

Online Resource 4

Chemical characterization of the reservoir water of the Berthelsdorfer Hüttenteich

Article Title Metal(loid)s in mining contaminated subaquatic sediments of the Berthelsdorfer Hüttenteich, Saxony, Germany

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Table 1 Chemical standard parameters of the reservoir water of the Berthelsdorfer Hüttenteich, measured in the field.

Samples	Date	Time	Location within the reservoir			
HT_1	30/09/2020	3:20 p.m.	Near the water surface, drainage area			
HT_2	30/09/2020	2:00 p.m.	From 2.70 m water depth, drainage area			

	Color	Transparency	Turbidity	Smell	Other observations	
HT_1	Colorless	Transparent	Slightly turbid	Odorless	Micro flocculation, mm large organic particles	
HT_2	Colorless	Transparent	Slightly turbid	Odorless	Micro flocculation	

	T	pH	E _H UG [mV] HG,25°C [mV]	O ₂ [mg/L]	EC [µS cm ⁻¹]	Turbidity [FNU]
	[°C]	[]				
HT_1	15.7	7.0	+138 +353	8.91	205.8	9.9
HT_2	13.9	6.9	+144 +361	7.81	199.8	16.7

	Carbonate hardness [°dH]	Alkalinity [mmol L ⁻¹]	Total hardness [°dH]	Chloride Cl ⁻ [mg L ⁻¹]
HT_1	3.4	1.25	4.4	16
HT_2	2.8	1.00	4.4	24

	Dissolved ferrous iron Fe ²⁺ [mg L ⁻¹]	Dissolved ferric iron Fe ³⁺ [mg L ⁻¹]	Total dissolved iron [mg L ⁻¹]	Total iron [mg L ⁻¹]
HT_1	0.01	0.07	0.08	0.37
HT_2	0.05	0.02	0.07	0.14

Table 2 Organic and nitrogen content and selected ion concentrations of the reservoir water of the Berthelsdorfer Hüttenteich of HT_2, measured in the laboratory.

Organic and nitrogen content	DOC [mg L ⁻¹]	DN [mg L ⁻¹]				
	6.61	1.32				
Anions	F ⁻ [mg L ⁻¹]	Cl ⁻ [mg L ⁻¹]	PO ₄ ³⁻ [mg L ⁻¹]	NO ₂ ⁻ [mg L ⁻¹]	NO ₃ ⁻ [mg L ⁻¹]	SO ₄ ²⁻ [mg L ⁻¹]
	0.10	18.52	0.22	≤0.01	3.36	30.89
Cations	Na ⁺ [mg L ⁻¹]	K ⁺ [mg L ⁻¹]	NH ₄ ⁺ [mg L ⁻¹]	Mg ²⁺ [mg L ⁻¹]	Ca ²⁺ [mg L ⁻¹]	Mn ²⁺ [mg L ⁻¹]
	12.05	2.72	≤ 0.01	5.35	19.36	≤ 0.01