Chemical analyses of hot water in South and West Iceland in 2017

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

		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
	Unit	Deildartunga hot spring	KH-37	LL-4	BA-01	EB-01	GH-4	HÖ-29	ER-23	MN-8	SG-3	BI-3	HO-1
Date		20.2.2017	12.1.2017	12.1.2017	11.1.2017	11.1.2017	12.1.2017	11.1.2017	11.1.2017	20.2.2017	20.2.2017	20.2.2017	16.1.2017
Sample no.		17-5087	17-5040	17-5038	17-5032	17-5034	17-5042	17-5037	17-5035	17-5084	17-5085	17-5086	17-5048
Water temp.	°C	96.6	65.7	97.1	109.3	120.7	113.2	80.7	99.1	87.5	68.5	66.9	85.5
Acidity	pH	9.51	10.33	9.85	8.97	8.92	8.92	9.50	9.52	9.41	9.11	9.05	8.29
pH-temp.	°C	22.3	22.2	22.1	19.5	20.8	22.1	21.8	21.3	22.3	22.3	22.3	22.1
Conductivity	µS/cm	390	321	676	2400	1769	615	649	558	495	345	350	8950
Conduct.temp.	°C	22.3	21.9	21.9	22.2	22.2	22.1	22.2	22.2	22.3	22.3	22.3	22.4
CO_2	mg/kg	27.7	15.1	21.4	7.4	13.2	44.6	18.2	28.3	16.4	62.6	70.9	7.5
H_2S	mg/kg	1.30	0.15	0.14	0.54	0.46	0.22	0.18	3.67	0.46	0.04	0.02	0.03
SiO_2	mg/kg	133.2	87.5	97.2	132.6	116.5	137.7	82.8	230.4	113.9	91.0	97.0	68.7
Na	mg/kg	78.3	66.8	88.2	373.6	277.6	117.9	113.3	105.1	87.7	70.4	73.3	673.1
K	mg/kg	2.21	0.70	1.71	16.79	11.66	3.57	2.87	5.44	2.18	1.11	1.12	13.95
Ca	mg/kg	2.96	2.70	2.69	45.17	42.49	4.34	7.58	1.94	6.86	2.84	3.07	49.22
Mg	mg/kg	<0.005	<0.005	<0.005	0.0150	0.0070	<0.005	<0.005	<0.005	0.0143	0.0063	0.0078	0.4699
Fe	mg/kg	0.026	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	0.026	<0.005	<0.005	0.0092
Al	mg/kg	0.138	0.122	0.213	0.079	0.080	0.143	0.054	0.476	0.067	0.024	0.021	0.010
Li	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Cl	mg/kg	34.4	25.3	43.5	617.9	411.5	110.9	127.1	56.5	73.1	28.4	27.0	2320.0
SO_4	mg/kg	51.6	22.4	64.0	129.1	136.6	55.7	47.8	59.7	62.7	35.6	34.4	340.5
F	mg/kg	2.992	2.248	0.966	0.44	0.499	0.891	0.564	2.684	2.068	0.85	0.708	1.422
B	mg/kg	0.258	0.124	0.245	0.249	0.246	0.304	0.117	0.18	0.225	0.232	0.216	0.09
Dissolved O_2	µg/kg	80	0	0	0	0	0	0	0	0	0	0	0