

## Certificate of Analysis

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<b>Client:</b>	Western BOP District Council	<b>Lab No:</b>	3684254	SPV1
<b>Contact:</b>	Erika MacGregor C/- Western BOP District Council Private Bag 12803 Tauranga Mail Centre Tauranga 3143	<b>Date Received:</b>	02-Oct-2024	
		<b>Date Reported:</b>	07-Oct-2024	
		<b>Quote No:</b>	126518	
		<b>Order No:</b>	67497	
		<b>Client Reference:</b>	WSZ & CSZ Annual bore testing part 1	
		<b>Submitted By:</b>	Erika MacGregor	

### Sample Type: Drinking Water for DWSNZ Compliance

Sample Name:	G00304 - Athenree Quarry Bore North 01-Oct-2024 8:40 am	G00577 - Athenree Quarry Bore South 01-Oct-2024 8:30 am	G00305 - Waihi Beach Wilson Rd Bore 01-Oct-2024 9:30 am
<b>Lab Number:</b>	3684254.1	3684254.2	3684254.3
Total Alkalinity	g/m <sup>3</sup> as CaCO <sub>3</sub> 64	71	63
Total Antimony	g/m <sup>3</sup> < 0.00021	< 0.00021	< 0.00021
Total Arsenic	g/m <sup>3</sup> 0.0017	0.0043	0.0023
Total Barium	g/m <sup>3</sup> < 0.0053	< 0.0053	0.051
Total Cadmium	g/m <sup>3</sup> < 0.000053	< 0.000053	< 0.000053
Total Calcium	g/m <sup>3</sup> 9.7	7.2	5.1
Total Chromium	g/m <sup>3</sup> < 0.00053	< 0.00053	< 0.00053
Total Copper	g/m <sup>3</sup> < 0.00053	0.00070	< 0.00053
Total Lead	g/m <sup>3</sup> 0.00027	0.00028	< 0.00011
Total Magnesium	g/m <sup>3</sup> 5.3	4.5	3.8
Total Mercury	g/m <sup>3</sup> < 0.00008	< 0.00008	< 0.00008
Total Nickel	g/m <sup>3</sup> < 0.00053	< 0.00053	< 0.00053
Total Sodium	g/m <sup>3</sup> 20	28	28
Chloride	g/m <sup>3</sup> 18.6	19.5	22
Sulphate	g/m <sup>3</sup> 3.6	3.5	3.3

## Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

### Sample Type: Drinking Water for DWSNZ Compliance

Test	Method Description	Default Detection Limit	Sample No
Total Digestion	Nitric acid digestion. APHA 3030 E (modified) : Online Edition.	-	1-3
Total Alkalinity	Titration to pH 4.5 (M-alkalinity), autotitrator. APHA 2320 B (modified for Alkalinity <20) : Online Edition.	1.0 g/m <sup>3</sup> as CaCO <sub>3</sub>	1-3
Total Antimony	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B : Online Edition / US EPA 200.8.	0.00021 g/m <sup>3</sup>	1-3
Total Arsenic	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B : Online Edition / US EPA 200.8.	0.0011 g/m <sup>3</sup>	1-3
Total Barium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B : Online Edition / US EPA 200.8.	0.0053 g/m <sup>3</sup>	1-3
Total Cadmium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B : Online Edition / US EPA 200.8.	0.000053 g/m <sup>3</sup>	1-3
Total Calcium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B : Online Edition.	0.053 g/m <sup>3</sup>	1-3
Total Chromium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B : Online Edition / US EPA 200.8.	0.00053 g/m <sup>3</sup>	1-3
Total Copper	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B : Online Edition / US EPA 200.8.	0.00053 g/m <sup>3</sup>	1-3
Total Lead	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B : Online Edition / US EPA 200.8.	0.00011 g/m <sup>3</sup>	1-3



This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised. The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked \* or any comments and interpretations, which are not accredited.

Sample Type: Drinking Water for DWSNZ Compliance			
Test	Method Description	Default Detection Limit	Sample No
Total Magnesium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B : Online Edition.	0.021 g/m <sup>3</sup>	1-3
Total Mercury	Bromine Oxidation followed by Atomic Fluorescence. US EPA Method 245.7, Feb 2005.	0.00008 g/m <sup>3</sup>	1-3
Total Nickel	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B : Online Edition / US EPA 200.8.	0.00053 g/m <sup>3</sup>	1-3
Total Sodium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B : Online Edition.	0.021 g/m <sup>3</sup>	1-3
Chloride	Filtered sample. Ion Chromatography. APHA 4110 B (modified) : Online Edition.	0.5 g/m <sup>3</sup>	1-3
Sulphate	Filtered sample. Ion Chromatography. APHA 4110 B (modified) : Online Edition.	0.5 g/m <sup>3</sup>	1-3

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 03-Oct-2024 and 07-Oct-2024. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

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