

Pristine Water Solutions Box 11 Group 320 RR 3 Selkirk, MB R1A 2A8 Phone: (431) 813.5694 Toll Free: (833) 573.5694

Informational Water Quality Report

Client:

Mrs. & Mr. Jane Doe 123 Countryside Road Rural, MB Sample #: 1 & 2

Location: Raw water drawn from well;

treated water from bathtub

Type of Water: Well water

Collection Date & Time: 09 January 2023 13:00

Definition and Legend

This informational water quality report compares the actual test results to national standards as defined in the *Guidelines for Canadian Drinking Water Quality* as established by Health Canada.

MAC: Maximum Acceptable Concentration (MAC) is the highest level of contaminant allowed in drinking water on the basis

of comprehensive review of the known health effects associated with each contaminant.

AO: Aesthetic Objective is the highest level of a non-enforceable guideline of a characteristic of water at which consumers

consider the water drinkable. These characteristics may affect taste, odour, or colour of water, or which may

Interfere with the supply of good quality water. They do not cause adverse health effects.

Action Levels: Are defined in treatment techniques which are required processes

intended to reduce the level of a contaminant in drinking water.

ppm (mg/L): Unless otherwise indicated, results and standards are expressed as an amount in parts per million

(which is often referred to as milligrams per liter). They are equivalents.

gpg: A common measurement of water hardness, grains per gallon (1 gpg = 17.1 mg/L)

ND: The contaminant was not detected above the minimum detection level.

NA: The contaminant was not analysed.

The contaminant was not detected above the minimum detection level,

or is within the referenced standard

The contaminant was detected above the standard but is not an

enforceable MAC.

The contaminant was detected above the Health Canada enforceable standard, or

the existing treatment equipment is not working as expected.

TEST RESULTS: Before treatment

Status	Contaminant	Result	Units	National Standards	Health Considerations & Comments
NA	Chlorine	NA	ppm	None required	Most Canadian drinking water distribution systems range from 0.04 - 2.00 ppm
				C. G 47.0 (. 4.0)	
•	Hardness	889 (52)	ppm (gpg)	Soft: < 17.0 (< 1.0 gpg) Slightly Hard: 17.1-60 (1.0-3.5 gpg) Moderately Hard: 60-120 (3.5-7.0 gpg) Hard: 120-180 (7.0-10.5 gpg) Very Hard: > 180 (> 10.5 gpg)	Although hardness may have significant aesthetic and personal property effects, major contributors of hardness (calcium and magnesium) are not of direct public health concern.
	Iron: Ferrous Ferric Total	2.26 0.23 2.49	ppm	AO: ≤ 0.3	While iron levels are not considered a health concern, levels above AO may affect taste and cause staining of laundry and plumbing fixtures.
	Manganese	0.02	ppm	MAC: ≤ 0.12 AO: ≤ 0.02	Can affect neurological development and behaviour, including memory. Infants are especially at risk. AO based on minimising the occurrence of discoloured water and staining of laundry and plumbing fixtures.
·	Nitrate	ND	ppm	MAC: ≤ 45	Naturally occurring; leaching or runoff from agricultural fertilisers, manure and domestic sewage. Can cause blue baby syndrome and is classified as a possible carcinogen.
	рН	6.79		pH of 7 is neutral (neither acidic nor alkaline). Drinking water pH in the range of 6.5 - 9.0 is considered acceptable but no standard exists.	Controlling pH is important to maximise treatment effectiveness, control corrosion, and reduce leaching from distribution systems and plumbing components.
	Sulfide	ND	ppm	AO: ≤ 0.05	Based on taste and odour; levels above AO would render water unpalatable
	TDS	1087	ppm	AO: ≤ 500	Based on taste; TDS above 500 ppm results in excessive scaling of plumbing & water-based appliances

TEST RESULTS: After treatment

Status	Contaminant	Result	Units	National Standards	Health Considerations & Comments
NA	Chlorine	NA	ppm	None required	Most Canadian drinking water distribution systems range from 0.04 - 2.00 ppm
				C. G 47.0 (. 4.0)	
	Hardness	804 (47)	ppm (gpg)	Soft: < 17.0 (< 1.0 gpg) Slightly Hard: 17.1-60 (1.0-3.5 gpg) Moderately Hard: 60-120 (3.5-7.0 gpg) Hard: 120-180 (7.0-10.5 gpg) Very Hard: > 180 (> 10.5 gpg)	Although hardness may have significant aesthetic and personal property effects, major contributors of hardness (calcium and magnesium) are not of direct public health concern.
	Iron: Ferrous Ferric Total	0.22 0.97 1.19	ppm	AO: ≤ 0.3	While iron levels are not considered a health concern, levels above AO may affect taste and cause staining of laundry and plumbing fixtures.
	Manganese	0.01	ppm	MAC: ≤ 0.12 AO: ≤ 0.02	Can affect neurological development and behaviour, including memory. Infants are especially at risk. AO based on minimising the occurrence of discoloured water and staining of laundry and plumbing fixtures.
NA	Nitrate	NA	ppm	MAC: ≤ 45	Naturally occurring; leaching or runoff from agricultural fertilisers, manure and domestic sewage. Can cause blue baby syndrome and is classified as a possible carcinogen.
	рН	6.76		pH of 7 is neutral (neither acidic nor alkaline). Drinking water pH in the range of 6.5 - 9.0 is considered acceptable but no standard exists.	Controlling pH is important to maximise treatment effectiveness, control corrosion, and reduce leaching from distribution systems and plumbing components.
	Sulfide	ND	ppm	AO: ≤ 0.05	Based on taste and odour; levels above AO would render water unpalatable
	TDS	1153	ppm	AO: ≤ 500	Based on taste; TDS above 500 ppm results in excessive scaling of plumbing & water-based appliances