Supplementary Materials S1- Temporal variability of the physicochemical parameters and concentrations of the main solutes of the piezometer, surface and spring waters.

Table S1: Piezometer S1N. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m above topographic field level (t.f.l), and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO_3^-	F^-	Cl^-	Br^-	NO_3^-	SO_4^{2-}	Ca^{2+}	Mg^{2+}	Na^+	K^+	NH_4^+	Error %
S1N	Feb-13	12	7.38	180	149	4.75	65	0.2	5.6	<0.1	1.8	18	15	2	7	10	0.03	-4.14
S1N	May-13	13	7.66	350	200	4.10	110	0.4	8.9	<0.1	7.4	48	45	3	8	8	<0.01	-2.72
S1N	Sep-13	13	7.23	610	n.d.	5.32	142	0.1	15.0	<0.1	0.9	160	82	12	14	17	0.10	0.30
S1N	Jan-14	11	10.87	380	70	5.25	111	0.3	9.2	<0.1	2.8	58	16	1	24	43	0.14	-4.81
S1N	May-14	14	7.88	320	n.d.	4.22	96	0.3	5.8	<0.1	2.1	55	28	2	14	23	0.12	-2.89
S1N	Sep-14	14	7.24	670	n.d.	4.80	152	0.4	7.6	<0.1	<0.1	106	54	4	27	33	<0.01	0.99
S1N	Jan-15	n.d.	n.d.	n.d.	n.d.	4.30	31	0.4	9.9	<0.1	3.6	56	30	1	27	52	0.12	3.28
S1N	May-15	13	7.66	169	123	4.05	88	0.5	5.5	<0.1	2.6	16	29	1	4	8	0.19	-1.04
S1N	Sep-15	16	8.74	200	94	4.92	120	0.1	6.4	<0.1	1.2	27	23	2	15	35	0.23	2.82
S1N	Jan-17	12	7.75	540	n.d.	5.47	113	0.3	26.6	<0.1	3.3	26	40	4	20	12	0.15	4.19
S1N	Jun-18	14	6.99	1093	n.d.	4.68	83	0.3	3.7	<0.1	5.5	31	27	1	13	32	0.01	1.24
S1N	Mar-19	13	7.49	226	n.d.	4.65	62	<0.1	2.4	<0.1	2.9	14	24	1	5	5	0.03	7.98
S1N	May-19	14	7.25	211	n.d.	4.50	62	0.1	28.5	1.9	1.8	52	24	1	5	5	0.03	-2.75
S1N	Oct-19	13	9.39	194	58	5.25	129	0.3	6.4	0.9	15.8	38	29	1	17	40	0.14	-0.88
S1N	Jan-20	12	6.62	230	86	3.93	90	0.3	15.6	<0.1	2.9	36	26	1	18	29	0.04	2.43
S1N	May-20	14	8.15	321	n.d.	4.49	106	0.1	11.2	<0.1	4.7	25	42	2	7	8	0.19	3.29
S1N	Oct-20	13	11.26	387	-226	n.d.	151	0.5	12.5	0.3	3.2	32	33	22	46	0	0.10	2.11
S1N	Jan-21	13	10.94	192	-209	3.95	79	0.1	3.2	<0.1	1.0	6	16	1	8	14	0.03	0.31
S1N	Apr-21	12	9.30	207	29	4.25	44	<0.1	48.2	0.6	6.3	14	27	1	10	17	0.16	-3.50
S1N	Sep-21	14	6.97	552	28	5.5	150	0.2	9.2	0.3	7.2	136	130	17	9	10	0.05	2.01
S1N	Jan-22	13	7.80	122	283	5.15	63	<0.1	6.4	<0.1	2.6	12	21	1	4	5	0.20	-1.41
S1N	May-22	14	7.54	231	273	5.63	96	0.2	7.1	<0.1	5.3	24	27	1	9	13	0.14	-3.84
S1N	Sep-22	14	9.65	399	n.d.	6.47	137	0.3	6.4	0.5	6.6	59	21	1	23	55	0.02	-3.67
S1N	Jan-23	11	6.84	149	261	4.98	38	<0.1	4.8	0.2	0.9	14	15	1	3	2	0.06	-2.04
S1N	Jun-23	14	10.60	249	113	4.70	99	0.2	4.6	<0.1	2.5	22	30	1	9	2	0.18	-3.69
S1N	Sep-23	14	6.89	404	227	5.70	119	0.1	3.9	<0.1	3.8	63	52	2	13	16	0.03	4.63

Table S2: Piezometer S6N. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO_3^-	F	Cl^-	Br^-	NO_3^-	SO_4^{2-}	Ca^{2+}	Mg^{2+}	Na^+	K^+	NH_4^+	Error %
S6N	Feb-13	12	8.97	290	165	5.60	80	1.6	8.3	0.4	0.6	46	31	<0.1	9	20	0.20	-2.93
S6N	May-13	13	9.55	250	145	6.45	85	1.1	6.5	0.2	2.8	39	26	1	9	22	n.d.	-4.51
S6N	Sep-13	13	6.23	510	n.d.	8.45	179	0.5	7.1	<0.1	7.1	120	77	2	16	39	n.d.	-0.70
S6N	Jan-14	12	6.23	230	156	6.48	90	0.6	4.1	<0.1	0.9	19	26	<0.1	7	16	0.50	0.69
S6N	May-14	14	7.72	870	n.d.	6.59	102	0.6	7.0	<0.1	1.6	366	145	6	13	33	0.10	-2.21
S6N	Sep-14	13	7.28	768	n.d.	8.14	168	0.6	7.7	<0.1	4.1	168	92	3	15	34	n.d.	-1.64
S6N	Jan-15	10	7.42	n.d.	n.d.	7.45	108	1.0	7.6	<0.1	0.9	50	39	<0.1	10	23	0.10	-1.81
S6N	May-15	14	8.48	302	149	7.36	141	0.9	5.3	<0.1	2.3	48	52	<0.1	10	21	0.10	1.49
S6N	Sep-15	14	7.08	400	188	7.82	227	0.5	5.3	<0.1	5.9	83	88	1	11	32	0.10	1.10
S6N	Jan-17	11	7.76	410	n.d.	8.82	178	0.5	5.0	<0.1	2.0	39	65	1	7	20	0.50	3.03
S6N	Jun-18	14	6.50	690	n.d.	6.75	182	0.6	4.8	<0.1	5.4	48	65	1	8	18	0.40	-0.67
S6N	Mar-19	13	7.42	536	n.d.	7.52	123	0.8	3.6	<0.1	1.4	163	91	3	7	20	0.10	0.33
S6N	Oct-19	12	7.76	301	134	7.76	226	1.0	8.1	<0.1	7.8	96	93	2	8	22	<0.01	-3.44
S6N	Jan-20	12	8.56	220	165	7.01	128	0.9	47.4	1.2	2.0	57	65	1	18	14	0.10	-2.82
S6N	May-20	14	8.22	572	n.d.	7.73	173	0.9	11.4	<0.1	4.7	84	84	2	7	16	<0.01	-0.10
S6N	Oct-20	13	7.32	398	-16	6.70	163	0.5	10.6	0.6	1.4	46	59	1	6	17	0.10	-3.12
S6N	Jan-21	12	8.69	251	-86	6.35	124	0.5	3.8	0.6	1.1	20	42	<0.1	5	9	0.10	-1.13
S6N	Apr-21	13	7.80	356	40	n.d.	160	0.4	3.8	0.6	5.0	24	55	1	0	12	0.2	-1.65
S6N	Sep-21	13	6.99	1150	30	8.58	162	0.3	17.3	<0.1	1.3	511	259	10	13	26	<0.01	4.11
S6N	Jan-22	12	7.29	452	293	7.65	167	0.5	6.2	<0.1	2.8	89	79	2	8	16	0.10	0.61
S6N	May-22	14	6.84	947	256	8.39	153	0.5	8.9	<0.1	1.8	334	164	8	10	21	0.10	0.27
S6N	Sep-22	13	7.43	912	n.d.	7.40	157	0.4	5.5	0.5	2.9	339	159	7	11	21	0.10	-1.34
S6N	Jan-23	12	6.92	274	269	5.50	132	0.5	5.4	0.6	1.5	22	44	1	4	11	0.10	-1.51
S6N	Jun-23	13	7.73	351	158	5.18	179	0.5	2.5	<0.1	2.1	20	51	4	4	11	<0.01	-2.36
S6N	Sep-23	14	6.68	885	226	8.71	143	0.2	1.4	<0.1	0.3	296	157	7	10	18	<0.01	4.13

Table S3: Piezometer S2Est. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO_3^-	F^-	Cl^-	Br^-	NO_3^-	SO_4^{2-}	Ca^{2+}	Mg^{2+}	Na^+	K^+	NH_4^+	Error %
S2 est.	Feb-13	13	4.87	550	280	5.09	1	2.0	25.2	0.4	39.1	234	74	5	30	15	0.09	-3.99
S2 est.	May-13	13	5.69	340	219	4.35	16	1.5	10.9	<0.1	19.4	272	96	10	13	13	<0.01	-0.78
S2 est.	Sep-13	14	5.83	720	n.d.	5.57	17	1.1	10.0	<0.1	13.0	314	105	13	15	12	1.10	0.05
S2 est.	Jan-14	n.d.	n.d.	n.d.	n.d.	5.60	8	1.2	9.9	<0.1	19.4	371	126	22	17	16	0.12	4.07
S2 est.	Sep-14	14	7.52	335	n.d.	5.05	15	0.7	5.9	<0.1	11.8	214	70	8	13	9	<0.01	0.56
S2 est.	Jan-15	13	5.12	n.d.	n.d.	4.62	44	0.5	6.6	<0.1	8.0	138	61	4	13	14	0.13	4.47
S2 est.	May-15	13	4.88	667	318	4.37	5	0.6	14.9	<0.1	9.8	367	113	16	15	12	0.09	-2.70
S2 est.	Sep-15	13	5.28	660	291	5.23	16	0.4	11.6	<0.1	10.5	450	124	27	14	16	0.08	-3.54
S2 est.	Jan-17	12	5.21	771	n.d.	5.71	42	0.2	8.7	<0.1	10.0	247	98	13	11	9	0.06	3.62
S2 est.	Jun-18	14	9.97	340	n.d.	4.96	17	1.1	20.9	<0.1	13.7	269	96	11	12	11	<0.01	-1.73
S2 est.	Mar-19	13	6.80	603	n.d.	4.93	25	0.3	5.7	<0.1	7.6	196	68	9	11	9	0.02	0.85
S2 est.	Oct-19	14	5.80	355	201	5.52	12	0.4	8.5	<0.1	9.6	272	102	12	15	9	0.02	4.91
S2 est.	Jan-20	12	6.19	738	174	4.27	21	1.4	27.1	<0.1	6.0	181	70	9	12	8	0.04	-0.33
S2 est.	May-20	14	7.15	765	n.d.	4.75	12	<0.1	23.4	0.8	11.6	332	120	15	15	11	0.01	1.28
S2 est.	Oct-20	12	7.08	286	-15	5.45	62	0.3	10.7	0.5	3.1	44	31	2	7	5	0.06	-2.19
S2 est.	Jan-21	13	6.85	333	13	4.25	43	0.3	8.8	0.3	8.7	97	45	6	9	8	0.01	3.05
S2 est.	Apr-21	13	5.50	661	38	4.56	28	<0.1	9.1	0.7	6.2	223	84	11	12	8	0.05	3.63
S2 est.	Sep-21	13	5.36	424	28	5.80	20	0.4	10.9	0.1	9.9	360	120	14	13	11	0.21	-1.73
S2 est.	Jan-22	13	4.90	702	373	5.45	20	0.3	9.8	<0.1	15.4	289	103	13	13	10	0.04	0.91
S2 est.	May-22	14	4.90	643	316	5.93	38	0.1	9.9	0.3	15.1	149	59	6	10	9	0.09	-1.59
S2 est.	Sep-22	13	5.57	358	n.d.	6.80	17	<0.1	10.3	0.3	12.2	289	101	13	12	10	<0.01	0.62
S2 est.	Jan-23	12	5.46	581	260	5.38	26	0.1	8.1	0.5	10.0	225	81	10	10	8	0.03	-0.23
S2 est.	Sep-23	14	5.49	565	326	6.10	27	<0.1	10.1	<0.1	8.8	259	83	11	12	9	0.01	-4.44

Table S4: Piezometer S42. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-Year	T	pH	E.C.	Eh	H.I.	HCO_3^-	F^-	Cl^-	Br^-	NO_3^-	SO_4^{2-}	Ca^{2+}	Mg^{2+}	Na^+	K^+	NH_4^+	Error %
S42	May-13	11	6.89	660	267	3.38	83	0.2	8.8	<0.1	20.3	234	104	8	10	15	0.90	-0.80
S42	Sep-13	13	6.62	630	n.d.	4.72	51	0.1	9.0	<0.1	20.0	202	85	7	10	16	<0.01	0.55
S42	Jan-14	11	6.77	590	250	4.70	173	0.1	9.0	<0.1	10.1	138	95	8	6	14	0.03	-0.98
S42	May-14	12	6.75	540	n.d.	3.56	49	<0.1	9.4	<0.1	16.3	169	62	7	10	17	0.15	-2.55
S42	Sep-14	13	6.75	530	n.d.	4.13	59	0.4	9.8	<0.1	15.2	162	66	6	11	13	<0.01	-3.11
S42	Jan-15	12	7.28	n.d.	n.d.	3.71	64	0.4	9.3	<0.1	17.3	164	70	6	11	14	0.08	-1.92
S42	May-15	11	6.42	456	120	3.41	63	0.2	9.4	<0.1	17.0	191	79	7	11	14	0.08	-1.70
S42	Sep-15	13	6.46	280	203	4.28	195	<0.1	5.0	<0.1	4.0	23	73	3	4	8	0.13	4.72
S42	Jan-18	10	6.38	523	n.d.	15.31	109	<0.1	7.9	0.8	13.3	161	92	8	10	16	0.03	4.64
S42	Jun-18	14	7.62	450	n.d.	3.98	94	0.2	8.3	0.5	18.2	181	82	7	9	12	0.41	-4.58
S42	Mar-19	12	6.94	565	n.d.	6.01	70	0.1	6.9	<0.1	14.9	204	82	8	9	13	0.02	-3.15
S42	Oct-19	14	7.22	291	28	4.59	177	0.2	3.3	0.1	8.0	59	80	3	7	7	0.03	3.66
S42	Jan-20	11	5.72	375	151	3.28	112	0.2	13.6	<0.1	13.7	179	103	8	12	14	0.05	3.89
S42	May-20	13	7.61	608	n.d.	3.9	63	0.5	12.2	<0.1	13.1	174	85	8	10	16	0.01	4.34
S42	Oct-20	13	7.32	540	23	4.55	244	0.6	11.1	0.4	12.0	63	94	6	5	9	0.06	-1.45
S42	Jan-21	11	6.56	553	30	3.4	112	0.3	6.2	0.8	13.8	144	8	8	91	12	<0.01	0.54
S42	Apr-21	12	6.30	550	37	4.28	93	<0.1	4.0	0.6	11.6	121	71	5	8	13	0.01	3.79
S42	Sep-21	12	6.60	558	28	5.48	111	<0.1	8.9	<0.1	16.1	207	120	7	8	14	0.06	4.83
S42	Jan-22	11	6.1	541	293	5.13	100	<0.1	7.8	<0.1	14.0	148	83	7	7	11	0.04	1.65
S42	May-22	12	6.09	514	184	5.64	113	0.1	7.5	<0.1	11.5	126	75	6	7	12	0.08	-0.01
S42	Sep-22	15	6.28	482	n.d.	6.4	145	0.1	7.7	0.6	11.3	110	79	7	6	11	0.10	-0.32
S42	Jan-23	11	6.5	515	161	4.37	139	<0.1	6.2	0.9	9.1	97	80	6	6	10	0.03	3.82
S42	Jun-23	12	7.18	478	188	4.29	193	0.4	3.5	<0.1	4.8	73	75	5	7	7	0.01	-2.16
S42	Sep-23	12	6.02	497	198	5.45	131	<0.1	2.9	<0.1	5.0	99	70	6	10	7	<0.01	2.72

Table S5: Piezometer S60. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-years	T	pH	E.C.	Eh	H.I.	HCO_3^-	F^-	Cl^-	Br^-	NO_3^-	SO_4^{2-}	Ca^{2+}	Mg^{2+}	Na^+	K^+	NH_4^+	Error %
S60	May-13	12	6.07	430	234	15.15	21	0.3	6.4	0.1	3.7	134	32	13	13	13	<0.01	3.00
S60	Sep-13	14	6.68	390	n.d.	15.33	28	0.2	6.9	<0.1	5.1	123	22	16	14	13	0.40	1.24
S60	Jan-14	11	6.09	390	277	15.28	29	<0.1	6.3	<0.1	4.4	121	27	13	13	11.5	0.08	0.06
S60	May-14	13	6.24	520	n.d.	15.18	24	0.2	6.8	<0.1	4.5	147	32	14	13	10.7	0.21	-1.22
S60	Sep-14	13	6.8	450	n.d.	15.25	29	0.2	7.10	<0.1	3.1	136	30	15	14	12	<0.01	0.78
S60	Jan-15	12	6.01	n.d.	n.d.	15.2	26	0.1	7.05	<0.1	5.8	144	30	14	16	13	0.06	-0.06
S60	May-15	16	5.88	326	139	15.18	27	0.3	7.6	<0.1	5.7	143	28	14	15	12	0.26	-2.88
S60	Sep-15	15	5.74	267	226	15.28	28	0.2	7.9	<0.1	5.1	137	23	15	15	14	0.10	-2.93
S60	Jan-17	11	6.81	593	n.d.	14.8	40	0.1	6.2	<0.1	4.4	78	18	11	13	11	0.13	2.56
S60	Jun-18	12	6.64	530	n.d.	15.13	28	0.4	7.3	<0.1	4.4	95	26	11	11	10	<0.01	3.80
S60	Mar-19	12	7.04	357	n.d.	15.20	28	<0.1	6.1	0.3	6.1	104	23	12	12	9	0.02	0.34
S60	Oct-19	15	6.00	276	n.d.	15.38	31	<0.1	11	<0.1	5.4	85	17	11	11	9	0.08	-4.32
S60	Jan-20	11	6.63	212	182	15.2	31	<0.1	9.6	0.7	5.5	103	31	12	13	4	0.02	3.00
S60	May-20	13	6.8	422	n.d.	15.25	29	0.5	12	<0.1	5.5	106	26	11	13	11	0.01	-1.52
S60	Oct-20	13	7.32	357	40	15.4	32	0.2	13.0	0.2	2.8	92	16	13	11	10	0.02	-3.43
S60	Jan-21	11	6.43	273	40	n.d.	31	0.1	4.9	0.4	4.6	92	21	10	11	8	<0.01	-1.69

Table S6: Piezometer S101. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L^{-1}). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO$_3^-$	F$^-$	Cl$^-$	Br$^-$	NO$_3^-$	SO$_4^{2-}$	Ca^{2+}	Mg^{2+}	Na$^+$	K$^+$	NH$_4^+$	Error %
S101	Feb-13	11	6.57	350	199	10.32	96	0.5	12.1	0.4	1.5	42	45	3	6	5	0.36	0.55
S101	May-13	11	6.57	380	n.d.	7.42	98	0.4	13.2	<0.1	3.5	46	53	4	6	4	0.1	4.59
S101	Sep-13	11	7.63	280	n.d.	9.62	74	0.2	13.0	<0.1	0.9	36	33	3	6	3	0.1	-2.59
S101	Jan-14	10	6.93	300	234	9.16	107	<0.1	9.4	<0.1	0.4	37	43	3	6	3	0.16	-1.23
S101	May-14	12	6.93	350	n.d.	7.13	122	0.2	10.6	<0.1	0.7	42	51	3	5	4	0.10	-1.75
S101	Sep-14	11	6.64	553	n.d.	7.97	122	0.3	12.3	<0.1	0.6	46	52	4	8	4	0.09	0.35
S101	Jan-15	12	6.18	n.d.	n.d.	7.92	120	0.2	9.5	<0.1	0.9	44	53	3	9	5	0.13	4.12
S101	May-15	13	6.60	467	162	7.42	113	0.2	9.9	<0.1	0.5	45	49	3	6	4	0.04	-0.39
S101	Sep-15	12	6.54	230	149	8.45	117	<0.1	9.9	<0.1	<0.1	35	52	3	6	3	0.06	4.44
S 101	Jan-17	9	7.21	147	n.d.	8.10	61	<0.1	3.2	<0.1	1.4	8	20	1	2	2	0.08	-2.91
S 101	Jan-18	14	6.88	300	n.d.	9.01	217	0.3	9.7	<0.1	3.0	31	86	3	6	3	0.37	3.58
S 101	Mar-19	12	7.22	473	n.d.	8.73	178	0.2	7.2	<0.1	1.3	26	63	3	5	3	<0.01	0.05
S 101	Oct-19	11	7.30	308	152	8.82	205	0.3	12.3	<0.1	0.7	31	75	3	10	3	0.02	1.49
S101	Jan-20	10	8.00	458	n.d.	7.82	198	0.4	13.7	1.3	0.9	41	73	4	6	2	0.01	-3.00
S101	May-20	13	7.41	483	n.d.	8.05	198	0.3	17.5	<0.1	0.1	41	73	3	10	25	0.01	3.85
S101	Oct-20	11	7.64	676	n.d.	8.3	196	0.2	23.2	0.6	0.5	56	83	4	10	4	0.03	-0.05
S101	Apr-21	12	7.40	383	20	7.55	194	<0.1	0.4	1.5	0.5	1	56	3	5	3	0.06	2.51
S101	Sep-21	13	7.00	378	26	8.75	196	0.2	9.5	0.1	0.5	29	95	3	6	3	0.01	1.27
S101	Jan-22	11	7.47	142	-40	9.08	63	<0.1	4.2	<0.1	0.8	7	22	1	1	2	0.10	-2.86
S101	May-22	13	9.90	477	228	13.30	165	0.1	7.9	<0.1	0.0	22	53	2	5	2	0.14	-4.44
S101	Sep-22	13	11.40	345	n.d.	12.5	178	0.4	9.2	0.7	<0.1	25	62	3	5	4	<0.01	-1.04
S101	Jan-23	11	10.01	395	216	11.4	204	0.1	8.3	0.9	3.0	21	68	3	5	3	<0.01	-1.24
S101	Jun-23	13	6.58	343	213	9.86	119	0.1	10.5	<0.1	4.7	21	43	4	5	2	<0.01	-0.02
S101	Sep-23	12	7.09	363	181	10.14	183	0.1	10.4	<0.1	4.8	23	61	2	5	2	<0.01	-4.73

Table S7: Piezometer S106. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO_3^-	F^-	Cl^-	Br^-	NO_3^-	SO_4^{2-}	Ca^{2+}	Mg^{2+}	Na^+	K^+	NH_4^+	Error %
S106	Feb-13	10	6.88	420	268	3.75	152	0.1	13.1	<0.1	7.0	118	95	5	6	4	0.04	0.64
S106	May-13	11	6.53	690	261	3.55	135	0.4	13.8	<0.1	17.4	156	109	6	6	5	<0.01	1.24
S106	Sep-13	12	6.39	530	n.d.	5.07	43	0.2	13.0	<0.1	16.0	177	84	6	6	6	0.50	0.97
S106	Jan-14	10	5.88	480	240	5.22	61	0.1	8.7	<0.1	10.1	122	67	5	7	7	0.09	3.48
S106	May-14	11	5.99	580	n.d.	3.64	126	0.1	6.0	<0.1	9.5	93	64	5	13	7	0.23	-0.45
S106	Sep-14	13	7.00	495	n.d.	4.47	94	0.1	7.0	<0.1	14.0	121	69	5	13	6	0.03	3.87
S106	Jan-15	14	7.50	n.d.	n.d.	3.72	137	0.2	6.2	<0.1	9.0	58	59	4	13	10	0.10	3.85
S106	May-15	11	6.62	267	121	3.66	83	0.2	4.6	<0.1	6.3	51	45	3	7	5	0.06	4.53
S106	Sep-15	12	6.39	290	n.d.	4.35	74	0.1	8.4	<0.1	9.4	109	61	4	8	8	0.15	1.13
S106	Jan-17	10	7.20	280	n.d.	5.10	110	0.1	4.9	0.6	6.9	27	45	2	3	5	0.14	1.68
S106	Jan-18	14	7.50	470	n.d.	3.79	45	0.1	10.5	0.5	17.7	120	67	4	6	4	0.41	2.45
S106	Jun-18	10	6.86	431	n.d.	3.87	45	<0.1	6.9	<0.1	10.4	100	50	4	6	3	<0.01	0.43
S106	Oct-19	12	7.60	169	128	4.70	48	0.2	11.3	<0.1	9.7	97	54	4	6	4	0.04	1.81
S106	Jan-20	10	5.79	227	185	3.53	57	<0.1	47.0	1.3	9.1	100	68	4	9	4	0.02	-3.13
S106	May-20	12	7.58	426	n.d.	3.80	52	0.2	12.7	<0.1	10.4	119	58	5	5	4	0.01	-3.05
S106	Oct-20	12	7.32	344	40	4.83	31	0.2	12.8	0.2	9.2	87	47	5	7	2	0.03	4.03
S106	Jan-21	10	7.37	323	-18	3.58	45	0.1	6.7	0.5	12.5	82	46	4	5	3	0.01	1.34
S106	Apr-21	12	6.20	368	36	3.95	80	<0.1	5.6	0.6	9.1	77	52	5	5	3	0.06	2.16
S106	Sep-21	11	6.35	348.0	26	5.84	70	0.1	9.0	<0.1	10.8	110	67	5	6	4	0.21	2.88
S106	Sep-23	13	6.45	310	233	5.74	49	0.1	10.0	<0.1	12.6	101	49	4	6	4	0.13	-3.90

Table S8: Piezometer S108. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO_3^-	F^-	Cl^-	Br^-	NO_3^-	SO_4^{2-}	Ca^{2+}	Mg^{2+}	Na^+	K^+	NH_4^+	Error %
S108	Feb-13	13	9.94	490	7.1	4.17	152	0.2	12.3	0.2	1.1	59	38	6	32	28	0.05	4.48
S108	May-13	13	10.63	220	128	3.70	71	0.2	7.8	0.1	0.6	16	18	1	10	16	0.50	2.87
S108	Sep-13	14	9.62	250	n.d.	5.25	63	0.1	7.6	<0.1	4.2	26	12	1	12	20	0.40	-4.36
S108	Jan-14	12	6.51	660	150	5.43	85	0.1	7.9	<0.1	0.0	197	72	15	14	23	0.24	2.63
S108	May-14	14	6.96	570	n.d.	4.07	226	0.2	10.1	<0.1	1.1	82	84	8	10	17	0.19	0.00
S108	Sep-14	13	7.06	547	n.d.	4.98	220	0.2	10.0	<0.1	<0.1	99	85	9	10	18	<0.01	-0.80
S108	Jan-15	n.d.	n.d.	n.d.	n.d.	4.45	140	0.3	9.3	<0.1	<0.1	61	58	6	10	16	0.30	4.51
S108	May-15	14	6.17	617	198	5.37	60	0.2	6.5	<0.1	4.9	255	78	18	11	13	0.19	-2.61
S108	Sep-15	15	9.92	750	224	5.30	32	0.4	10.4	<0.1	6.9	495	127	34	19	24	0.08	-3.07
S108	Jan-17	12	6.63	779	n.d.	5.73	110	0.1	6.7	<0.1	18.0	227	97	21	14	19	0.20	4.11
S108	Jun-18	11	6.50	390	n.d.	4.65	35	0.6	22.0	<0.1	12.0	514	138	34	19	20	0.40	-4.67
S108	Mar-19	13	6.86	1052	n.d.	4.61	26	0.2	12.3	<0.1	11.3	525	138	36	20	21	0.02	-2.71
S108	Oct-19	13	6.38	524	n.d.	5.58	29	0.3	20.4	<0.1	7.8	420	136	34	18	21	0.02	4.60
S108	Jan-20	12	6.59	939	122	3.88	21	1.7	20.1	3.5	10.0	497	150	43	23	19	0.02	4.17
S108	May-20	14	8.42	1030	n.d.	4.73	26	1.1	26.2	0.5	11.7	476	144	35	25	26	0.01	2.52
S108	Oct-20	13	7.32	941	35	5.65	51	0.4	22.4	0.5	6.7	389	138	29	17	14	0.33	3.79
S108	Jan-21	13	6.76	968	17	3.87	50	<0.1	6.7	0.9	11.6	474	141	32	20	19	0.06	-0.16
S108	Apr-21	14	6.50	736	37	4.43	74	<0.1	5.6	0.8	5.5	220	86	18	14	11	0.26	4.70
S108	Sep-21	15	6.80	1006	26	8.9	33	0.8	27.2	0.1	11.5	475	170	32	18	22	0.01	4.58
S108	Jan-22	13	5.49	946	352	5.63	31	<0.1	7.8	<0.1	10.7	436	129	30	18	25	0.04	2.00
S108	May-22	15	5.52	956	301	5.92	111	<0.1	11.2	<0.1	6.5	250	106	21	15	20	0.17	4.82
S108	Sep-22	13	6.52	940	n.d.	6.80	30	0.2	8.4	0.3	9.2	425	126	29	18	21	<0.01	1.29
S108	Jan-23	13	6.08	872	221	5.21	35	0.2	6.9	0.6	8.6	323	116	10	13	10	0.03	-1.38
S108	Jun-23	14	6.93	420	218	4.89	38	0.1	7.0	<0.1	10.1	300	111	10	16	19	<0.01	1.82
S108	Sep-23	15	6.54	863	232	8.90	31	0.1	8.2	<0.1	11.3	433	115	27	18	20	0.08	-3.82

Table S9: Piezometer S109. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L^{-1}). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO$_3^-$	F$^-$	Cl$^-$	Br$^-$	NO$_3^-$	SO$_4^{2-}$	Ca^{2+}	Mg^{2+}	Na$^+$	K$^+$	NH$_4^+$	Error %
S109	Feb-13	12	7.3	380	210	7.63	84	0.3	11.3	<0.1	1.5	71	45	4	7	9	0.04	-2.20
S109	May-13	12	6.86	530	243	7.66	128	0.6	16.3	<0.1	5.0	155	104	5	8	10	<0.01	2.50
S109	Sep-13	12	6.41	850	n.d.	8.55	135	0.3	18.0	<0.1	7.9	217	119	9	10	18	<0.01	1.52
S109	Jan-14	11	6.65	710	240	8.33	148	0.2	14.4	0.2	8.0	216	112	8	9	14	<0.01	-2.20
S109	May-14	17	6.68	750	n.d.	7.75	188	0.2	17.0	<0.1	10.0	233	118	9	22	15	0.32	-3.46
S109	Sep-14	12	6.58	854	n.d.	8.38	124	0.1	14.4	<0.1	8.6	237	119	9	10	15	<0.01	-0.12
S109	Jan-15	n.d.	n.d.	n.d.	n.d.	8.02	121	0.2	16.5	<0.1	13.0	274	121	9	12	16	0.12	-3.61
S109	May-15	14	6.7	756	150	8.00	144	0.2	15.4	<0.1	13.1	246	123	10	3	16	0.04	-4.16
S109	Sep-15	14	6.43	590	149	8.50	126	0.1	16.9	<0.1	10.9	258	125	10	11	17	0.10	-0.74
S109	Jan-17	11	6.76	801	n.d.	8.65	160	0.1	12.9	<0.1	13.0	180	120	9	10	16	0.03	4.64
S109	Jun-18	15	6.21	1020	n.d.	8.03	118	0.6	22.2	<0.1	12.4	233	115	9	10	15	<0.01	-2.43
S109	Mar-19	12	7.06	837	n.d.	7.83	118	1.1	17.8	<0.1	12.7	231	119	10	10	15	<0.01	0.63
S109	May-19	12	7.05	385	167	8.60	122	0.2	15.0	0.1	13.5	211	121	8	10	15	0.02	3.31
S109	Oct-19	11	7.60	736	133	7.43	122	1.3	32.4	<0.1	15.8	271	142	13	13	20	0.03	2.01
S109	Jan-20	13	6.86	765	n.d.	8.29	118	0.3	24.7	<0.1	17.8	258	123	9	11	14	0.01	-3.38
S109	May-20	12	7.32	691	5	8.47	117	<0.1	20.3	0.3	14.1	192	112	9	10	11	0.03	2.20
S109	Oct-20	12	7.22	1066	-2.6	7.12	139	0.1	16.5	1.0	15.9	178	113	8	13	12	0.01	3.51
S109	Jan-21	12	6.50	660	35	8.17	133	0.2	12.9	0.8	12.4	131	92	8	9	12	1.15	4.43
S109	Apr-21	14	6.90	675	27	5.90	160	<0.1	21.9	0.2	17.2	236	150	9	11	15	0.06	3.84
S109	Sep-21	14	6.9	675	27	5.90	116	0.1	16.1	<0.1	14.0	173	105	8	10	14	0.05	3.62
S109	Jan-22	13	6.5	704	244	8.65	126	0.1	14.2	<0.1	13.7	188	101	8	9	13	0.08	-1.40
S109	May-22	15	5.50	333	302	6.88	26	<0.1	10.5	<0.1	11.1	93	29	8	9	6	0.08	-3.66
S109	Sep-22	12	6.80	660	n.d.	7.96	133	0.1	12.0	0.8	13.3	197	114	9	12	14	<0.01	3.62
S109	Jan-23	13	6.64	685	233	8.02	127	0.1	20.5	<0.1	12.4	201	105	8	10	13	0.01	-3.25
S109	Jun-23	13	6.84	688	248	8.80	134	0.1	14.9	<0.1	11.9	215	109	8	10	13	<0.01	-3.42
S109	Sep-23	13	6.84	688	248	8.80	134	0.1	14.9	<0.1	11.9	215	109	8	10	13	<0.01	-3.42

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO$_3^-$	F$^-$	Cl$^-$	Br$^-$	NO$_3^-$	SO$_4^{2-}$	Ca^{2+}	Mg^{2+}	Na$^+$	K$^+$	NH$_4^+$	Error %
S111	Feb-13	12	7.85	320	196	4.88	99	0.9	11.1	<0.1	0.1	40	30	9	8	7	0.04	-0.78
S111	May-13	12	7.79	430	256	5.20	137	0.7	12.2	0.1	<0.1	64	49	11	11	7	<0.01	0.53
S111	Sep-13	13	6.99	690	n.d.	5.89	151	0.4	11.0	<0.1	0.1	123	64	18	13	12	<0.01	1.68
S111	Jan-14	12	7.63	540	249	5.40	165	0.4	9.9	<0.1	0.2	105	66	16	13	10	<0.01	2.07
S111	May-14	13	7.04	720	n.d.	5.25	123	0.4	11.0	0.30	0.3	270	77	30	16	15	0.10	-3.89
S111	Sep-14	13	6.87	860	n.d.	4.60	133	0.3	9.3	<0.1	0.6	250	76	29	16	16	<0.01	-2.51
S111	Jan-15	n.d.	n.d.	n.d.	n.d.	4.57	135	0.5	9.9	<0.1	1.6	260	87	31	17	16	0.10	0.59
S111	May-15	14	6.71	617	198	5.37	109	0.6	9.1	<0.1	1.5	276	74	29	16	15	0.09	-4.37
S111	Sep-15	13	6.61	580	61	5.85	106	0.2	9.2	0.11	0.3	296	82	32	17	17	0.08	-1.69
S111	Jan-17	11	7.15	835	n.d.	5.74	177	<0.1	4.4	1.31	0.9	220	94	30	18	17	0.08	4.73
S111	Jun-18	13	6.87	800	n.d.	5.22	188	0.8	21.6	0.60	3.1	278	118	30	18	16	<0.01	0.03
S111	Mar-19	12	7.18	864	n.d.	5.09	167	0.4	13.3	<0.1	2.5	241	95	28	17	15	0.02	-0.32
S111	Oct-19	13	6.92	548	115	5.51	161	<0.1	11.8	2	2.3	283	100	29	17	13	0.02	-2.63
S111	Jan-20	12	7.90	708	149	4.99	149	1.8	39.8	<0.1	4.5	333	114	35	20	17	0.03	-3.86
S111	May-20	13	7.87	920	n.d.	5.11	146	0.7	22.3	<0.1	2.5	317	98	38	42	23	0.01	3.49
S111	Oct-20	13	7.32	705	5	5.65	122	<0.1	17.5	0.44	<0.1	311	102	41	22	8	0.04	3.47
S111	Jan-21	13	7.12	759	-1.7	4.81	150	0.3	18.4	1.2	3.9	246	101	33	18	15	0.01	4.72
S111	Apr-21	13	6.80	759	37	5.5	131	<0.1	5.7	1.00	2.0	220	81	28	15	14	0.10	2.97
S111	Sep-21	14	7.00	832	29	5.96	171	0.4	18.6	0.52	4.7	308	150	29	18	16	0.06	5.97
S111	Jan-22	12	6.6	729	136	5.34	117	0.2	8.3	<0.1	2.0	255	93	32	15	11	0.14	4.29
S111	May-22	14	6.60	830	266	5.48	153	0.2	10.6	<0.1	1.6	279	95	30	19	14	0.10	-1.62
S111	Sep-22	12	7.10	811	n.d.	6.36	159	0.2	9.5	<0.1	0.5	267	102	32	17	15	<0.01	2.23
S111	Jan-23	13	6.80	772	192	5.10	157	0.2	8.8	0.85	2.5	239	97	31	17	15	0.01	4.12
S111	Jun-23	15	6,67	771	223	5.18	127	0.2	8.8	<0.1	2.5	251	119	17	9	8	<0.01	2.23
S111	Sep-23	13	6.73	764	224	5.78	138	0.2	5.5	<0.1	1.6	217	81	31	16	14	0.02	4.46

Table S11: Piezometer S113. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO$_3^-$	F$^-$	Cl$^-$	Br$^-$	NO$_3^-$	SO$_4^{2-}$	Ca^{2+}	Mg^{2+}	Na$^+$	K$^+$	NH$_4^+$	Error %
S113	Feb-13	13	5.82	440	242	6.85	35	0.3	12.0	<0.1	10.3	130	42	9	11	9	0.08	-3.20
S113	May-13	13	5.82	390	305	6.83	23	1.1	12.9	<0.1	10.1	113	35	9	10	8	<0.01	-3.68
S113	Sep-13	13	6.07	370	n.d.	7.13	20	0.2	12.0	<0.1	12.0	112	32	9	11	10	0.50	-1.91
S113	Jan-14	12	5.7	350	305	7.20	6	0.1	10.8	<0.1	10.2	107	30	8	11	7	0.06	0.17
S113	May-14	14	5.85	480	n.d.	6.97	12	0.4	11.6	<0.1	9.7	103	27	8	10	8	0.17	-3.38
S113	Sep-14	13	6.32	532	n.d.	6.91	13	0.3	12.3	0.24	9.2	113	30	8	11	8	<0.01	-3.65
S113	Jan-15	n.d.	n.d.	n.d.	n.d.	7.07	14	0.3	11.8	<0.1	10.7	103	30	8	11	8	0.06	-0.38
S113	May-15	14	5.6	278	233	6.94	21	0.2	11.0	<0.1	11.3	99	31	8	10	7	0.04	-1.87
S113	Sep-15	13	5.81	220	210	7.04	28	0.2	12.0	<0.1	10.0	106	30	8	10	10	1.10	-4.21
S113	Jan-17	13	6.02	466	n.d.	7.07	30	0.1	11.0	<0.1	8.2	91	33	9	10	8	0.45	3.74
S113	Jun-18	14	7.00	850	n.d.	6.97	16	0.9	12.7	<0.1	10.0	124	35	10	10	8	0.03	-2.20
S113	Oct-19	12	6.76	418	n.d.	6.98	29	0.6	12.4	<0.1	10.8	120	41	11	10	8	0.03	1.20
S113	Jan-20	14	7.07	172	340	7.07	23	0.3	11.5	<0.1	10.8	101	36	10	10	8	0.02	3.76
S113	May-20	11	6.91	274	234	6.73	29	<0.1	15.7	0.8	12.7	140	43	11	11	9	0.03	-4.23
S113	Oct-20	14	7.41	372	n.d.	6.7	21	0.4	13.4	<0.1	11.2	109	35	9	11	7	0.01	-0.06
S113	Jan-21	13	7.32	326	43	6.73	29	0.3	15.0	0.42	0.5	96	35	9	9	8	0.21	2.35
S113	Apr-21	11	6.41	474	37	6.62	39	0.1	6.8	0.47	12.5	84	33	9	9	5	0.00	2.25
S113	Sep-21	13	5.40	336	38	6.65	28	0.4	11.4	0.65	8.9	69	29	8	8	6	0.05	4.92
S113	Jan-22	13	6.20	326	29	6.87	23	0.5	13.2	<0.1	11.7	80	35	9	10	8	0.38	9.18
S113	May-22	12	5.53	333	254	6.8	27	0.1	11.0	<0.1	11.7	98	32	9	10	7	0.04	-0.53
S113	Sep-22	15	5.50	333	302	6.88	26	<0.1	10.5	<0.1	11.1	93	29	8	9	6	0.08	-3.66
S113	Jan-23	13	6.18	332	n.d.	7.30	22	0.1	10.0	0.30	10.7	95	32	9	10	8	n.d.	2.04
S113	Jun-23	12	5.47	333	239	7.48	23	0.3	11.3	<0.1	14.8	129	39	10	10	9	0.01	-2.20
S113	Sep-23	15	5.67	340	207	6.84	31	0.1	21.9	<0.1	11.0	93	36	9	9	6	<0.01	-3.28
S113	set-23	15	5.40	340	3	7.06	24	0.2	10.6	<0.1	11.4	101	32	9	9	9	0.03	-1.29

Table S12: Piezometer S118. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L^{-1}). Electroneutrality parameter in %; n.d. not determined.

ID	month-year	T	pH	E.C.	Eh	H,I.	HCO$_3^-$	F$^-$	Cl$^-$	Br$^-$	NO$_3^-$	SO$_4^{2-}$	Ca^{2+}	Mg^{2+}	Na$^+$	K$^+$	NH$_4^+$	Error %
S118	Sep-14	13	6.66	650	n.d.	6.16	85	0.12	9.7	<0.1	19.4	187	69	16	15	22	n.d.	0.76
S118	Jan-15	n.d.	n.d.	n.d.	n.d.	6.11	87	0.4	10.7	<0.1	28.4	215	73	19	15	22	0.07	-2.40
S118	May-15	13	6.16	556	100	6.18	76	0.2	10.6	<0.1	30.9	225	68	21	12	24	0.06	-3.71
S118	Sep-15	15	6.54	490	173	6.22	65	0.2	10.0	<0.1	26.8	231	69	20	13	27	0.10	-2.34
S118	Jan-17	11	6.03	738	n.d.	6.42	65	0.1	8.2	<0.1	24.2	168	60	19	12	22	0.08	4.62
S118	Jan-18	14	6.36	360	n.d.	5.92	71	0.4	13.4	<0.1	17.7	178	61	16	10	19	1.36	-1.73
S118	Mar-19	12	6.91	572	n.d.	5.95	51	0.3	11.4	<0.1	26.2	193	55	19	11	21	0.03	-2.88
S118	Oct-19	13	6.67	293	111	6.87	59	0.2	10.6	0.6	19.4	163	60	17	10	17	0.02	2.28
S118	Jan-20	11	5.87	403	150	5.85	51	0.6	19.3	0.7	26.7	224	70	22	13	23	0.02	-0.51
S118	May-20	14	7.89	683	n.d.	6.02	54	0.1	17.4	<0.1	30.1	244	73	24	12	21	0.04	-1.78
S118	Oct-20	12	7.32	591	55	6.15	63	<0.1	14.5	0.2	36.0	151	65	18	9	12	0.08	2.77
S118	Jan-21	11	6.01	600	59	5.85	66	0.3	11.4	0.7	26.5	181	68	22	9	14	0.01	2.96
S118	Apr-21	13	5.70	634	35	4.68	67	0.1	7.5	0.7	11.1	160	53	20	8	18	1.06	3.24
S118	Sep-21	13	7.22	692	31	6.67	115	<0.1	16.5	0.7	26.0	237	98	28	9	29	0.06	3.91
S118	Jan-22	12	6.06	417	289	6.65	79	0.1	9.2	<0.1	17.4	137	52	16	6	19	0.28	0.25
S118	May-22	13	6.39	421	232	6.72	74	0.2	9.5	<0.1	18.3	144	56	15	8	17	0.32	0.21
S118	Sep-22	13	7.56	392	n.d.	6.94	96	0.3	6.4	0.4	15.4	87	50	6	4	17	0.06	-2.49
S118	Jan-23	11	6.70	609	201	6.70	89	0.5	12.9	<0.1	27.6	228	73	24	9	24	0.26	-3.00
S118	Jun-23	13	6.57	199	290	6.66	79	0.4	3.4	<0.1	1.7	30	37	3	2	5	0.31	3.98
S118	Sep-23	14	6.13	473	271	6.94	61	0.1	3.3	<0.1	8.9	99	51	6	5	15	0.33	4.93

Table S13: Piezometer S119. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L^{-1}). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO$_3^-$	F$^-$	Cl$^-$	Br$^-$	NO$_3^-$	SO$_4^{2-}$	Ca^{2+}	Mg^{2+}	Na$^+$	K$^+$	NH$_4^+$	Error %
S119	Jan-14	13	6.94	385	n.d.	12.20	73	0.2	8.5	<0.1	<0.1	101	44	6	13	7	<0.01	-1.29
S119	Jan-15	n.d.	n.d.	n.d.	n.d.	12.80	54	0.3	8.5	<0.1	0.4	109	40	7	13	7	0.07	-0.89
S119	May-15	15	6.31	269	136	12.20	50	0.3	9.5	<0.1	0.1	94	33	7	10	8	0.03	-4.40
S119	Sep-15	16	6.15	210	165	12.10	48	0.2	8.7	<0.1	0.0	93	33	6	11	7	0.08	-2.99
S 119	Jan-17	10	6.73	559	n.d.	12.10	58	0.2	6.1	<0.1	0.4	36	20	6	9	7	0.05	4.01
S 119	Jan-18	13	6.43	560	n.d.	12.00	41	0.4	8.6	<0.1	0.2	50	20	4	9	6	0.28	-2.58
S 119	Mar-19	12	7.06	246	n.d.	11.80	49	0.1	5.9	<0.1	1.3	43	21	5	9	6	0.02	2.12
S 119	Oct-19	15	6.50	220	n.d.	11.80	45	0.6	10.4	1.1	0.6	58	17	11	11	6	0.08	2.49
S119	Jan-20	11	6.76	172	167	11.60	39	<0.1	7.4	0.7	2.8	74	31	1	10	6	0.04	-3.86
S119	May-20	14	7.75	343	n.d.	11.60	36	0.3	8.9	<0.1	2.0	64	26	5	9	6	0.01	0.45
S119	Oct-20	13	7.32	296	34	11.60	45	0.3	11.7	0.5	1.9	44	22	4	9	7	0.08	-0.63
S119	Jan-21	12	6.64	182	26	11.50	49	0.2	4.9	0.7	2.1	30	18	4	8	4	0.01	1.32
S119	Apr-21	13	6.30	192	40	11.50	49	<0.1	4.7	<0.1	1.7	36	20	4	8	5	0.01	3.44
S119	Sep-21	14	6.44	413	26	11.60	46	0.4	21.2	0.2	8.7	154	81	7	10	7	0.04	4.91
S119	Jan-22	11	6.31	350	271	11.50	37	<0.1	9.6	<0.1	6.0	102	43	6	8	8	0.05	1.44
S119	May-22	14	6.11	180	321	11.60	35	0.1	8.2	<0.1	2.4	66	26	4	9	6	0.06	-1.40
S119	Sep-22	13	6.39	198	n.d.	11.80	41	0.1	6.1	0.4	0.5	44	19	3	8	6	<0.01	-1.34
S119	Jan-23	12	6.23	303	203	12.10	43	<0.1	7.6	<0.1	4.3	106	47	6	9	7	<0.01	2.79
S119	Jun-23	14	6.36	220	203	11.60	46	0.1	7.6	<0.1	1.2	40	21	4	8	5	0.01	0.41
S119	Sep-23	15	6.63	245	285	11.70	46	0.1	8.4	<0.1	1.9	62	27	4	8	5	0.01	-2.99

Table S14: Piezometer S120. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO₃⁻	F⁻	Cl⁻	Br⁻	NO₃⁻	SO₄²⁻	Ca²⁺	Mg²⁺	Na⁺	K⁺	NH₄⁺	Error %
S120	Sep-14	12	5.69	1390	n.d.	15.79	11	0.4	10.0	<0.1	3.0	789	284	15	10	40	<0.01	-0.16
S120	Jan-15	n.d.	n.d.	n.d.	n.d.	15.68	6	0.7	11.4	<0.1	9.9	646	219	10	9	30	0.10	-4.01
S120	May-15	15	4.86	1524	204	15.56	5	0.8	16.0	<0.1	13.0	1140	400	25	10	33	0.06	-2.61
S120	Sep-15	15	4.77	980	325	16.65	7	0.7	22.0	<0.1	9.5	708	239	16	9	25	0.08	-4.12
S120	Jan-17	11	5.36	1440	n.d.	16.8	192	0.2	8.1	<0.1	8.0	532	253	12	7	20	0.12	-0.46
S120	Jun-18	14	7.12	220	n.d.	14.93	11	0.6	37.0	0.3	9.6	1398	534	23	10	55	1.02	-0.07
S120	Mar-19	11	5.73	1752	n.d.	15.00	16	0.5	18.3	<0.1	8.9	1004	381	16	11	48	0.06	0.56
S120	Oct-19	12	5.40	1071	n.d.	16.57	12	0.4	55.9	<0.1	17.6	540	214	11	8	16	0.12	-3.64
S120	Jan-20	10	6.15	1264	222	14.56	14	<0.1	27.0	2.2	8.7	1115	469	17	10	59	0.04	4.78
S120	May-20	13	6.9	1227	n.d.	15.68	11	1.1	22.1	<0.1	10.4	685	244	12	8	19	0.01	-4.04
S120	Oct-20	13	7.32	825	104	16.77	122	0.3	19.1	0.4	3.5	318	163	7	6	10	0.12	0.21
S120	Jan-21	11	5.45	1771	90	n.d.	24	0.2	4.9	1.0	5.6	1200	413	14	10	56	0.00	-4.05
S120	Apr-21	13	4.80	1581	47	n.d.	13	<0.1	4.5	<0.1	11.5	899	315	15	8	29	0.12	-3.36
S120	Sep-21	14	5.08	590	29	16.9	17	0.4	17.4	0.4	3.5	358	150	4	6	14	0.04	0.97
S120	Jan-22	11	5.01	827	359	15.50	24	0.2	8.2	<0.1	7.6	381	149	7	7	17	0.08	0.56
S120	May-22	13	4.73	792	368	16.26	11	0.3	8.2	<0.1	6.5	359	126	7	6	13	0.16	-3.59
S120	Sep-22	12	4.99	642	n.d.	16.75	10	0.2	8.2	0.2	3.1	281	106	5	6	9	0.02	-0.79
S120	Jan-23	12	5.00	1653	233	14.65	12	0.3	8.1	<0.1	13.0	1041	355	17	12	44	<0.01	-3.65
S120	Jun-23	12	5.14	1103	253	15.08	11	0.2	10.2	<0.1	7.8	496	196	11	7	19	0.01	2.27
S120	Sep-23	13	4.64	823	328	17.08	27	0.3	2.7	<0.1	1.8	343	127	7	6	9	<0.01	-1.85

Table S15: Piezometer S124. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO_3^-	F^-	Cl^-	Br^-	NO_3^-	SO_4^{2-}	Ca^{2+}	Mg^{2+}	Na^+	K^+	NH_4^+	Error %
S124	Jan-15	n.d.	n.d.	n.d.	n.d.	6.15	29	0.5	9.8	<0.1	22.4	164	48	9	12	20	1.77	-2.86
S124	May-15	13	5.75	392	254	5.90	25	0.2	9.3	<0.1	22.3	168	52	11	11	20	1.61	0.72
S124	Sep-15	13	5.69	390	228	6.49	22	<0.1	10.0	<0.1	21.7	177	49	10	12	21	1.70	-2.72
S124	Jan-17	11	5.83	679	n.d.	6.78	29	<0.1	7.9	0.6	20.0	159	52	12	12	21	1.83	4.51
S124	Jun-18	14	6.25	2160	n.d.	6.06	24	0.4	12.5	0.2	27.1	178	62	12	11	21	2.02	3.00
S124	Mar-19	12	6.83	572	n.d.	12.00	173	0.1	10.3	<0.1	24.0	189	74	12	11	21	1.82	-12.79
S124	Oct-19	13	6.32	309	206	6.65	26	0.3	13.3	<0.1	21.4	176	59	11	10	12	1.83	-1.27
S124	Jan-20	10	5.78	388	160	5.68	22	0.6	14.9	1.0	23.7	159	73	3	7	4	1.55	-1.42
S124	May-20	14	7.8	620	n.d.	6.15	27	0.1	29.9	<0.1	23.4	208	66	13	12	20	2.52	-3.71
S124	Oct-20	12	7.32	491	59	6.87	29	0.1	12.9	0.4	16.7	179	72	11	4	18	1.86	4.37
S124	Jan-21	10	5.30	544	58	5.62	32	0.3	7.5	0.6	23.1	161	62	9	11	19	1.68	4.35
S124	Apr-21	13	5.30	536	70	5.90	23	0.1	6.8	1.2	20.7	168	56	12	10	19	1.85	4.11
S124	Sep-21	13	5.77	520	30	6.68	30	0.3	8.7	0.7	23.7	187	76	10	11	15	0.04	4.18
S124	Jan-22	12	5.42	507	320	6.33	33	n.d.	10.4	<0.1	22.5	159	60	10	9	17	2.02	3.05
S124	May-22	14	5.44	517	324	6.34	28	<0.1	11.4	<0.1	24.5	166	52	11	12	18	1.76	-0.98
S124	Sep-22	13	6.24	486	n.d.	7.38	28	<0,1	9.6	0.3	28.5	153	51	10	9	17	1.70	-0.93
S124	Jan-23	12	5.41	460	302	7.65	24	0.6	12.7	<0.1	30.1	185	59	12	10	19	1.60	-1.99
S124	Jun-23	13	5.39	491	282	6.78	25	<0.1	14.4	<0.1	23.3	136	57	9	7	16	1.63	4.01
S124	Sep-23	14	5.42	464	258	7.12	31	0.1	11.1	<0.1	20.9	156	51	9	8	16	1.33	-3.05

Table S16: Piezometer S128. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m t.f.l., and concentrations of main cations and anions (mg·L^{-1}). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	H.I.	HCO$_3^-$	F$^-$	Cl$^-$	Br$^-$	NO$_3^-$	SO$_4^{2-}$	Ca^{2+}	Mg^{2+}	Na$^+$	K$^+$	NH$_4^+$	Error %
S128	Jan-15	n.d.	n.d.	n.d.	n.d.	4.96	117	0.4	7.8	<0.1	<0.1	42	43	4	11	6	0.02	0.80
S128	May-15	13	6.15	260	-21	3.85	72	0.6	8.9	<0.1	0.3	68	31	6	11	6	0.20	-2.90
S128	Sep-15	14	6.10	240	-2	4.74	71	0.3	6.1	<0.1	0.5	93	38	7	13	7	0.03	-1.70
S128	Jan-17	11	6.17	361	n.d.	5.32	27	<0.1	4.8	0.5	<0.1	118	32	9	13	7	0.30	0.60
S128	Jan-18	13	6.08	540	n.d.	4.47	26	0.6	6.6	0.1	1.0	144	45	9	12	7	0.35	0.30
S128	Mar-19	11	6.85	397	n.d.	4.52	27	0.2	6.2	<0.1	2.1	136	39	10	14	7	0.07	1.50
S128	Oct-19	14	6.00	196	17	5.10	15	0.6	7.4	<0.1	0.6	148	36	10	13	8	0.03	-1.60
S128	Jan-20	12	5.79	217	111	2.75	23	0.8	11.0	1.5	1.5	128	32	6	21	13	0.02	-1.00
S128	May-20	12	7.58	381	n.d.	4.38	16	0.6	10.4	<0.1	0.6	162	41	12	16	10	0.61	0.40
S128	Oct-20	12	7.32	407	36	5.08	12	0.3	9.7	0.5	1.3	145	36	12	13	8	0.38	0.50
S128	Jan-21	11	6.37	398	40	3.75	32	<0.1	2.7	0.8	5.9	131	46	10	10	4	<0.01	3.30
S128	Apr-21	11	5.70	374	36	4.12	27	<0.1	2.3	1.2	0.1	107	31	9	12	6	0.17	4.90
S128	Sep-21	14	5.85	472	31	5.34	41	0.1	10.0	0.4	0.2	132	10	13	8	1	<0.01	-3.18
S128	Jan-22	12	5.54	385	169	5.00	38	<0.1	6.6	<0.1	0.5	130	35	10	13	6	0.36	-2.80
S128	May-22	12	5.60	386	163	5.51	17	0.1	5.5	<0.1	<0.1	132	32	10	12	9	0.40	-0.10
S128	Sep-22	13	5.83	395	n.d.	6.30	18	<0.1	5.1	0.4	<0.1	141	35	11	13	8	0.93	0.60
S128	Jan-23	12	6.01	412	97	5.04	40	0.3	5.0	1.0	<0.1	143	37	11	13	7	1.60	-3.20
S128	Jun-23	12	6.90	386	156	4.68	16	0.1	4.5	<0.1	0.8	156	48	10	12	7	<0.01	2.90
S128	Sep-23	13	5.45	399	198	5.45	24	0.2	4.5	<0.1	0.3	160	38	11	13	7	0.03	-3.90

Table S17: Surface water VIV. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, and concentrations of main cations and anions (mg·L^{-1}). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	HCO$_3^-$	F$^-$	Cl$^-$	Br$^-$	NO$_3^-$	SO$_4^{2-}$	Ca^{2+}	Mg^{2+}	Na$^+$	K$^+$	NH$_4^+$	Error %
VIV	Jun-18	17	7.90	520	n.d.	96	0.2	11.4	<0.1	4.8	102	66	6	9	8	0.05	3.30
VIV	Mar-19	9	7.16	489	n.d.	100	0.2	11.7	0.9	3.2	125	77	7	9	8	0.07	3.84
VIV	Oct-19	15	7.61	206	95	32	0.2	37.5	<0.1	1.4	66	50	4	5	5	0.06	2.89
VIV	Jan-20	7	6.59	497	63	120	<0.1	14.6	0.9	3.5	191	108	9	9	10	0.38	2.83
VIV	May-20	16	8.02	393	n.d.	85	0.5	15.3	<0.1	1.7	94	52	4	8	6	0.18	-4.67
VIV	Oct-20	14	7.32	299	-21	92	0.1	12.3	0.5	3.5	54	44	3	6	5	0.23	-3.13
VIV	Jan-21	7	6.71	657	17	111	0.3	10.7	0.1	4.5	201	106	8	8	9	0.22	1.36
VIV	Apr-21	13	6.60	365	34	69	0.1	7.2	1.4	2.6	70	51	0	6	5	0.22	2.29
VIV	Sep-21	15	7.70	283	23	122	<0.1	18.3	<0.1	1.0	95	75	5	8	7	0.04	1.28
VIV	Jan-22	7	7.35	501	173	118	0.2	10.2	<0.1	5.7	129	79	6	8	8	0.46	-0.62
VIV	May-22	20	8.27	461	222	119	0.3	9.6	<0.1	1.3	100	66	5	8	7	0.10	-1.14
VIV	Sep-22	17	7.44	377	n.d.	123	0.2	8.2	<0.1	1.7	80	60	5	8	7	0.05	-0.10
VIV	Jan-23	8	5.88	442	96	110	0.2	9.2	0.5	2.2	98	68	6	7	6	0.03	2.95
VIV	Jun-23	18	7.14	334	284	115	0.2	6.1	<0.1	1.9	73	64	2	5	5	0.32	1.79
VIV	Sep-23	17	7.21	339	80	119	0.2	9.5	<0.1	1.9	63	52	4	6	7	0.02	-2.85

Table S18: Surface water VAL. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	HCO_3^-	F^-	Cl^-	Br^-	NO_3^-	SO_4^{2-}	Ca^{2+}	Mg^{2+}	Na^+	K^+	NH_4^+	Error %
VAL	Sep-17	4	8.66	379	n.d.	60	0.1	9.4	<0.1	0.6	20	25	3	6	4	0.09	4.31
VAL	Jun-18	17	7.00	130	n.d.	49	0.8	15.8	<0.1	2.4	161	66	6	9	5	0.33	-3.92
VAL	Mar-19	9	7.54	333	n.d.	63	0.2	9.6	<0.1	1.7	67	41	4	7	4	0.06	1.62
VAL	Oct-19	14	7.32	153	38	93	0.2	6.0	<0.1	0.9	20	32	3	6	4	0.03	1.74
VAL	Jan-20	7	6.04	214	134	43	0.3	15.5	0.5	2.5	90	45	5	8	4	0.05	1.14
VAL	May-20	18	7.67	230	n.d.	55	0.4	10.6	<0.1	1.4	37	28	3	7	6	0.04	2.50
VAL	Oct-20	13	7.32	272	38	89	0.3	12.6	0.4	1.1	37	34	4	6	7	0.05	-2.78
VAL	Jan-21	5	6.13	370	51	56	0.1	7.6	0.4	2.6	68	42	3	7	3	0.05	1.71
VAL	Apr-21	16	6.30	223	30	59	<0.1	7.4	2.5	1.1	29	28	1	7	1	0.06	-1.08
VAL	Sep-21	16	7.05	520	29	154	0.4	11.1	0.1	1.9	50	70	4	7	5	0.01	3.56
VAL	Jan-22	5	8.15	206	190	72	0.1	8.7	<0.1	1.9	33	28	3	6	4	0.10	-2.98
VAL	May-22	13	6.65	450	284	188	0.4	10.6	<0.1	3.4	60	70	5	7	6	0.19	-3.84
VAL	Sep-22	9	6.59	193	n.d.	74	0.2	7.0	<0.1	1.8	19	24	3	7	5	0.03	-0.31
VAL	Jan-23	7	7.75	240	215	81	0.2	7.0	0.4	2.2	34	33	4	6	4	0.04	0.90
VAL	Jun-23	17	7.07	380	220	95	0.2	7.1	<0.1	5.3	86	60	4	7	5	<0.01	1.07
VAL	Sep-23	13	7.15	195	223	82	0.1	7.4	<0.1	1.2	16	28	2	5	4	0.95	1.61

Table S19: Spring GRN. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	E.C.	Eh	HCO$_3^-$	F$^-$	Cl$^-$	Br$^-$	NO$_3^-$	SO$_4^{2-}$	Ca^{2+}	Mg^{2+}	Na$^+$	K$^+$	NH$_4^+$	Error %
GRN	Sep-14	15	7.36	168	n.d.	49	0.1	7.3	<0.1	0.5	5	13	2	6	3	<0.01	-0.09
GRN	Jan-15	14	5.6	n.d.	n.d.	30	0.1	7.3	<0.1	0.4	6	10	1	5	3	0.09	4.20
GRN	May-15	15	7.41	81	118	33	0.1	7.2	<0.1	<0.1	6	7	1	9	3	0.06	2.01
GRN	Sep-15	16	7.20	70	125	40	0.1	8.7	<0.1	0.4	6	10	1	6	3	0.10	-4.35
GRN	Jan-17	4	7.73	301	n.d.	44	0.1	6.9	<0.1	0.6	6	12	1	6	3	0.09	0.93
GRN	Jun-18	11	6.92	390	n.d.	40	0.2	5.8	<0.1	1.8	5	12	2	5	3	0.04	4.77
GRN	Mar-19	8	8.16	383	n.d.	32	0.1	6.3	<0.1	0.4	6	10	1	5	3	0.03	4.25
GRN	Oct-19	14	6.62	72	162	67	0.5	11.1	<0.1	0.7	7	20	3	7	4	0.05	1.60
GRN	Jan-20	6	7.42	81	185	35	0.9	10.0	0.2	0.1	14	13	2	6	4	0.05	-1.68
GRN	May-20	15	7,63	236	n.d.	44	0.2	9.4	<0.1	0.9	12	13	2	6	4	0.05	-3.28
GRN	Jan-21	5	6.89	116	10.7	39	<0.1	6.8	<0.1	1.2	5	11	2	5	1	0.01	-0.43
GRN	Apr-21	13	6.40	100	52	52	<0.1	5.5	0.25	0.2	4	14	2	6	3	0.12	3.10
GRN	Sep-21	16	7.08	119	23	63	<0.1	6.2	<0.1	0.8	4	18	2	6	3	<0.01	4.26
GRN	Jan-22	6	7.01	94	224	40	0.1	5.9	<0.1	0.6	5	10	1	5	3	0.06	-2.12
GRN	May-22	8	6.63	116	273	51	0.1	7.9	<0.1	<0.1	9	13	2	6	4	0.10	-3.47
GRN	Sep-22	12	7.14	140	n.d.	77	0.1	5.8	<0,1	2.0	5	18	2	6	5	0.12	-3.93
GRN	Jan-23	6	6.60	95	197	44	0.0	9.4	<0.1	1.1	6	17	2	5	2	<0.01	4.38
GRN	Jun-23	16	6.43	102	192	50	0.1	6.2	<0,1	0.6	5	16	1	5	3	0.05	2.66
GRN	Sep-23	15	6.22	111	226	58	0.1	7.2	<0.1	0.7	3	15	2	5	3	<0.01	-2.66

Table S20: Spring SR8. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, Hydraulic Head (H.I.) in m, and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-years	T	pH	E.C.	Eh	HCO$_3^-$	F$^-$	Cl$^-$	Br$^-$	NO$_3^-$	SO$_4^{2-}$	Ca^{2+}	Mg^{2+}	Na$^+$	K$^+$	NH$_4^+$	Error %
SR8	Sep-14	14	7.20	352	n.d.	72	0.2	11.1	<0.1	0.4	90	47	5	10	4	0.01	-1.27
SR8	Jan-15	12	6.90	n.d.	n.d.	54	0.4	18.6	<0.1	2.1	119	54	5	11	5	0.09	-3.21
SR8	May-15	12	7.28	351	25	61	0.5	14.3	<0.1	2.4	137	66	6	8	4	0.09	-0.72
SR8	Sep-15	16	7.70	250	147	98	0.2	10.4	<0.1	0.9	78	52	5	8	4	0.12	-1.63
SR8	Jan-17	5	8.36	757	n.d.	176	0.1	6.1	<0.1	3.6	26	62	5	7	4	0.52	3.34
SR8	Jun-18	17	7.00	130	n.d.	38	0.6	14.0	<0.1	1.8	167	70	7	8	7	0.55	1.43
SR8	Mar-19	9	7.12	716	n.d.	100	0.4	14.9	<0.1	3.1	135	74	7	8	5	0.06	-2.09
SR8	Oct-19	14	7.71	288	63	172	0.3	7.6	0.1	1.0	56	75	6	8	4	0.02	4.40
SR8	Jan-20	9	5.77	359	116	24	1.5	74.0	n.d.	2.9	179	89	9	12	5	0.27	-4.12
SR8	May-20	13	8.43	441	n.d.	71	0.4	17.6	<0.1	2.0	105	58	6	9	5	0.01	0.03
SR8	Oct-20	13	7.32	571	10	192	1.5	28.7	0.5	9.9	115	102	8	11	8	0.04	-0.99
SR8	Jan-21	8	6.49	566	33	59	0.7	16.1	0.6	5.1	196	89	8	10	8	0.14	0.64
SR8	Apr-21	11	6.60	402	32	90	0.1	13.3	0.3	1.9	80	59	6	9	4	0.10	4.97
SR8	Sep-21	16	7.83	357	27	162	0.2	8.3	0.2	1.5	41	62	4	7	4	0.21	1.20
SR8	Jan-22	6	7.57	390	263	146	0.2	10.9	<0.1	3.7	59	62	6	7	4	0.33	-0.17
SR8	May-22	13	7.06	390	150	204	0.3	10.3	<0.1	2.6	31	63	6	8	5	0.14	-3.64
SR8	Sep-22	12	6.76	246	n.d.	81	0.3	9.0	<0.1	5.3	35	33	3	8	5	0.19	-1.83
SR8	Jan-23	8	7.20	542	162	195	0.3	7.2	0.2	6.1	87	94	7	7	9	0.01	4.17
SR8	Jun-23	14	7.02	756	188	193	0.2	6.9	<0.1	12.7	210	119	17	9	8	0.01	0.11
SR8	Sep-23	18	6.63	688	215	189	0.3	9.6	<0.1	7.3	141	111	7	13	9	0.01	3.79

Table S21: Spring SR10a. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	month-year	T	pH	E.C.	Eh	HCO$_3^-$	F$^-$	Cl$^-$	Br$^-$	NO$_3^-$	SO$_4^{2-}$	Ca^{2+}	Mg^{2+}	Na$^+$	K$^+$	NH$_4^+$	Error %
SR10A	Sep-14	13	6.85	290	n.d.	22	0.2	10.0	<0.1	1.5	73	22	7	10	6	<0.01	1.74
SR10A	Jan-15	13	7.18	n.d.	n.d.	21	0.3	11.4	<0.1	2.9	70	17	6	12	6	0.08	-4.02
SR10A	May-15	12	6.01	213	175	23	0.3	11.0	<0.1	3.0	75	25	7	9	6	0.02	0.84
SR10A	Sep-15	11	6.41	170	145	22	0.1	15.3	<0.1	2.2	68	20	6	10	11	0.06	-0.31
SR10A	Jan-17	10	6.30	201	n.d.	34	0.1	8.7	0.4	2.8	48	14	5	12	5	0.05	-2.24
SR10A	Jun-18	15	7.5	530	n.d.	27	0.4	9.9	0.1	5.4	57	19	6	8	5	0.02	-2.08
SR10A	Mar-19	11	7.10	422	n.d.	32	0.2	7.7	<0.1	2.9	51	19	6	8	5	<0.01	2.22
SR10A	Oct-19	14	6.49	109	120	27	0.3	9.6	<0.1	2.5	51	20	6	9	5	0.02	4.14
SR10A	Jan-20	9	7.22	158	216	35	0.3	15.9	<0.1	5.2	59	33	2	11	7	0.03	2.41
SR10A	May-20	13	7.62	231	n.d.	24	0.2	15.3	<0.1	8.4	62	23	6	9	6	0.04	-1.65
SR10A	Oct-20	12	7.32	198	34	27	0.3	12.1	0.1	2.9	58	29	5	5	4	0.04	2.14
SR10A	Jan-21	10	6.59	200	27	51	<0.1	5.9	<0.1	3.1	36	19	6	9	4	0.03	3.20
SR10A	Apr-21	13	6.10	222	49	30	0.2	6.8	0.5	4.5	62	19	6	9	5	0.02	-2.41
SR10A	Sep-21	13	7.70	203	27	43	<0.1	7.4	<0.1	4.0	50	25	6	8	6	0.06	4.67
SR10A	Jan-22	11	5.96	183	248	29	0.1	7.3	<0.1	4.0	47	17	5	5	9	0.08	-1.46
SR10A	May-22	7	6.09	182	291	33	0.2	8.9	<0.1	2.5	43	15	5	8	5	0.06	-4.56
SR10A	Sep-22	12	6.28	170	n.d.	28	0.2	6.9	0.3	1.6	35	14	4	7	5	0.02	1.91
SR10A	Jan-23	11	5.90	176	226	24	0.2	11.0	<0.1	4.3	43	16	4	7	4	<0.01	-3.50
SR10A	Jun-23	14	6.29	173	197	31	0.2	7.9	<0.1	3.5	37	18	5	4	2	0.01	-0.88
SR10A	Sep-23	14	6.09	170	240	34	0.1	4.2	<0.1	1.0	30	13	4	8	4	<0.01	3.37

Table S22: Superficial water GIT. Month and year of sampling, Temperature (T) in °C, pH values, Electrical Conductivity (E.C.) in µS/cm, redox potential (Eh) in mV, and concentrations of main cations and anions (mg·L⁻¹). Electroneutrality parameter in %; n.d. not determined.

ID	Month-year	T	pH	TDS	HCO_3^-	F^-	Cl^-	NO_3^-	SO_4^{2-}	Ca^{2+}	Mg^{2+}	Na^+	K^+	NH_4^+	Err
GIT	Jan-13	15.0	6.30	959	120	1.0	17.0	0.9	557	211	29	13	10	0.05	-1.05
GIT	May-13	15.5	5.80	788	74	0.7	10.0	0.1	475	191	17	11	10	0.02	0.98
GIT	Feb-14	14.2	6.06	1036	151	0.7	16.0	0.1	574	238	33	12	12	0.20	1.71
GIT	Sep-14	15.0	6.18	816	94	0.8	11.8	0.1	477	194	18	11	10	0.04	0.32
GIT	Apr-15	14.5	6.20	911	115	0.6	10.7	0.2	542	202	23	9	8	0.05	-3.32
GIT	Oct-15	15.0	6.19	852	111	0.4	13.7	0.2	478	206	21	11	9	1.17	2.75
GIT	May-16	15.0	5.98	917	125	0.5	13.0	0.4	512	220	24	12	10	0.40	2.58
GIT	Oct-16	12.6	5.83	849	120	0.5	8.0	0.1	475	198	22	15	10	0.19	2.01
GIT	Apr-17	14.9	6.37	871	192	1.1	10.0	0.2	428	192	23	14	11	0.20	0.15
GIT	Jun-18	17.5	6.47	854	78	2.0	13.0	0.1	530	180	26	12	13	0.04	-2.85
GIT	mar-19	14.5	6.58	917	149	0.8	12.4	0.1	511	192	27	13	11	1.28	-2.81
GIT	Oct-19	17.0	6.60	824	92	0.1	12.0	0.1	498	180	21	11	9	0.09	-3.17
GIT	Jan-20	13.0	6.41	1028	112	1.6	24.0	1.0	586	243	34	14	11	0.24	3.67
GIT	May-20	15.4	6.52	941	104	1.2	25.1	0.1	558	206	23	12	8	3.52	-3.30
GIT	Oct-20	16.0	6.28	757	114	1.2	22.3	0.2	404	181	21	8	5	0.51	1.67
GIT	Apr-21	15.2	5.90	752	67	1.4	6.4	0.1	458	176	24	10	9	0.55	2.37
GIT	Sept-21	14.8	6.34	844	151	1.2	34.0	1.4	434	184	19	13	5	0.40	3.31
GIT	Dic-21	13.8	6.03	550	118	0.7	20.7	0.1	411	194	18	12	12	0.1	4.04
GIT	Jan-22	13.8	6.07	585	165	0.8	8.4	0.2	411	177	18	10	11	2.4	-1.40
GIT	Mag-22	15.0	6.19	531	180	0.9	11.3	0.1	338	167	17	10	9	3.2	1.00
GIT	Sep-22	19.4	6.37	563	182	1.2	7.9	<0.1	372	168	18	10	8	2.82	-2.01
GIT	Jan-23	14.0	6.10	611	151	0.7	1.6	1.6	456	179	23	10	8	2.77	0.12
GIT	May-23	16.3	6.10	591	140	0.8	8.9	0.3	441	183	23	11	9	1.02	0.30
GIT	Jun-23	16.2	6.20	837	161	0.6	15.5	0.3	434	184	22	11	8	0.04	-1.60
GIT	Sep-23	16.6	6.10	864	146	0.6	10.0	<0.1	481	182	23	11	10	0.13	-3.83