

## **2024** Blazer Water Treatment Plant Summary

COUNTY		Blazer Treated Water (Entering the Distribution System)				
Parameter	Units	Winter (Feb 2024)	Summer (Aug 2024)	Average	Guideline	Common Source
Aluminum	mg/L	0.0804	0.303	0.192	< 0.100 OG Annual Avg.	Naturally occurring and plant treatment process chemicals
Ammonia	mg/L as N	<0.0050	0.0799	<0.0425	No Maximum	Naturally occurring; released agricultural or industrial wastes
Antimony	mg/L	<0.00010	<0.00010	<0.00010 0.00012	0.006 MAC	Erosion of natural deposits in watershed Erosion of natural deposits in watershed
Arsenic Atrazine + metabolites	mg/L mg/L	0.00010 <0.00010	0.00014 <0.00010	<0.00012	0.01 ALARA 0.005 MAC	Leaching and/or runoff from agricultural use
Barium	mg/L	0.0390	0.0333	0.0362	2 MAC	Erosion of natural deposits in watershed
Benzene	mg/L	<0.00050	<0.00050	<0.00050	0.005 MAC	Releases or spills from industrial use
Benzo(a)pyrene	mg/L	<0.0000050	<0.0000050	<0.0000050	0.00004 MAC	Distribution system materials
Boron	mg/L	< 0.010	<0.010	<0.010	5 MAC	Naturally occurring; leaching or runoff from industrial use
Bromate	mg/L	0.00043	<0.00033	<0.00038	0.01 MAC	Possible contamination in hypochlorite solution
Bromoxynil	mg/L	<0.000050	<0.000050	<0.000050	0.005 MAC	Leaching and/or runoff from agricultural use
Cadmium Calcium	mg/L	<0.0000050 50.2	<0.0000050 39.6	<0.0000050 44.9	0.007 MAC No Maximum	Erosion of natural deposits in watershed Erosion of natural deposits in watershed
Carbon tetrachloride	mg/L mg/L	<0.00050	<0.00050	<0.00050	0.002 MAC	Industrial effluents and leaching from hazardous waste sites
Chloramines	mg/L	<0.20	<0.20	<0.20	No Maximum	Formed in the presence of both chlorine and ammonia
Chloride	mg/L	4.87	4.88	4.88	≤250 AO	Naturally occurring, dissolved salt deposits, highway salt
Chlorpyrifos	mg/L	<0.00010	<0.00010	<0.00010	0.09 MAC	Leaching and/or runoff from agricultural use
Chromium	mg/L	<0.00050	<0.00050	<0.00050	0.05 MAC	Erosion of natural deposits in watershed
Colour	CU	<2.0	<5.0	<2.0	15 AO	Erosion of natural deposits in watershed
Coliforms, E.Coli	PA/100mL	Absent	Absent	Absent	0 MAC 0 MAC	Domestic animals, wildlife, human waste  Soil. domestic animals and wildlife
Conner Conner	PA/100mL mg/L	Absent 0.00090	Absent <0.00050	Absent <0.00070	0 MAC	Soil, domestic animals and wildlife  Erosion of natural deposits in watershed
Copper Cvanazine	mg/L mg/L	<0.00090	<0.00050	<0.00070	No Maximum	Leaching and/or runoff from agricultural use
Cyanide	mg/L	<0.0050	<0.100	<0.100	0.2 MAC	Industrial and mining effluents; release from organic compounds.
Cyanobacterial Toxins (as Microcystin, Total)	mg/L	<0.00020	<0.00020	<0.00020	0.0015 MAC	Naturally occurring; released from blooms of blue-green algae
Diazinon	mg/L	<0.0000250	< 0.000125	< 0.000125	0.02 MAC	Run off from agricultural or other uses.
Dicamba 1.2-Dichlorobenzene	mg/L mg/L	<0.00010 <0.00050	<0.00010 <0.00050	<0.00010 <0.00050	0.12 MAC 0.2 MAC	Leaching and/or runoff from agricultural use Releases or spills from industrial use
1,4-Dichlorobenzene	mg/L	<0.00050	<0.00050	<0.00050	0.005 MAC	Releases or spills from industrial use
1,2-Dichloroethane	mg/L	< 0.00050	< 0.00050	< 0.00050	0.005 MAC	Releases or spills from industrial use
Dichloromethane	mg/L mg/I	<0.0010	<0.0010	<0.0010	0.05 MAC 0.9 MAC	Industrial and municipal wastewater discharges By-product of chlorination.
2,4-Dichlorophenol 2,4 D (2,4-Dichlorophenoxy	mg/L mg/L	<0.00030	<0.00020	<0.00030	0.1 MAC	Leaching and/or runoff from use as a weed controller
acetic acid) Diclofop-methyl	mg/L	<0.00010	<0.00010	<0.00010	0.009 MAC	Leaching and/or runoff from use as a weed controller
Dimethoate	mg/L	<0.00010	<0.00010	<0.00010	0.02 MAC	Leaching and/or runoff from agricultural use
Diuron	mg/L	<0.00050	<0.00050	< 0.00050	0.15 MAC	Leaching and/or runoff from use in controlling vegetation
Ethylbenzene	mg/L	< 0.00050	<0.00050	<0.00050	0.14 MAC	Emissions, effluents or spills from petroleum and chemical industries
Fluoride <sup>1</sup>	mg/L	0.134	0.094	0.114	1.5 MAC 0.28 MAC	Erosion of natural deposits in watershed Leaching and/or runoff from use as a weed controller
Glyphosate Haloacetic Acid, Total	mg/L mg/L	<0.00020 0.00542	<0.00020 0.01290	<0.00020 0.00916	0.28 MAC 0.08 ALARA	By-product of chlorination
Hardness, Total	mg/L as CaCO <sub>2</sub>	190	152	171	No Maximum	Erosion of natural deposits in watershed
Iron	mg/L	< 0.010	< 0.010	< 0.010	≤0.300 AO	Erosion of natural deposits in watershed
Lead	mg/L	<0.000050	<0.000050	<0.000050	0.005 ALARA	Leaching from plumbing (pipes, solder, brass fittings, lead service lines)
Magnesium	mg/L	15.6	12.8	14.2	No Maximum	Erosion of natural deposits in watershed
Malathion Manganese	mg/L mg/L	<0.000250 0.00021	<0.0000250 0.00013	<0.0000250 0.00017	0.19 MAC 0.12 MAC	Leaching and/or runoff from agricultural and other uses  Erosion of natural deposits in watershed
Mercury	mg/L	<0.00021	<0.00013	<0.00017	0.12 MAC	Erosion of natural deposits in watershed
Methoxychlor	mg/L	<0.0000080	<0.0000080	<0.0000080	No Maximum	Leaching and/or runoff from agricultural and other uses
Metolachlor	mg/L	<0.0000250	< 0.000125	< 0.000125	0.05 MAC	Leaching and/or runoff from agricultural and other uses
Metribuzin	mg/L	<0.00010	<0.00010	<0.00010	0.08 MAC	Leaching and/or runoff from agricultural use
Monochlorobenzene	mg/L	<0.00050	<0.00050	<0.00050	0.08 MAC	Releases or spills from industrial effluents
Nitrate Nitrite	mg/L as N mg/L as N	0.168 <0.010	0.115	0.142 <0.010	10 (as N) MAC 1 (as N) MAC	Erosion of natural deposits in watershed Erosion of natural deposits in watershed
Nitrite Nitrilotriacetic Acid (NTA)	mg/L as N mg/L	<0.010	<0.010	<0.010	0.40 MAC	Sewage contamination
Pentachlorophenol	mg/L	<0.00050	<0.00050	<0.00050	0.06 MAC	By-product of chlorination
pH	pH units	8.26	8.17	8.22	7-10.5 MAC	Influenced by dissolved minerals in water, temp, and treatment process
Picloram	mg/L	<0.00010	<0.00010	<0.00010	0.19 MAC	Leaching and/or runoff from agricultural and other uses
Selenium Silver	mg/L	0.000620 <0.000010	0.000477 <0.000010	0.000549 <0.000010	0.05 MAC No Maximum	Naturally occurring (erosion and weathering of rocks and soils)  Naturally occurring (erosion and weathering of rocks and soils)
Silver Simazine	mg/L mg/L	<0.00010 <0.00010	<0.00010 <0.00010	<0.00010 <0.00010	No Maximum 0.01 MAC	Naturally occurring (erosion and weathering of rocks and soils)  Leaching and/or runoff from agricultural and other uses
Sodium	mg/L mg/L	<0.00010 4.74	<0.00010	<0.00010 4.11	0.01 MAC ≤200 AO	Erosion of natural deposits in watershed
Sulphate (Sulfate)	mg/L	54.0	38.4	46.2	≤500 AO	Erosion of natural deposits in watershed
Sulphide as S	mg/L	< 0.0015	< 0.0015	< 0.0015	≤0.05 AO	Reduction of sulphates by sulphate-reducing bacteria; industrial wastes
Terbufos	mg/L	<0.00050	<0.00050	<0.00050	0.001 MAC	Leaching and/or runoff from agricultural and other uses
Tetrachloroethylene	mg/L	<0.00050	<0.00050	<0.00050	0.01 MAC	Industrial effluents or spills  Reproduct of physication, industrial effluents and use of posticides
2,3,4,6-Tetrachlorophenol Toluene	mg/L mg/L	<0.00050 <0.00040	<0.00050 <0.00040	<0.00050 <0.00040	0.1 MAC 0.06 MAC	By-product of chlorination; industrial effluents and use of pesticides Emissions, effluents or spills from petroleum and chemical industries
Total Dissolved Solids	mg/L mg/L	144	204	174	500 AO	Erosion of natural deposits in watershed
Total Organic Carbon	mg/L	<0.50	0.81	<0.65	No Maximum	Erosion of natural deposits in watershed
Trichloroethylene	mg/L	<0.00050	<0.00050	< 0.00050	0.005 MAC	Industrial effluents and spills from improper disposals
2,4,6-Trichlorophenol	mg/L	<0.00050	<0.00050	<0.00050	0.005 MAC	By-product of chlorination; industrial effluents and spills
Trifluralin	mg/L	<0.00010	<0.00010	<0.00010	0.045 MAC 0.1 MAC	Runoff from agricultural uses  By-product of chlorination
Trihalomethanes, Total Uranium	mg/L mg/L	0.0077 0.000551	0.0160 0.000491	0.0119 0.000521	0.1 MAC 0.02 MAC	By-product of chlorination Industrial effluents or spills
Vinyl chloride	mg/L mg/L	<0.000551	<0.000491	<0.000521	0.02 MAC 0.002 ALARA	Industrial effluents; degradation product from organic solvents in groundwater; leaching from PVC pipes
Xylenes (total)	mg/L	<0.00050	<0.00050	<0.00050	0.09 MAC	Emissions, effluents or spills from petroleum and chemical industries
Zinc	mg/L	<0.0030	< 0.0030	< 0.0030	≤5.000 AO	Erosion of natural deposits in watershed/leaching from plumbing fixtures

Legend

<sup>1</sup> Fluoride is not added at the Blazer Water Treatment Plant
(AO) Aesthetic Objective as determined by Health Canada
(ALRAR) As Low As Reasonably Adnessible as determined by Health Canada
(OG) Operating guidance as determined by Health Canada
(MAC) Maximum Acceptable Concentration as determined by Health Canada
< Indicates not detected above the specified parameter (less than)
mg/L = milligeams per lift, or, parts per million
TCU = True Colour Units
PA = Present or Absent

<u>Links</u>

Health Canada Guidelines for Canadian Drinking Water Quality, Summary Table (Sept 2020)

Health Canada Water Quality - Reports and Publications

Alberta Environment and Parks

Potable Water Regulation