SUPPLEMENTARY MATERIAL 2 TO:

Dobrzyński, D., Tetfejer, K., Stępień, M., Karasiński, J., Tupys, A. & Słaby, E., 2023. Geochemistry of germanium in thermal waters of the Jelenia Góra geothermal system (Sudetes, Poland): solute relationships and aquifer mineralogy. *Annales Societatis Geologorum Poloniae*, 93: 323–344.

KENDALL'S TAU CORRELATION COEFFICIENTS BETWEEN THE PHYSICOCHEMICAL PARAMETERS OF THE THERMAL WATERS STUDIED

	pH	T	E_H	Li	Na	K	Rb	Cs	Be
pH	1.0000								
T	0.3536	1.0000							
E_H	-0.3648	-0.5318	1.0000						
Li	-0.2047	-0.0716	0.3014	1.0000					
Na	-0.2764	-0.2071	0.3149	0.3275	1.0000				
K	-0.3870	-0.1838	0.5048	0.5671	0.5053	1.0000			
Rb	-0.3792	-0.1374	0.4506	0.5903	0.5092	0.9111	1.0000		
Cs	-0.1766	-0.0707	0.2598	0.5027	0.1257	0.5007	0.5085	1.0000	
Be	-0.1300	0.2609	-0.0614	0.3560	0.1579	0.2782	0.3159	0.1474	1.0000
Mg	-0.6152	-0.3996	0.5184	0.4048	0.2965	0.5953	0.5909	0.5346	0.0476
Ca	-0.4219	-0.4973	0.4525	0.2734	0.4473	0.4860	0.4589	0.0812	0.0071
Sr	-0.4122	-0.3561	0.4913	0.4609	0.6077	0.7121	0.6966	0.3016	0.1579
Ba	-0.3513	-0.1462	0.3335	0.3557	0.4601	0.5568	0.5452	0.1847	0.2772
U	-0.5387	-0.4190	0.5355	0.3553	0.4050	0.6634	0.6485	0.4348	-0.0087
V	-0.2128	-0.3555	0.3626	0.1835	0.0388	0.3211	0.3246	0.2790	-0.0928
Mo	0.3780	0.3703	-0.2910	-0.1106	-0.3222	-0.2853	-0.2698	0.1097	0.0012
W	0.3424	0.4257	-0.3362	0.0184	-0.2329	-0.1942	-0.1787	0.1121	0.1367
Mn	-0.2892	-0.3185	0.2676	0.3113	0.2997	0.3267	0.3035	0.0919	0.0861
Cu	-0.4145	-0.4175	0.3559	0.1617	0.2044	0.3528	0.3020	0.2442	-0.1445
Ag	-0.0806	-0.0958	0.2094	0.2885	0.2017	0.2668	0.2755	0.2104	0.1028
Zn	-0.0323	-0.2233	0.1924	0.0688	0.1730	0.2196	0.2108	0.0566	-0.1527
Cd	-0.2494	-0.0424	-0.0274	0.2338	0.1144	0.2040	0.2289	0.2338	0.1218
B	0.2842	0.2650	-0.1556	0.2598	-0.0058	0.0097	0.0097	-0.0378	0.2176
Al	-0.0733	0.2005	-0.2955	-0.0383	-0.0383	-0.0804	-0.0532	-0.0149	0.2509
Ga	0.1963	0.5411	-0.2664	0.1567	-0.0589	-0.0389	0.0033	0.3246	0.3852
Tl	-0.5417	-0.2399	0.4430	0.3299	0.3260	0.6501	0.6539	0.1062	0.1547
Si	0.0301	0.1567	0.1405	0.2928	0.2966	0.4203	0.3932	0.0754	0.4385
Ge	0.0864	0.2228	-0.1348	0.1112	0.1673	0.0841	0.0687	-0.1509	0.2478
P	-0.2005	-0.0262	0.1731	0.1357	-0.0446	0.2327	0.2327	0.3036	-0.0662
As	0.3737	0.3777	-0.2129	0.0911	-0.0271	-0.0601	-0.0175	0.2726	0.1714
Sb	-0.4030	-0.2680	0.3867	0.3150	0.1385	0.4372	0.4725	0.5367	0.0699
Se	-0.3670	-0.2184	0.3488	0.3426	0.3663	0.4931	0.4812	0.2475	0.2634
Br	-0.1321	-0.1037	0.1921	0.2206	0.4315	0.3193	0.3116	-0.0378	0.2562
Cl^-	-0.1330	-0.1937	0.2726	0.1422	0.3008	0.3704	0.3511	-0.0290	0.1545
F^-	0.3979	0.4523	-0.3234	-0.0058	-0.1787	-0.2195	-0.1632	0.0671	0.1150
NO_3^-	-0.0090	-0.0235	-0.1211	-0.1970	-0.2843	-0.2910	-0.2440	0.0750	-0.1593
S^{-2}	0.1224	0.0069	-0.4118	-0.3737	-0.3908	-0.5554	-0.5108	-0.3139	-0.2720
SO_4^{2-}	-0.0489	-0.0380	0.2345	0.1500	0.2007	0.2767	0.2455	-0.1179	0.1923
HCO_3^-	-0.3114	-0.2612	0.4414	0.4925	0.3839	0.6806	0.6476	0.4413	0.2211

KENDALL'S TAU CORRELATION COEFFICIENTS - cont'd

	Mg	Ca	Sr	Ba	U	V	Mo	W	Mn	Cu
pH										
T										
E_H										
Li										
Na										
K										
Rb										
Cs										
Be										
Mg	1.0000									
Ca	0.6256	1.0000								
Sr	0.5909	0.7353	1.0000							
Ba	0.3554	0.4505	0.6419	1.0000						
U	0.6631	0.6932	0.7429	0.4994	1.0000					
V	0.4039	0.3670	0.3634	0.4199	0.5723	1.0000				
Mo	-0.4657	-0.5512	-0.4386	-0.3641	-0.5750	-0.4287	1.0000			
W	-0.4610	-0.4570	-0.3623	-0.3345	-0.5888	-0.5892	0.7278	1.0000		
Mn	0.3572	0.5781	0.5220	0.3259	0.4298	0.2031	-0.3311	-0.2127	1.0000	
Cu	0.4534	0.4240	0.3610	0.3011	0.4577	0.3970	-0.2799	-0.3386	0.2910	1.0000
Ag	0.1169	0.0933	0.1801	0.2041	0.2233	0.1649	-0.1065	-0.0976	0.1280	0.1483
Zn	0.3384	0.2818	0.2352	0.1531	0.4658	0.4397	-0.4248	-0.4260	0.1299	0.1641
Cd	0.3684	0.2090	0.1841	0.2416	0.2494	0.1025	-0.2743	-0.1244	0.1918	0.1174
B	-0.3250	-0.1997	-0.1105	-0.1523	-0.4508	-0.4298	0.3554	0.5022	-0.0611	-0.3429
Al	-0.3212	-0.1249	-0.0359	0.1485	-0.2207	-0.0025	0.0758	0.1620	-0.0730	0.0131
Ga	-0.1497	-0.3589	-0.1922	-0.0734	-0.3209	-0.3778	0.4556	0.5233	-0.2268	-0.2513
Tl	0.5633	0.6076	0.6385	0.5575	0.5652	0.3618	-0.5180	-0.4687	0.4765	0.4794
Si	-0.0455	-0.0126	0.2174	0.2223	-0.1118	-0.3281	0.2038	0.2812	-0.0251	-0.1352
Ge	-0.2947	-0.0164	0.0803	0.0329	-0.3284	-0.4714	0.2001	0.3936	0.0310	-0.2555
P	0.4343	0.0892	0.1474	0.1969	0.3990	0.4606	-0.1996	-0.2695	0.0669	0.3184
As	-0.2128	-0.4207	-0.2230	-0.2182	-0.3791	-0.3717	0.6465	0.6437	-0.2570	-0.3357
Sb	0.6453	0.2960	0.3530	0.2390	0.5813	0.3234	-0.2184	-0.2145	0.2553	0.3648
Se	0.3467	0.3584	0.4535	0.3347	0.3837	0.1838	-0.3376	-0.2475	0.2418	0.2653
Br	0.1106	0.3290	0.4644	0.3785	0.2587	-0.0849	-0.2332	-0.1355	0.2701	0.0448
Cl^-	0.1193	0.3433	0.5077	0.3793	0.3085	0.0937	-0.3167	-0.2853	0.1335	0.0824
F^-	-0.3053	-0.5226	-0.3963	-0.3508	-0.4700	-0.5253	0.5883	0.6042	-0.3139	-0.4691
NO_3^-	0.0863	-0.1164	-0.2462	-0.1512	0.0915	0.2392	-0.0697	-0.1231	-0.0325	0.0012
S^{-2}	-0.4836	-0.1577	-0.2914	-0.2316	-0.6415	0.0504	0.0345	0.0343	0.0806	-0.0129
SO_4^{2-}	-0.0241	0.1500	0.3390	0.3441	0.0678	-0.0941	-0.0489	-0.0565	0.0809	-0.0318
HCO_3^-	0.5033	0.4169	0.5507	0.4258	0.6183	0.3549	-0.3379	-0.2133	0.3482	0.3592

KENDALL'S TAU CORRELATION COEFFICIENTS - cont'd

	Ag	Zn	Cd	B	Al	Ga	Tl	Si	Ge	P
pH										
T										
E_H										
Li										
Na										
K										
Rb										
Cs										
Be										
Mg										
Ca										
Sr										
Ba										
U										
V										
Mo										
W										
Mn										
Cu										
Ag	1.0000									
Zn	0.2637	1.0000								
Cd	-0.1792	0.2430	1.0000							
B	-0.0044	-0.2549	-0.1047	1.0000						
Al	0.0307	-0.1432	0.1229	0.0584	1.0000					
Ga	-0.0909	-0.3119	-0.0188	0.2320	0.1040	1.0000				
Tl	0.1278	0.2282	0.2663	-0.3079	0.0436	-0.2424	1.0000			
Si	0.1063	-0.1908	-0.0647	0.4246	-0.0260	0.2700	0.0714	1.0000		
Ge	-0.0434	-0.3665	-0.1046	0.4406	0.0396	0.2214	-0.0483	0.4923	1.0000	
P	0.1219	0.2003	0.2572	-0.2733	-0.1229	-0.0513	0.2592	-0.1590	-0.3707	1.0000
As	0.0044	-0.2416	-0.0971	0.4270	0.0137	0.5131	-0.5360	0.3509	0.2504	-0.1722
Sb	0.1590	0.2272	0.2770	-0.3202	-0.1376	-0.0209	0.4000	-0.1168	-0.3127	0.3420
Se	-0.0435	0.0924	0.1875	-0.0397	0.0362	-0.2418	0.4139	0.1842	0.0099	0.1451
Br	-0.0521	0.0878	0.0922	0.0398	0.0074	-0.0668	0.3769	0.3135	0.2169	-0.1252
Cl^-	0.1152	0.1421	-0.0722	0.0776	-0.0458	-0.1601	0.2527	0.2582	0.0862	0.0078
F^-	-0.0153	-0.2585	-0.1153	0.4454	0.0410	0.4326	-0.5160	0.2428	0.2314	-0.2622
NO_3^-	0.0595	0.0726	0.1188	-0.4043	0.0293	0.0586	-0.0684	-0.4768	-0.2788	0.2245
S^{-2}	-0.1385	-0.1342	-0.0358	-0.0138	0.3160	-0.1986	-0.2924	-0.4320	-0.1098	-0.0069
SO_4^{2-}	0.0523	-0.0492	-0.0979	0.2297	0.0187	-0.0594	0.2417	0.4871	0.2145	-0.0831
HCO_3^-	0.3446	0.3050	0.1594	-0.0185	-0.0584	-0.1138	0.4411	0.1687	-0.0757	0.3006

KENDALL'S TAU CORRELATION COEFFICIENTS - cont'd

	As	Sb	Se	Br	Cl^-	F^-	NO_3^-	S^{-2}	SO_4^{2-}	HCO_3^-
pH										
T										
E_H										
Li										
Na										
K										
Rb										
Cs										
Be										
Mg										
Ca										
Sr										
Ba										
U										
V										
Mo										
W										
Mn										
Cu										
Ag										
Zn										
Cd										
B										
Al										
Ga										
Tl										
Si										
Ge										
P										
As	1.0000									
Sb	-0.0587	1.0000								
Se	-0.1111	0.3681	1.0000							
Br	0.0107	0.0490	0.6065	1.0000						
Cl^-	-0.1145	0.0747	0.2515	0.4281	1.0000					
F^-	0.6637	-0.2018	-0.2472	-0.0807	-0.1614	1.0000				
NO_3^-	-0.2089	0.0980	-0.2924	-0.2689	-0.2712	-0.1058	1.0000			
S^{-2}	-0.1637	-0.1684	-0.4573	-0.3179	-0.2556	-0.1052	0.2610	1.0000		
SO_4^{2-}	0.0225	-0.0808	0.2075	0.4595	0.5285	0.0010	-0.3632	-0.2338	1.0000	
HCO_3^-	-0.0905	0.5518	0.5114	0.2515	0.3183	-0.2407	-0.1270	-0.3204	0.1105	1.0000