

Water Quality Tests Results (Sainen)

No.	Items	Sainen						Unit
		24/4/2019	22/5/2019	25/6/2019	3/7/2019	8/8/2019	12/9/2019	
	Water temperature	12.2	14.8	16.5	17.2	21.6	20.2	(°C)
1	Common Bacteria	0	0	0	0	0	0	(number/mL)
2	E.coli	N.D. ※1	N.D. ※1	N.D. ※1	N.D. ※1	N.D. ※1	N.D. ※1	(MPN/100mL)
3	Cadmium							(mg/L)
4	Mercury							(mg/L)
5	Selenium							(mg/L)
6	Lead			< 0.001			< 0.001	(mg/L)
7	Arsenic							(mg/L)
8	Chromium (VI)	< 0.005			< 0.005			(mg/L)
9	Nitrite nitrogen	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	(mg/L)
10	Cyanide ion and Cyanogens chloride			< 0.001			< 0.001	(mg/L)
11	Nitrate and Nitrite	0.3	0.2	0.2	0.2	0.2	0.2	(mg/L)
12	Fluoride	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	(mg/L)
13	Boron							(mg/L)
14	Carbon tetrachloride			< 0.0002			< 0.0002	(mg/L)
15	1, 4-dioxane							(mg/L)
16	cis -1,2-Dichloroethylene and trans -1,2- Dichloroethylene			< 0.004			< 0.004	(mg/L)
17	Dichloromethane			< 0.002			< 0.002	(mg/L)
18	Tetrachloroethylene			< 0.001			< 0.001	(mg/L)
19	Trichloroethylene			< 0.001			< 0.001	(mg/L)
20	Benzene			< 0.001			< 0.001	(mg/L)
21	Chlorate	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	(mg/L)
22	Chloroacetic acid			< 0.002			< 0.002	(mg/L)
23	Chloroform			0.008			0.015	(mg/L)
24	Dichloroacetic acid			< 0.003			0.004	(mg/L)
25	Dibromochloromethane			0.002			< 0.001	(mg/L)
26	Bromate			< 0.001			< 0.001	(mg/L)
27	Total trihalomethanes			0.014			0.019	(mg/L)
28	Trichloroacetic acid			< 0.003			0.009	(mg/L)
29	Bromodichloromethane			0.005			0.004	(mg/L)
30	Bromoform			< 0.001			< 0.001	(mg/L)
31	Formaldehyde			< 0.008			< 0.008	(mg/L)
32	Zinc			< 0.01			< 0.01	(mg/L)
33	Aluminium	0.02	0.04	0.04	0.04	0.08	0.04	(mg/L)
34	Iron	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	(mg/L)
35	Copper	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	(mg/L)
36	Sodium	4.4	3.9	4.9	4.7	4.7	4.8	(mg/L)
37	Manganese	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	(mg/L)
38	Chloride ion	5.0	4.1	5.4	5.8	5.0	5.8	(mg/L)
39	Calcium, Magnesium (Hardness)	25	27	30	28	31	31	(mg/L)
40	Total residue	48			74			(mg/L)
41	Anionic surface active agent							(mg/L)
42	Geosmin			< 0.000001	< 0.000001	< 0.000001	< 0.000001	(mg/L)
43	2-Methylisoborneol			< 0.000001	< 0.000001	< 0.000001	< 0.000001	(mg/L)
44	Nonionic surface active agent							(mg/L)
45	Phenols							(mg/L)
46	Organic substances (Total Organic Carbon)	0.3	0.3	0.4	0.4	0.5	0.4	(mg/L)
47	pH Value	7.5	7.6	7.6	7.5	7.6	7.5	
48	Taste	None	None	None	None	None	None	
49	Odor	None	None	None	None	None	None	
50	Color	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	(degree)
51	Turbidity	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	(degree)
	Free residual chlorine ※2	0.40	0.40	0.40	0.50	0.42	0.46	(mg/L)

※1 N.D. = Not detected

※2 Necessary sanitation measures: Free residual chlorine ≥ 0.1 mg/L

Water Quality Tests Results (Sainen)

No.	Items	Sainen						Unit
		31/10/2019	27/11/2019	11/12/2019	15/1/2020			
	Water temperature	15.1	11.9	9.5	8.2			(°C)
1	Common Bacteria	0	0	0	0			(number/mL)
2	E.coli	N.D. ※1	N.D. ※1	N.D. ※1	N.D. ※1			(MPN/100mL)
3	Cadmium							(mg/L)
4	Mercury							(mg/L)
5	Selenium							(mg/L)
6	Lead			< 0.001				(mg/L)
7	Arsenic							(mg/L)
8	Chromium (VI)	< 0.005			< 0.005			(mg/L)
9	Nitrite nitrogen	< 0.004	< 0.004	< 0.004	< 0.004			(mg/L)
10	Cyanide ion and Cyanogens chloride			< 0.001				(mg/L)
11	Nitrate and Nitrite	0.4	0.3	0.5	0.3			(mg/L)
12	Fluoride	< 0.08	< 0.08	< 0.08	< 0.08			(mg/L)
13	Boron							(mg/L)
14	Carbon tetrachloride			< 0.0002				(mg/L)
15	1, 4-dioxane							(mg/L)
16	cis -1,2-Dichloroethylene and trans -1,2- Dichloroethylene			< 0.004				(mg/L)
17	Dichloromethane			< 0.002				(mg/L)
18	Tetrachloroethylene			< 0.001				(mg/L)
19	Trichloroethylene			< 0.001				(mg/L)
20	Benzene			< 0.001				(mg/L)
21	Chlorate	< 0.06	< 0.06	< 0.06	< 0.06			(mg/L)
22	Chloroacetic acid			< 0.002				(mg/L)
23	Chloroform			0.003				(mg/L)
24	Dichloroacetic acid			< 0.003				(mg/L)
25	Dibromochloromethane			0.003				(mg/L)
26	Bromate			< 0.001				(mg/L)
27	Total trihalomethanes			0.009				(mg/L)
28	Trichloroacetic acid			< 0.003				(mg/L)
29	Bromodichloromethane			0.003				(mg/L)
30	Bromoform			< 0.001				(mg/L)
31	Formaldehyde			< 0.008				(mg/L)
32	Zinc			< 0.01				(mg/L)
33	Aluminium	0.04	0.04	0.03	0.03			(mg/L)
34	Iron	< 0.03	< 0.03	< 0.03	< 0.03			(mg/L)
35	Copper	< 0.01	< 0.01	< 0.01	< 0.01			(mg/L)
36	Sodium	5.5	5.9	6.4	5.8			(mg/L)
37	Manganese	< 0.001	< 0.001	< 0.001	< 0.001			(mg/L)
38	Chloride ion	5.7	5.8	7.9	6.2			(mg/L)
39	Calcium, Magnesium (Hardness)	31	34	35	33			(mg/L)
40	Total residue	59			79			(mg/L)
41	Anionic surface active agent							(mg/L)
42	Geosmin	< 0.000001	< 0.000001					(mg/L)
43	2-Methylisoborneol	< 0.000001	< 0.000001					(mg/L)
44	Nonionic surface active agent							(mg/L)
45	Phenols							(mg/L)
46	Organic substances (Total Organic Carbon)	0.4	0.4	0.3	0.3			(mg/L)
47	pH Value	7.7	7.7	7.6	7.6			
48	Taste	None	None	None	None			
49	Odor	None	None	None	None			
50	Color	< 0.5	< 0.5	< 0.5	< 0.5			(degree)
51	Turbidity	< 0.1	< 0.1	< 0.1	< 0.1			(degree)
	Free residual chlorine ※2	0.42	0.42	0.44	0.40			(mg/L)

※1 N.D. = Not detected

※2 Necessary sanitation measures: Free residual chlorine ≥ 0.1 mg/L