Chemical analyses of hot water in South and West Iceland 2018

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

	Eining	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		16.2.2018	16.2.2018	5.2.2018	7.2.2018	8.2.2018	8.2.2018	5.2.2018	8.2.2018	8.2.2018	15.2.2018	15.2.2018	15.2.2018	13.2.2018
Sample no.		18-5073	18-5071	18-5053	18-5051	18-5057	18-5059	18-5054	18-5061	18-5062	18-5068	18-5070	18-5069	18-5064
Water temp.	°C	96.4	89.0	65.6	96.9	107.8	121.1	116.7	80.2	94.0	84.0	67.8	66.7	85.5
Acidity	pH	9.57	9.24	10.73	9.77	8.88	8.90	8.86	9.52	9.54	9.48	8.96	9.16	8.29
pH-temp.	°C	22.6	22.6	22.2	22.8	22.6	21.9	22.5	22.0	22.2	22.8	22.8	22.9	22.2
Conductivity	µS/cm	402	635	342	479	2430	1697	645	630	532	486	385	356	8980
Conduct.temp.	°C	22.3	22.3	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.5	22.3	22.5	22.5
CO_2	mg/kg	25.7	13.0	12.0	19.3	4.7	7.5	42.2	14.2	25.5	14.9	80.0	59.9	5.2
H_2S	mg/kg	1.30	0.81	0.13	0.07	0.09	0.36	0.22	0.10	3.06	0.46	0.01	0.05	0.04
SiO_2	mg/kg	136.7	118.8	87.9	89.7	132.3	116.3	137.7	83.2	232.9	117.0	105.4	92.9	70.0
Na	mg/kg	80.0	113.0	66.3	92.6	375.5	277.1	121.3	111.2	106.0	90.4	77.7	72.3	680.9
K	mg/kg	2.23	2.52	0.66	1.76	16.79	11.33	3.62	2.71	5.44	2.11	1.15	1.11	13.97
Ca	mg/kg	3.09	13.57	2.71	2.94	43.82	41.56	4.36	7.32	1.92	6.96	3.43	2.91	49.53
Mg	mg/kg	0.007	-	-	-	0.009	-	-	-	-	0.0100	0.0140	0.0070	0.4510
Fe	mg/kg	0.05	-	-	0.01	-	-	-	0.006	-	0.01	-	-	0.006
Al	mg/kg	0.138	0.024	0.123	0.235	0.068	0.081	0.146	0.059	0.476	0.075	0.021	0.024	-
Li	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cl	mg/kg	35.3	115.5	26.9	50.5	686.3	447.8	118.6	122.5	60.1	72.9	25.9	28.5	2878.9
SO_4	mg/kg	58.9	81.1	24.1	81.1	132.8	144.5	60.0	51.1	65.2	62.0	32.1	35.5	375.7
F	mg/kg	2.68	2.14	2.44	1.03	0.49	0.53	1.00	0.64	2.93	1.89	0.62	0.71	1.29
B	mg/kg	0.258	0.216	0.118	0.238	0.243	0.235	0.287	0.110	0.175	0.217	0.195	0.227	0.085
Dissolved O_2	µg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0