ± 1.9	5.2	3.1
	N180 B	mg/l	65.6 ± 0.729	2.03	3.1
Chloride	N180 A	mg/l	110 ± 0.63	4.41	4
	N180 B	mg/l	41.2 ± 0.375	1.65	4
DOC (as C)	N180 A DOC	mg/l	1.55 ± 0.082	0.186	12
	N180 B DOC	mg/l	2.87 ± 0.0629	0.287	10
El. conductivity (25°C)	N180 A	µS/cm	1170 ± 4.33	15.3	1.3
	N180 B	µS/cm	571 ± 1.88	7.42	1.3
Hydrogen carbonate	N180 A	mg/l	445 ± 1.63	8.9	2
	N180 B	mg/l	211 ± 1.2	4.22	2
Magnesium	N180 A	mg/l	39.8 ± 0.541	1.59	4
	N180 B	mg/l	15.8 ± 0.174	0.632	4
Nitrate (as NO ₃)	N180 A	mg/l	10.1 ± 0.0896	0.507	5
	N180 B	mg/l	29.5 ± 0.271	1.48	5
Nitrite (as NO ₂)	N180 A	mg/l	0.0307 ± 0.00108	0.00307	10
	N180 B	mg/l	0.385 ± 0.00518	0.0204	5.3
Orthophosphate (as PO ₄)	N180 A	mg/l	0.051 ± 0.00379	0.0102	20
	N180 B	mg/l	0.411 ± 0.051	0.123	30
pH-value	N180 A	-	7.6 ± 0.0251	0.152	2
	N180 B	-	7.58 ± 0.0328	0.152	2
Potassium	N180 A	mg/l	2.5 ± 0.0456	0.13	5.2
	N180 B	mg/l	2.79 ± 0.0421	0.145	5.2
Sodium	N180 A	mg/l	23.3 ± 0.188	0.791	3.4

Parameter	Sample	Unit	Assigned value ± U (k=2)	Criterion	Criterion [%]
Sodium	N180 B	mg/l	24.8 ± 0.253	0.844	3.4
Sulfate (as SO ₄)	N180 A	mg/l	106 ± 0.947	3.51	3.3
	N180 B	mg/l	32 ± 0.308	1.06	3.3
Total-P (as PO ₄)	N180 A	mg/l	0.145 ± 0.00263	0.0109	7.5
	N180 B	mg/l	2.01 ± 0.0245	0.151	7.5
Total hardness	N180 A	mmol/l	5.84 ± 0.0648	0.175	3
	N180 B	mmol/l	2.29 ± 0.0232	0.0686	3
Total nitrogen	N180 A	mg/l	2.49 ± 0.0962	0.207	8.3
	N180 B	mg/l	7.29 ± 0.23	0.605	8.3

Legend:

Assigned value	Target value for proficiency assessment of the participants (3 significant digits)
U (k=2)	Expanded uncertainty (k=2) of the assigned value (3 significant digits)
Criterion	Specified value for the determination of the z-score in the given unit (3 significant digits)
Criterion [%]	Specified value for the determination of the z-score in % of the assigned value (2 significant digits)