

CITY OF CAPE TOWN 2020/ 2021 ANNUAL DRINKING WATER QUALITY REPORT. ANALYTICAL DATA AND APPROXIMATE DISTRIBUTION FOR CAPE TOWN DRINKING WATER.

Sample period: July 2020 to June 2021

When our residents open their taps, they can trust their water is reliable, tested, treated and safe to drink. The City of Cape Town is legally required to publish tap water quality analytical data once a year, to demonstrate continued compliance with water quality standards, or inform residents of possible risks. City of Cape Town tap water has for many years maintained 'excellent' compliance status with prescribed national drinking water quality standards (SANS241). The annual tap water quality reports from 2014 are available on the City's website, see www.capetown.gov.za/waterquality. Regular monthly updates are also available on National Department of Water and Sanitation's 'My Water' page for water quality: <http://ws.dwa.gov.za/IRIS/mywater.aspx>. This 'excellent' quality City water costs only 4c -7c a litre compared to about R10 a litre for shop-bought bottled water. See the water quality results below provided across Cape Town for the July 2020 to June 2021 period.

PARAMETERS	SANS 241 : 2015 Specs	BLACKHEATH SUPPLY Typical Analysis MAX 430 Mℓ/day	FAURE SUPPLY Typical Analysis MAX 500 Mℓ/day	KLOOF NEK SUPPLY Typical Analysis MAX 22.5 Mℓ/day	STEENBRAS SUPPLY Typical Analysis MAX 150 Mℓ/day	VOËLVLEI SUPPLY Typical Analysis MAX 273 Mℓ/day	WEMMERSHOEK SUPPLY Typical Analysis MAX 250 Mℓ/day	BROOKLANDS SUPPLY Typical Analysis MAX 5.5 Mℓ/day	HELDERBERG SUPPLY Typical Analysis MAX 12 Mℓ/day	WITZANDS SUPPLY Typical Analysis MAX 15 Mℓ/day	CONSTANTIA NEK SUPPLY Typical Analysis MAX 3 Mℓ/day	ALBION SPRINGS SUPPLY Typical Analysis MAX 1.999 Mℓ/day	MONWABISI DESALINATION SUPPLY Typical Analysis MAX 7 Mℓ/day
PHYSICAL & AESTHETIC DETERMINANDS													
Colour mg/ℓ Pt-Co	≤15	5	6	6	5	6	7	12	6	7	6	<5	5
Conductivity mS/m	≤170	12	17	21	14	14	7	76	18	31	19	20	73
Total Dissolved Solids mg/ℓ	≤1200	79	113	140	92	92	48	509	122	206	124	131	486
Turbidity NTU	Operational ≤1 / Aesthetic ≤5	0.6	0.6	0.7	0.6	0.7	0.7	0.6	0.6	0.7	0.6	1	0.6
pH (pH units)	≥5 to ≤9.7	8.7	8.2	8.6	7.6	7.7	8.2	8.5	8.4	7.6	7.5	7	8.6
CHEMICAL - MACRO DETERMINANDS													
Free Chlorine as Cl ₂ mg/ℓ	≤5	1.3	1.1	0.9	1.2	1.2	1.4	1.1	0.8	1.0	1.0	0.1	0.7
Nitrate as N mg/ℓ	≤11	0.2	0.2	0.5	0.2	0.3	0.3	0.2	0.4	0.3	0.2	1.4	0.4
Nitrite as N mg/ℓ	≤0.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Combined nitrate plus nitrite	≤1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
Sulphate as SO ₄ ²⁻ mg/ℓ	Aesthetic ≤250 / Acute health ≤500	12	32	33	18	12	4	186	6	23	34	11.5	3
Fluoride as F ⁻ mg/ℓ	≤1.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Ammonia as N mg/ℓ	≤1.5	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloride as Cl ⁻ mg/ℓ	≤300	16	21	25	25	24	11	108	35	47	28	40.7	200
Sodium as Na mg/ℓ	≤200	6.6	10.1	16.9	13.6	10.9	3.2	57.2	16.7	20.6	-	16.7	144
Zinc as Zn mg/ℓ	≤5	0.03	0.02	-	0.02	0.01	0.02	-	0.02	0.02	-	0.04	-
CHEMICAL - MICRO DETERMINANDS													
Antimony as Sb µg/ℓ	≤20	20	20	20	20	20	20	20	20	20	-	20	20
Arsenic as As µg/ℓ	≤10	10	10	10	10	10	10	10	10	10	-	10	10
Barium as Ba µg/ℓ	≤700	20	20	20	20	20	20	20	20	20	-	20	20
Boron as B mg/ℓ	≤2.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	0.1	1
Cadmium as Cd µg/ℓ	≤3	1	1	1	1	1	1	1	1	1	-	1	1
Chromium (Total) as Cr µg/ℓ	≤50	20	20	20	20	20	20	20	20	20	-	20	20
Copper as Cu µg/ℓ	≤2000	20	20	20	38.6	32.1	20	20	20	20	-	20	20
Cyanide as CN ⁻ µg/ℓ	≤200	20	2	1	11	11	13	11	13	12	12	<10	21
Iron as Fe µg/ℓ	Chronic Health ≤2000 / Aesthetic ≤300	226.5	78	23.7	46.9	130.9	150	53	71.5	103.2	-	84.8	69.2
Lead as Pb µg/ℓ	≤10	10	10	10	10	10	10	10	10	10	-	10	10
Manganese as Mn µg/ℓ	Chronic Health ≤400 / Aesthetic ≤100	20	20	20	20	20	20	20	20	20	-	20	20
Mercury as Hg µg/ℓ	≤6	5	5	5	5	5	5	5	5	5	-	5	5
Nickel as Ni µg/ℓ	≤70	20	20	20	20	20	20	20	20	20	-	20	20
Selenium as Se µg/ℓ	≤40	10	10	10	10	10	10	10	10	10	-	10	10
Uranium as U µg/ℓ	≤30	15	15	15	15	15	15	15	15	15	-	15	15
Aluminium as Al µg/ℓ	≤300	143.9	61.5	109	108.1	42.2	158	50	54.2	50.8	-	75.9	40
CHEMICAL - ORGANIC DETERMINANDS													
Total Organic Carbon mg/ℓ	≤10	2	2	2	2	2	1	4	2	3	2	1	2
Trihalomethanes													
Chloroform µg/ℓ	≤300	65	37	-	58	87	87	62	50	86	-	104	1
Bromoform µg/ℓ	≤100	1	1	-	1	1	1	1	9	2	-	5	13
Dibromochloromethane µg/ℓ	≤100	5	2	-	8	7	3	7	55	23	-	40	1
Bromodichloromethane µg/ℓ	≤60	20	7	-	32	23	13	23	42	51	-	58	1
Combined Trihalomethane	≤1	0.6	0.3	-	0.8	0.8	0.4	0.7	1.5	1.7	-	2	0.2
Phenols µg/ℓ	≤10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	-	-
MICROBIOLOGICAL DETERMINANDS													
<i>E. coli</i> count/100mℓ	Not Detected	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heterotrophic Plate Count Count/mℓ	≤1000	9	3	2	4	26	4	4	14	25	21	298	19
Total coliforms Count/100mℓ	≤10	1	1	1	1	1	1	2	3	1	1	26	12
Protozoan parasites													
<i>Cryptosporidium</i> Species Count/10ℓ	Not Detected	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-
<i>Giardia</i> Species Count/10ℓ	Not Detected	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	-	-
OTHER													
Hardness(Total) as CaCO ₃ mg/ℓ	-	29.6	43.7	50.3	22.8	29.1	12.1	212.3	63.5	58.8	-	29.3	107.7
Alkalinity as CaCO ₃ mg/ℓ	-	18	12	26	7	16	16	22	28	50	8	12	16
Calcium as Ca mg/ℓ	-	10.2	15.7	18.5	7.5	8.7	8.1	76.1	9.6	19.6	-	9.1	2.5
Potassium as K mg/ℓ	-	1	1.1	1	1	1	1	1.6	1.4	1.3	-	1.2	6.3
Magnesium as Mg mg/ℓ	-	1	1.1	1	1.8	1.8	1	5.4	2.3	2.4	-	1.6	1.1

KEY: ND = Not Detected. The water treatment plants supply water into an interconnected system of reservoirs and pipelines serving the municipal area.