

## Water Quality Tests Results (Naruwadai)

No.	Items	Naruwadai						Unit
		24/4/2019	22/5/2019	25/6/2019	3/7/2019	8/8/2019	12/9/2019	
	Water temperature	12.1	16.4	18.1	19.0	22.2	22.5	( °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	0.4	0.3	0.4	0.4	0.3	0.4	(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	<i>cis</i> -1,2-Dichloroethylene and <i>trans</i> -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	0.09	< 0.06	(mg/L)
22	Chloroacetic acid			< 0.002			< 0.002	(mg/L)
23	Chloroform			0.006			0.009	(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			0.013			0.016	(mg/L)
28	Trichloroacetic acid			0.004			0.006	(mg/L)
29	Bromodichloromethane			0.005			0.005	(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	0.01	0.01	0.02	0.02	0.03	0.03	(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	6.1	6.2	6.8	7.0	7.2	7.1	(mg/L)
37	Manganese	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	(mg/L)
38	Chloride ion	6.6	5.8	7.3	7.2	6.9	7.1	(mg/L)
39	Calcium, Magnesium (Hardness)	19	20	19	20	23	21	(mg/L)
40	Total residue	41			66			(mg/L)
41	Anionic surface active agent							(mg/L)
42	Geosmin			0.000002	0.000002	0.000003	0.000002	(mg/L)
43	2-Methylisobornol			< 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	0.5	0.4	0.5	0.5	(mg/L)
47	pH Value	7.5	7.5	7.6	7.6	7.5	7.7	
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	0.36	0.34	0.34	0.36	0.44	0.36	(mg/L)

※1 N.D. = Not detected

※2 Necessary sanitation measures: Free residual chlorine  $\geq$  0.1 mg/L

## Water Quality Tests Results (Naruwadai)

No.	Items	Naruwadai					Unit
		31/10/2019	27/11/2019	11/12/2019	15/1/2020		
	Water temperature	17.2	15.2	10.4	9.2		( °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	0.5	0.4	0.5	0.5		(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			0.002			(mg/L)
24	Dichloroacetic acid			< 0.003			(mg/L)
25	Dibromochloromethane			0.002			(mg/L)
26	Bromate			< 0.001			(mg/L)
27	Total trihalomethanes			0.006			(mg/L)
28	Trichloroacetic acid			< 0.003			(mg/L)
29	Bromodichloromethane			0.002			(mg/L)
30	Bromoform			< 0.001			(mg/L)
31	Formaldehyde			< 0.008			(mg/L)
32	Zinc			< 0.01			(mg/L)
33	Aluminium	0.01	0.01	< 0.01	< 0.01		(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	6.9	6.2	6.0	6.3		(mg/L)
37	Manganese	< 0.001	< 0.001	< 0.001	< 0.001		(mg/L)
38	Chloride ion	6.9	6.4	7.4	7.4		(mg/L)
39	Calcium, Magnesium (Hardness)	21	21	21	20		(mg/L)
40	Total residue	48			49		(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	0.3	0.3	< 0.3		(mg/L)
47	pH Value	7.6	7.5	7.5	7.5		
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	0.38	0.40	0.38	0.40		(mg/L)

※1 N.D. = Not detected

※2 Necessary sanitation measures: Free residual chlorine  $\geq$  0.1 mg/L