

Chemical analyses of hot water in the capital area 2019

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

	Unit	Laugarnes RV-5	Ellidaár RV-23	Reykir MG-25	Reykjahlíd MG-39	Nesjavellir Heated groundwater	Hellisheidi Heated groundwater
Date		11.2.2019	5.2.2019	22.2.2019	21.1.2019	15.8.2019	15.8.2019
Sample no.		19-5037	19-5029	19-5049	19-5011	19-5271	19-5270
Water temp.	°C	127.8	89.2	90.5	92.2	80	80
Acidity	pH	9.55	9.63	9.75	8.68	8.23	6.57
pH-temp.	°C	20.9	22.0	22.6	22.3	23.0	23.1
Conductivity	µS/cm	386	229	218	225	178	95
Conduct.temp.	°C	21.9	22.1	22.1	22.9	23.4	23.5
CO ₂	mg/kg	16.9	26.3	23.9	26.0	51.2	24.3
H ₂ S	mg/kg	0.60	0.00	0.83	1.43	0.41	0.20
SiO ₂	mg/kg	145.7	90.9	96.2	100.2	42.4	24.2
Na	mg/kg	74.6	47.5	45.3	48.6	17.9	6.3
K	mg/kg	2.98	1.13	0.92	1.13	2.62	0.86
Ca	mg/kg	4.05	2.68	2.38	2.03	9.07	4.71
Mg	mg/kg	<0,005	<0,005	<0,005	<0,005	4.538	2.723
Fe	mg/kg	0.008	0.011	0.010	0.010	0.010	0.016
Al	mg/kg	0.192	0.130	0.161	0.192	0.060	0.031
Li	mg/kg	-	-	-	-	-	-
Cl	mg/kg	60.4	24.4	16.0	13.1	12.5	6.9
SO ₄	mg/kg	33.2	14.0	10.5	13.1	11.2	3.9
F	mg/kg	0.851	0.280	0.501	0.699	0.124	0.078
B	mg/kg	0.063	0.023	0.040	0.040	0.072	
Dissolved O ₂	µg/kg	0	300	0	0	0	0