

Cayman Water

2011 Water Quality Data

Parameter	WAC MCL	US Federal MCL	WHO guideline MCL	System field samples	ACWW	West Bay	Britannia	Major Sources
Microbiological contaminants								
Total coliform bacteria	0 (a)	5% (b)	5% (c)	3.7%	0.4%	0.0%	0.0%	naturally present in the environment
Faecal coliform bacteria	0 (a)	N/A	0 (a)	3.7%	0.0%	0.0%	0.0%	naturally present in the environment
Disinfection byproducts								
Total trihalomethanes (ppb)	N/E	80	1000		1.10	1.85	1.04	by-product of drinking water chlorination
Disinfectants								
Chlorine, free residual (ppm) (d)	0.2-0.5	MRDL-4	N/A		0.30	0.31	0.27	water additive used to control microbes
Volatile organic contaminants								
16 US regulated compounds	N/E	62-550-310 (4a)	various		U	U	U	various sources including industrial pollution
Inorganic contaminants								
Total dissolved solids (ppm) (d)	≤200	N/A	1000		167	193	176	residual from desalination process
Hydrogen Sulfide (ppm) (e)	≤0.01	N/A	0.05		0	0	0	residual from post treatment process
Copper (ppm) (f)	N/E	1.3	1		0.06	0.06	0.05	corrosion by-product
Zinc (ppm) (e)	N/E	N/A	3		0.14	0.10	0.14	corrosion inhibitor additive
Iron (ppm) (f)	N/E	N/A	0.3		0.05	<0.05	<0.05	corrosion by-product
Sodium (ppm) (f)	N/E	N/A	200		59	65	63	residual from desalination process
Chloride (ppm) (e)	N/E	N/A	250		96	110	100	residual from desalination process
Other parameters								
pH (d)	6.5-8.0	N/A	< 8		7.54	7.03	7.10	adjusted to neutral (7) in finishing process
Conductivity (µS/cm) (d)	≤400	N/A	N/A		332	381	348	is a function of TDS

Notes

- a) No colony forming units in any 100 ml sample
- b) The US Federal MCL for coliform bacteria must not show the presence of coliform bacteria in ≥5% of the monthly samples taken.
- c) The WHO MCL for coliform bacteria must not show the presence of coliform bacteria in ≥5% of the yearly samples taken.
- d) Average of all daily sample results for the year.
- e) From once yearly overseas lab testing sample

Abbreviations

- µS/cm micro-Siemens per centimetre
- ACWW- Abel Castillo Water Works
- MCL- Maximum contaminant level
- MRDL- Maximum residual disinfection level
- N/A- Not applicable
- N/E- Not established
- ppb- parts per billion
- ppm- parts per million
- U- below the detectable limit of the test method