

# Cayman Water

## 2015 Water Quality Data

Parameter	WAC MCL	US Federal MCL	WHO guideline MCL	System field samples	ACWW	West Bay	Britannia	Major Sources
<b>Microbiological contaminants</b>								
Total coliform bacteria	0 (a)	5% (b)	5% (c)	0.0%	0.0%	0.0%	0.0%	naturally present in the environment (f)
Faecal coliform bacteria	0 (a)	N/A	0 (a)	0.0%	0.0%	0.0%	0.0%	naturally present in the environment
<b>Disinfection byproducts</b>								
Total trihalomethanes (ppb)	N/E	80	1000		1.10	1.85	1.04	by-product of drinking water chlorination
<b>Disinfectants</b>								
Chlorine, free residual (ppm) (d)	0.2-0.5	MRDL-4	N/A		0.23	0.28	0.28	water additive used to control microbes
<b>Volatile organic contaminants</b>								
16 US regulated compounds	N/E	62-550-310 (4a)	various		U	U	U	various sources including industrial pollution
<b>Inorganic contaminants</b>								
Total dissolved solids (ppm) (d)	≤200	N/A	1000		135	183	147	residual from desalination process
Hydrogen Sulfide (ppm) (d)	≤0.01	N/A	0.05		0	0	0	residual from post treatment process
Copper (ppm) (e)	N/E	1.3	1		<0.05	<0.05	<0.05	corrosion by-product
Zinc (ppm) (e)	N/E	N/A	3		0.10	0.11	0.24	corrosion inhibitor additive
Iron (ppm) (e)	N/E	N/A	0.3		<0.05	<0.05	<0.05	corrosion by-product
Sodium (ppm) (e)	N/E	N/A	200		49	64	51	residual from desalination process
Chloride (ppm) (e)	N/E	N/A	250		83	112	84	residual from desalination process
<b>Other parameters</b>								
pH (d)	6.5-8.0	N/A	< 8		7.55	7.65	7.00	adjusted to neutral (7) in finishing process
Conductivity (µS/cm) (d)	≤400	N/A	N/A		270	366	294	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 monthly overseas lab testing samples for the year.
- f) It is possible for samples to be contaminated from exterior sources during the sampling process such as the tap, the sampling personnel or sample containers. US and WHO MCL's take this into account by setting an allowance for positive test results. WAC does not. CW resamples positive results the following day. If the resample results are negative, CW deems the initial sample as compromised. CW however reports all positive samples whether deemed compromised or not in the percentage calculation.

### Abbreviations

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