

Certificate of Analysis

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Client:	Lowe Environmental Impact Limited	Lab No:	4254624	SPV1
Contact:	[REDACTED]	Date Received:	01-Jul-2026	
		Date Reported:	08-Jul-2026	
		Quote No:	[REDACTED]	
		Order No:		
		Client Reference:	Project Reference [REDACTED]	
		Submitted By:	[REDACTED]	

Sample Type: Aqueous

Sample Name:	Groundwater - Bore 2 30-Jun-2026 9:10 am	Groundwater - Bore 1 30-Jun-2026 9:35 am
Lab Number:	4254624.1	4254624.2
pH	pH Units	6.3
Electrical Conductivity (EC)	mS/m	12.9
Chloride	g/m ³	6.4
Total Nitrogen	g/m ³	5.6
Total Ammoniacal-N	g/m ³	< 0.010
Nitrate-N + Nitrite-N	g/m ³	3.7
Total Kjeldahl Nitrogen (TKN)	g/m ³	1.93
Dissolved Reactive Phosphorus	g/m ³	0.024
Escherichia coli	cfu / 100mL	< 1

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: Aqueous

Test	Method Description	Default Detection Limit	Sample No
Filtration, Unpreserved	Sample filtration through 0.45 µm membrane filter. Analysed at Hill Laboratories - Chemistry, Unit 1, 17 Print Place, Middleton, Christchurch.	-	1-2
pH	pH meter. Analysed at Hill Laboratories - Chemistry, Unit 1, 17 Print Place, Middleton, Christchurch. APHA 4500-H ⁺ B (modified) : Online Edition. Note: It is not possible to achieve the APHA Maximum Storage Recommendation for this test (15 min) when samples are analysed upon receipt at the laboratory, and not in the field. Samples and Standards are analysed at an equivalent laboratory temperature (typically 18 to 22 °C). Temperature compensation is used.	0.1 pH Units	1-2
Electrical Conductivity (EC)	Conductivity meter, 25°C. Analysed at Hill Laboratories - Chemistry, Unit 1, 17 Print Place, Middleton, Christchurch. APHA 2510 B : Online Edition.	0.1 mS/m	1-2
Chloride	Filtered sample from Christchurch. Ion Chromatography. APHA 4110 B (modified) : Online Edition.	0.5 g/m ³	1-2
Total Nitrogen	Calculation: TKN + Nitrate-N + Nitrite-N. Please note: The Default Detection Limit of 0.05 g/m ³ is only attainable when the TKN has been determined using a trace method utilising duplicate analyses. In cases where the Detection Limit for TKN is 0.10 g/m ³ , the Default Detection Limit for Total Nitrogen will be 0.11 g/m ³ . In-house calculation.	0.05 g/m ³	1-2
Total Ammoniacal-N	Filtered Sample from Christchurch. OPA fluorometry. Flow injection analyser. (NH ₄ -N = NH ₄ ⁺ -N + NH ₃ -N). In-house (FIALab).	0.010 g/m ³	1-2
Nitrate-N + Nitrite-N	Filtered sample from Christchurch. Total oxidised nitrogen. Automated cadmium reduction, flow injection analyser. APHA 4500-NO ₃ ⁻ I (modified) : Online Edition.	0.002 g/m ³	1-2
Total Kjeldahl Nitrogen (TKN)	Total Kjeldahl digestion, automated phenol/hypochlorite colorimetry. APHA 4500-N _{org} D (modified): Online Edition.	0.10 g/m ³	1-2



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Sample Type: Aqueous			
Test	Method Description	Default Detection Limit	Sample No
Dissolved Reactive Phosphorus	Filtered sample from Christchurch. Molybdenum blue colourimetry. Flow injection analyser. APHA 4500-P G (modified) : Online Edition.	0.004 g/m ³	1-2
Escherichia coli	Membrane filtration, count on CCA agar, incubated at 44.5°C for 21-24 hours. Analysed at Hill Laboratories - Microbiology, Unit 1, 17 Print Place, Middleton, Christchurch. APHA 9222 I (modified) : Online Edition.	1 cfu / 100mL	1-2

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

Testing was completed between 01-Jul-2026 and 08-Jul-2026. 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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