



Water Authority-Cayman

Grand Cayman Public Water Supply Biannual Analysis (from Red Gate Plants)

PARAMETER - BIANNUAL ANALYSIS <i>(all results in mg/l, unless otherwise stated)</i>	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	WHO Health Based Guidelines
	09-Jul-07	08-Dec-08	30-Nov-09	11-Apr-11	29-Nov-11	14-Aug-12	05-Aug-13	06-Aug-14	19-Oct-15	20-Jun-16	10-Jul-17	05-Nov-18	
Alkalinity	4.80	n/r	2.10	n/d	2.30	5.35	2.00	1.80	1.80	2.10	1.00	5.00	none
Aluminum	BDL	BDL	BDL	n/d	<0.005	<0.005	<0.005	0.010	0.005	<0.005	<0.005	n/d	none
Ammonia	BDL	BDL	n/r	BDL	<0.017	<0.017	n/r	< 0.02	<0.02	<0.02	n/r	n/r	none
Bicarbonate	5.9	n/r	2.6	n/d	2.8	6.2	2.4	2.20	2.20	2.60	1.22	6.10	none
Boron	n/d	n/d	1.3	0.7	1.1	1.1	1.5	1.2	1.3	0.9	n/d	1.0	2.4
Calcium	1.4	1.2	0.8	n/d	1.6	0.7	1.8	0.8	0.4	0.2	0.8	1.2	none
Chloride	91.0	108.0	103.9	86.0	98.0	107.9	105.0	102.5	120.0	83.0	84.0	74.0	none
Copper	BDL	0.002	BDL	n/d	<0.021	<0.021	<0.02	0.03	<0.04	<0.04	<0.04	< 0.02	2
Hardness	6.5	10.0	9.0	n/d	4.0	3.5	7.0	4.5	3.5	2.5	5.0	8.0	none
Iron	BDL	0.01	0.02	0.12	<0.008	<0.008	0.01	< 0.02	<0.02	<0.02	<0.02	n/d	none
Magnesium	0.7	1.7	1.7	n/d	0.0	0.4	0.6	0.6	0.6	0.5	0.7	1.0	none
Nitrate as N	BDL	0.30	1.80	BDL	<0.1	<0.1	<0.1	< 0.1	<0.1	0.3	n/d	n/d	50 as NO ₃ ⁻
Orthophosphate	1.74	1.47	2.18	n/d	1.56	1.10	1.10	0.94	1.1	1.0	1.0	1.5	none
Sodium	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	none
Sulphate	11.5	12.9	10.8	n/d	10.6	8.7	10.9	4.7	7.7	7.7	4.1	7.1	none
Sulfide	BDL	BDL	BDL	BDL	<0.002	<0.002	<0.01	< 0.01	<0.01	<0.01	<0.01	n/d	none
Zinc	0.548	0.484	0.688	0.643	0.461	0.438	0.420	0.34	0.4	0.4	0.4	0.5	none
PARAMETER - DAILY ANALYSIS <i>(all results in mg/l, unless otherwise stated)</i>													
Total dissolved solids	150	195	173	158	170	169	210	156.9	169	165	140	125	none
Electrical conductivity $\mu S/cm$	336	391	369	329	354	353	370	361	352	322	322	262	none
Total chlorine residual	0.55	0.56	0.57	0.56	0.59	0.66	0.65	0.53	0.50	0.53	0.62	0.58	none
Free chlorine residual	0.53	0.51	0.55	0.52	0.56	0.56	0.59	0.51	0.50	0.44	0.51	0.55	≥ 0.5
pH units	7.53	7.09	7.43	7.69	7.74	7.78	7.07	7.51	7.82	7.39	7.51	7.45	none
Total coliform bacteria cfu/100ml	BDL	BDL	BDL	BDL	BDL	<1	<1.0	< 1.0	<1.0	<1.0	<1.0	< 1.0	0
E. coli cfu/100 ml	BDL	BDL	BDL	BDL	BDL	<1	<1.0	< 1.0	<1.0	<1.0	<1.0	< 1.0	0
Thermotolerant coliform bacteria cfu/100ml	BDL	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	n/d	0
Heterotrophic Plate Count cfu/ml	0	0	0	n/d	0	0	<0.1	< 0.1	<0.1	<0.1	<0.1	1	none

NOTE: Samples collected @ Red Gate Reservoir Site; n/d = not done; n/a = not applicable; n/r = not reportable; BDL = Below Detection Limit

Results below detection limit are reported as "<" and the detection limit.

Annual analysis instead of biannual from 2002 onwards

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