Chemical analyses of hot water in South and West Iceland 2019

By analysing the chemical properties in wells, it can be monitored how production fields react to utilization.

	Unit	Akranes and Borgarfjördur heating utility		Rangá utility		Thorlaks-höfn utility	Ölfus utility	Austur-veita utility	Grimsnes utility	Hlídar-veita utility	Munaðar-nes utility	Norðurárdalur utility		Stykkis-holmur utility
		Deildartunga hot spring	LH-1	KH-37	LL-4	BA-01	EB-01	GH-4	ÖN-29	ER-23	MN-8	SG-3	BI-3	HO-1
Date		18.2.2019	18.2.2019	27.2.2019	7.2.2018	28.2.2019	28.2.2019	27.2.2019	28.2.2019	28.2.2019	19.2.2019	19.2.2019	19.2.2019	29.1.2019
Sample no.		19-5046	19-5047	19-5054	18-5051	19-5062	19-5061	19-5057	19-5059	19-5058	19-5043	19-5044	19-5045	19-5024
Water temp.	°C	96.8	89.2	65.6	96.9	107.6	121.5	114.7	81.0	-	88.1	67.7	66.3	85.3
Acidity	pH	9.52	9.29	10.74	9.77	9.02	8.97	9.17	9.55	9.55	9.44	8.95	9.13	8.36
pH-temp.	°C	22.4	22.4	22.2	22.8	22.3	22.3	22.7	22.1	22.2	22.3	22.4	22.4	22.1
Conductivity	µS/cm	396	629	337	479	2350	1680	644	601	530	487	365	344	8740
Conduct.temp.	°C	22.1	22.1	22.0	22.4	22.0	22.0	21.9	22.0	22.0	22.1	22.1	22.1	22.3
CO_2	mg/kg	26.0	13.9	11.9	19.3	5.5	7.8	41.2	14.4	28.3	14.5	80.1	59.85	5.55
H_2S	mg/kg	1.13	0.74	0.12	0.07	0.50	0.72	0.20	0.11	1.94	0.38	0.01	0.204	0.0476
SiO_2	mg/kg	136.0	119.3	88.3	89.7	130.7	116.4	140.5	84.0	234.4	115.5	104.8	91.81	69.04
Na	mg/kg	80.2	111.8	66.3	92.6	365.8	276.4	122.0	108.6	106.9	87.9	77.1	69.97	666.8
K	mg/kg	2.23	2.50	0.63	1.76	16.32	11.29	3.60	2.64	5.52	2.12	1.10	1.048	13.628
Ca	mg/kg	2.92	12.84	2.72	2.94	47.30	41.29	4.39	6.79	1.82	6.61	3.37	2.832	51.71
Mg	mg/kg	<0.005	<0.005	<0.005	-	0.0140	0.0050	<0.005	0.0070	0.0060	0.0060	0.0110	0.007	0.453
Fe	mg/kg	0.21	0.01	0.006	0.01	0.065	0.031	0.008	0.11	0.065	0.032	0.006	0.03	0.083
Al	mg/kg	0.138	0.023	0.123	0.235	0.067	0.082	0.149	0.062	0.480	0.058	0.016	0.022	<0.0075
Li	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cl	mg/kg	35.0	112.4	27.2	50.5	612.8	414.6	114.2	118.9	56.7	72.0	26.1	28.02	2374
SO_4	mg/kg	41.4	83.9	23.2	81.1	130.2	142.1	53.4	45.4	54.6	56.6	30.9	33.43	340.2
F	mg/kg	1.937	1.506	1.639	1.029	0.413	0.423	0.7	0.458	1.968	1.686	0.448	0.51	1.593
B	mg/kg	0.255	0.218	0.113	0.238	0.237	0.235	0.291	0.104	0.173	0.215	0.195	0.224	0.081
Dissolved O_2	µg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0