

Sample Name:	Wanaka Spring	Wanaka Spring		
Date	Friday, January 12, 2018	Wednesday, April 24, 2024	The Maximum Acceptable Values (MAV) are taken from the 'Water Services (Drinking Water Standards for New Zealand) Regulations 2022', published under the authority of the New Zealand Government-2022. Copies of this publication are available from: https://www.legislation.govt.nz/regulation/public/2022/0168/latest/whole.html	
Time	2.45pm	1:00pm		
Routine Water + E.coli profile Kit				
Escherichia coli	MPN / 100mL	< 1	< 1	Escherichia coli2 - Less than one in 100 mL of sample.
Turbidity	NTU	0.06	0.06	≤ 5
pH	pH Units	8	8.1	pH 7.0–8.5 Should be between 7 and 8. Most waters with a low pH have a high plumbosolvency. Waters with a high pH: have a soapy taste and feel. A pH less than 8 is preferable for effective disinfection with chlorine
Total Alkalinity	g/m3 as CaCO3	91	93	Higher alkalinity is good to have in our drinking water because it keeps the water safe for us to drink. The amount of Alkalinity that should be in our water is 20-200 mg/L for typical drinking water.
Free Carbon Dioxide	g/m3 at 25°C	1.7	1.5	
Total Hardness	g/m3 as CaCO3	92	89	Hardness (total) (Ca + Mg) as CaCO3 200 mg/L High hardness causes scale deposition, scum formation. Low hardness (<100) may be more corrosive 100–300
Electrical Conductivity (EC)	mS/m	19.1	19.9	Very Low
Electrical Conductivity (EC)	µS/cm	191	199	Very Low
Approx Total Dissolved Salts	g/m3	128	133	Total dissolved solids 1000 mg/L Taste may become unacceptable from 600–1200 mg/L
Total Arsenic	g/m3	<0.0011	<0.0011	0.01 MAV
Total Boron	g/m3	< 0.0053	< 0.0053	Boron 1.4 MAV
Total Calcium	g/m3	33	32	
Total Copper	g/m3	< 0.0053	< 0.0053	Copper 2 MAV
Total Iron	g/m3	< 0.021	< 0.021	Iron 0.2 mg/L Staining of laundry and sanitary ware
Total Lead	g/m3	<0.00011	<0.00011	MAV 0.01
Total Manganese	g/m3	< 0.0053	< 0.0053	Manganese 0.04 mg/L Staining of laundry 0.10 Taste threshold (MAV 0.4 mg/L)
Total Magnesium	g/m3	2.3	2.3	
Total Potassium	g/m3	1.16	1.16	
Total Sodium	g/m3	3	3	Sodium <200 mg/L Taste threshold
Total Zinc	g/m3	<0.00011	<0.00011	Zinc 1.5 mg/L Taste threshold. May affect appearance from 3 mg/L
Chloride	g/m3	1	0.9	Chloride 250 mg/L Taste, and causes corrosion
Nitrate-N	g/m3	0.65	0.67	Acceptable Value (MAV) of 50 milligrams per litre (mg/l) for nitrate, which is equivalent to 11.3 mg/l nitrate-nitrogen - Nitrite, long-term 0.2 mg/L Expressed in mg/L as NO2. PMAV (long term)
Sulphate	g/m3	4.6	3.9	Sulphate 250 mg/L Taste threshold

Overall Comment:

The standards set limits for the concentration of determinands in drinking water. The Maximum Acceptable Values (MAVs) for any determinand must not be exceeded at any time.

The Aesthetic Values are taken the publication, 'Aesthetic Values for Drinking Water Notice 2022' issued by the Water Services Regulator ("Taumata Arowai"). Aesthetic values specify or provide minimum or maximum values for substances and other characteristics that relate to the acceptability of drinking water to consumers (such as appearance, taste or odour).

Note that the units: g/m3 are the same as mg/L and ppm.