

2024



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Certificate of Analysis

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Client:

Mackenzie District Council

Contact:

Geoff Horler
C/- Mackenzie District Council
PO Box 52
Fairlie 7949

Lab No:

3666762

DWAPv1

Date Received:

07-Sep-2024

Date Reported:

17-Sep-2024

Quote No:

80544

Order No:

110837

Client Reference:

Water Supply - Yearly Monitoring

Submitted By:

Geoff Horler

Sample Type: Potable Water

Sample Name:	Tekapo Supply 06-Sep-2024 12:30 pm	Twizel Supply 06-Sep-2024 11:20 am	Aesthetic Values	Maximum Acceptable Values (MAV)	
Lab Number:	3666762.1	3666762.2			
Routine Water Profile					
Turbidity	NTU	0.35	0.30	≤ 5	-
pH	pH Units	8.7	6.7	7.0 - 8.5	-
Total Alkalinity	g/m ³ as CaCO ₃	82	18.2	-	-
Free Carbon Dioxide	g/m ³ at 25°C	< 1.0	6.8	-	-
Total Hardness	g/m ³ as CaCO ₃	61	15.8	≤ 200	-
Electrical Conductivity (EC)	mS/m	16.4	5.0	-	-
Electrical Conductivity (EC)	µS/cm	164	50	-	-
Approx Total Dissolved Salts	g/m ³	110	33	≤ 1000	-
Total Arsenic	g/m ³	< 0.0011	< 0.0011	-	0.01
Total Boron	g/m ³	< 0.0053	< 0.0053	-	2.4
Total Calcium	g/m ³	24	4.9	-	-
Total Copper	g/m ³	0.00058	0.0024	≤ 1	2
Total Iron	g/m ³	< 0.021	< 0.021	≤ 0.3	-
Total Lead	g/m ³	0.00023	< 0.00011	-	0.01
Total Magnesium	g/m ³	0.121	0.85	-	-
Total Manganese	g/m ³	0.00082	< 0.00053	≤ 0.04 (Staining) ≤ 0.10 (Taste)	0.4
Total Potassium	g/m ³	6.2	0.57	-	-
Total Sodium	g/m ³	7.4	3.3	≤ 200	-
Total Zinc	g/m ³	0.082	0.0020	≤ 1.5	-
Chloride	g/m ³	< 0.5	1.7	≤ 250	-
Nitrate-N	g/m ³	0.39	0.74	-	11.3
Sulphate	g/m ³	1.3	1.5	≤ 250	-

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Certificate of Analysis

Page 1 of 2

Client:

Mackenzie District Council

Contact:

Arnel Loria
C/- Mackenzie District Council
PO Box 52
Fairlie 7949

Lab No:

3984746

SPv1

Date Received:

13-Sep-2025

Date Reported:

18-Sep-2025

Quote No:

80544

Order No:

113976

Client Reference:

Water Supply - Yearly Monitoring

Submitted By:

Arnel Loria

Sample Type: Potable Water

Sample Name:	Twizel Supply 12-Sep-2025 12:10 pm	
Lab Number:	3984746.1	
Routine Water Profile		
Turbidity	NTU	0.08
pH	pH Units	6.4
Total Alkalinity	g/m ³ as CaCO ₃	16.2
Free Carbon Dioxide	g/m ³ at 25°C	12.6
Total Hardness	g/m ³ as CaCO ₃	15.7
Electrical Conductivity (EC)	mS/m	4.7
Electrical Conductivity (EC)	µS/cm	47
Approx Total Dissolved Salts	g/m ³	32
Total Arsenic	g/m ³	< 0.0011
Total Boron	g/m ³	< 0.053
Total Calcium	g/m ³	5.4
Total Copper	g/m ³	0.0029
Total Iron	g/m ³	< 0.021
Total Lead	g/m ³	< 0.00011
Total Magnesium	g/m ³	0.56
Total Manganese	g/m ³	< 0.00053

Total Potassium	g/m ³	0.45
Total Sodium	g/m ³	2.4
Total Zinc	g/m ³	0.0019
Chloride	g/m ³	1.3
Nitrate-N	g/m ³	0.85
Sulphate	g/m ³	1.6

Summary of Methods

The following table(s) give a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those achievable in a relatively simple matrix.