



City Of Brantford Water System

SCADA Data - Monthly Averages

May 2021

Water Treatment Plant			
Source	Parameter	Units	Monthly Average
Grand River	Flow Rate	ML/d	40.10
Brantford POE	Flow Rate	ML/d	34.18

Grand River	Turbidity	NTU	8.43
Filter 1	Turbidity	NTU	0.046
Filter 2	Turbidity	NTU	0.044
Filter 3	Turbidity	NTU	0.046
Filter 4	Turbidity	NTU	0.049
Filter 5	Turbidity	NTU	0.048
Filter 6	Turbidity	NTU	0.057
Filter 7	Turbidity	NTU	0.054
Filter 8	Turbidity	NTU	0.051
Brantford POE	Turbidity	NTU	0.078

CCC Effluent	Log Removal		16.29
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Brantford POE	Combined Chlorine	mg/L	2.62
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Brantford POE	Pressure	psi	97.24
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Distribution System			
Source	Parameter	Units	Monthly Average
Tollgate Reservoir	Total Chlorine	mg/L	2.26
Park Rd. Reservoir	Total Chlorine	mg/L	2.18
Northwest Reservoir	Total Chlorine	mg/L	2.46

Albion St. Booster	Pressure	psi	90.56
Tollgate Reservoir	Pressure	psi	60.00
Park Rd. Reservoir	Pressure	psi	79.10
Northwest Reservoir	Pressure	psi	85.29
Bell Lane	Pressure	psi	50.77
Fifth Ave	Pressure	psi	O.O.S
Lawren Harris	Pressure	psi	65.12
St. Andrews	Pressure	psi	92.03
Empey St.	Pressure	psi	82.61

Definitions:

SCADA - Supervisory Control and Data Acquisition

CCC - Chlorine Contact Chambers

Log Removal – a shorthand term for \log_{10} removal, used in reference to the physical-chemical treatment of water to remove, kill, or inactivate pathogenic organisms.

Combined Chlorine - The concentration of residual chlorine that is combined with ammonia (NH₃), organic nitrogen, or both in water as chloramine, yet is still available to oxidize organic matter and act as a disinfectant. Combined chlorine can be accurately estimated as the difference between the measured total chlorine and measure or known free chlorine residual.



City Of Brantford Water System

Treatment Operators Analysis

May 2021

Source	Parameter	Units	MAC	AO/OG	Minimum	Maximum	Average
Grand River	Ammonia	mg/L			0.01	0.15	0.08
Brantford POE	Ammonia	mg/L			0.21	0.56	0.34
Grand River	True Colour	PtCo			12.0	20.0	16.5
Brantford POE	True Colour	PtCo		5	0.0	2.0	0.0
Brantford POE	Aluminum	mg/L		0.100	0.020	0.165	0.099
Grand River	UV254				0.123	0.154	0.135
Brantford POE	UV254				0.030	0.047	0.035
Brantford POE	Fluoride	mg/L	1.50		0.540	0.810	0.650
Brantford POE	Free chlorine	mg/L			0.10	0.10	0.10
Brantford POE	Combined Chlorine	mg/L	3.00		2.40	3.00	2.63
Brantford POE	Total Chlorine	mg/L			2.50	3.10	2.73

MAC - Maximum Acceptable Concentration

AO/OG - Aesthetic Objective/Operational Guideline

Combined Chlorine - The concentration of residual chlorine that is combined with ammonia (NH₃), organic nitrogen, or both in water as chloramine, yet is still available to oxidize organic matter and act as a disinfectant. Combined chlorine can be accurately estimated as the difference between the measured total chlorine and measure or known free chlorine residual.