

## Food &amp; Water Testing

## ANALYTICAL REPORT

REPORT CODE AR-25-NC-010135-02 # REPORT DATE 11/04/2025

# This amended report supersedes Analytical Report number AR-25-NC-010135-01, dated 09/04/2025.

Attention Veolia Water Services (ANZ) Pty Ltd  
NZ Queenstown Lab Results  
74 Glenda Drive  
Frankton  
9300 Queenstown  
NEW ZEALAND

Phone 03 450 9240

Email

Copy to: QLDC Lab Results (lab.results@qldc.govt.nz), Lado

Contact for your orders: James Thornton  
Contract: Shotover WWTP Monthly + Bores  
Submission Reference: Shotover WWTP April 2025  
Comments: Time of 817-2025-00034054 corrected

Order code: EUNZCH-00213069

Purchase Order Number: 7300456370

SAMPLE CODE 817-2025-00034053

|                        |                  |                        |                               |
|------------------------|------------------|------------------------|-------------------------------|
| Sampling Point code:   | NC0001572018     | Sampling Point name:   | Shotover WWTP Effluent + Grab |
| Reception Date & Time: | 03/04/2025 14:02 | Reception temperature: | 7.1 °C                        |
| Analysis Started on:   | 04/04/2025       | Analysis Ending Date:  | 09/04/2025                    |
| Sampled Date & Time    | 03/04/2025 11:30 | Sampler(s)             |                               |
| Sampling Purpose       | Monitoring       |                        |                               |

## RESULTS

## LOQ

## SPECIFICATIONS

## \*NC0AK Ammoniacal Nitrogen by Discrete Analyser

|                  |      |      |      |
|------------------|------|------|------|
| Ammonia nitrogen | 1.81 | mg/l | 0.01 |
|------------------|------|------|------|

## \*NC03N Carbonaceous Biochemical Oxygen Demand in Water by DO Meter

|  |      |      |   |                                       |
|--|------|------|---|---------------------------------------|
| Carbonaceous Biochemical Oxygen Demand | 7.00 | mg/l | 2 | MAV of 30 mg/l ✓ Client Specification |
|--|------|------|---|---------------------------------------|

## \*ZMJU9 Enumeration of Escherichia coli by Membrane Filtration

|                  |     |            |    |  |
|------------------|-----|------------|----|--|
| Escherichia coli | <10 | cfu/100 ml | 10 | MAV of 260 cfu/100 ml ✓ Client Specification |
|------------------|-----|------------|----|--|

## \*NC03R Nitrate-Nitrogen in Water by Discrete Analyser Calculation (Trace)

|                  |      |      |      |
|------------------|------|------|------|
| Nitrate nitrogen | 6.82 | mg/l | 0.01 |
|------------------|------|------|------|

## \*NC05B Total Biochemical Oxygen Demand (TBOD 5 Days) by Electrode

|                                 |   |      |   |
|---------------------------------|---|------|---|
| Biochemical oxygen demand (BOD) | 7 | mg/l | 2 |
|---------------------------------|---|------|---|

## \*NC03M Total Nitrogen in Water by Discrete Analyser (Trace)

|                    |      |      |      |                                       |
|--------------------|------|------|------|---------------------------------------|
| Total Nitrogen (N) | 10.7 | mg/l | 0.01 | MAV of 23 mg/l ✓ Client Specification |
|--------------------|------|------|------|---------------------------------------|

## \*NC76G Total Phosphorus in Water by Discrete Analyser (Trace)

|                  |      |      |      |
|------------------|------|------|------|
| Total phosphorus | 1.82 | mg/l | 0.01 |
|------------------|------|------|------|

## \*NC0AE Total Suspended Solids in Water by Gravimetry

|                  |      |      |     |                                       |
|------------------|------|------|-----|---------------------------------------|
| Suspended Solids | 11.7 | mg/l | 2.5 | MAV of 30 mg/l ✓ Client Specification |
|------------------|------|------|-----|---------------------------------------|

SAMPLE CODE 817-2025-00034054

|                        |                  |                        |                      |
|------------------------|------------------|------------------------|----------------------|
| Sampling Point code:   | NC0001572019     | Sampling Point name:   | Shotover WWTP Bore 1 |
| Reception Date & Time: | 03/04/2025 14:02 | Reception temperature: | 7.1 °C               |
| Analysis Started on:   | 03/04/2025       | Analysis Ending Date:  | 08/04/2025           |
| Sampled Date & Time    | 03/04/2025 13:15 | Sampler(s)             |                      |
| Sampling Purpose       | Monitoring       |                        |                      |

## RESULTS

## LOQ

## Food & Water Testing

| RESULTS  |       |            | LOQ   |
|--|-------|------------|-------|
| <b>*NC0AK Ammoniacal Nitrogen by Discrete Analyser</b>                           |       |            |       |
| Ammonia nitrogen   | 0.43  | mg/l       | 0.01  |
| <b>*ZMJU7 Enumeration of Escherichia coli by Membrane Filtration</b>             |       |            |       |
| Escherichia coli   | 1     | cfu/100 ml | 1     |
| <b>*NC03R Nitrate-Nitrogen in Water by Discrete Analyser Calculation (Trace)</b> |       |            |       |
| Nitrate nitrogen   | <0.01 | mg/l       | 0.01  |
| <b>*NC04Q Piezometer Level</b>   |       |            |       |
| Water Level  | 3.51  | m          | 0.005 |
| <b>*NC03M Total Nitrogen in Water by Discrete Analyser (Trace)</b>               |       |            |       |
| Total Nitrogen (N)   | 0.88  | mg/l       | 0.01  |
| <b>*NC76G Total Phosphorus in Water by Discrete Analyser (Trace)</b>             |       |            |       |
| Total phosphorus   | 0.19  | mg/l       | 0.01  |

| SAMPLE CODE            |                  | 817-2025-00034056      |                      |
|------------------------|------------------|------------------------|----------------------|
| Sampling Point code:   | NC0001572021     | Sampling Point name:   | Shotover WWTP Bore 3 |
| Reception Date & Time: | 03/04/2025 14:02 | Reception temperature: | 7.1 °C               |
| Analysis Started on:   | 04/04/2025       | Analysis Ending Date:  | 08/04/2025           |
| Sampled Date & Time    | 03/04/2025 12:55 | Sampler(s)             |                      |
| Sampling Purpose       | Monitoring       |                        |                      |

| RESULTS  |      |            | LOQ  |
|--|------|------------|------|
| <b>*NC0AK Ammoniacal Nitrogen by Discrete Analyser</b>                           |      |            |      |
| Ammonia nitrogen   | 10.9 | mg/l       | 0.01 |
| <b>*ZMJU7 Enumeration of Escherichia coli by Membrane Filtration</b>             |      |            |      |
| Escherichia coli   | 19   | cfu/100 ml | 1    |
| <b>*NC03R Nitrate-Nitrogen in Water by Discrete Analyser Calculation (Trace)</b> |      |            |      |
| Nitrate nitrogen   | 0.03 | mg/l       | 0.01 |
| <b>*NC03M Total Nitrogen in Water by Discrete Analyser (Trace)</b>               |      |            |      |
| Total Nitrogen (N)   | 11.3 | mg/l       | 0.01 |
| <b>*NC76G Total Phosphorus in Water by Discrete Analyser (Trace)</b>             |      |            |      |
| Total phosphorus   | 2.66 | mg/l       | 0.01 |

| SAMPLE CODE            |                  | 817-2025-00034057      |                      |
|------------------------|------------------|------------------------|----------------------|
| Sampling Point code:   | NC0001572022     | Sampling Point name:   | Shotover WWTP Bore 4 |
| Reception Date & Time: | 03/04/2025 14:02 | Reception temperature: | 7.1 °C               |
| Analysis Started on:   | 04/04/2025       | Analysis Ending Date:  | 08/04/2025           |
| Sampled Date & Time    | 03/04/2025 12:45 | Sampler(s)             |                      |
| Sampling Purpose       | Monitoring       |                        |                      |

| RESULTS  |      |            | LOQ  |
|--|------|------------|------|
| <b>*NC0AK Ammoniacal Nitrogen by Discrete Analyser</b>                           |      |            |      |
| Ammonia nitrogen   | 5.13 | mg/l       | 0.01 |
| <b>*ZMJU7 Enumeration of Escherichia coli by Membrane Filtration</b>             |      |            |      |
| Escherichia coli   | 2    | cfu/100 ml | 1    |
| <b>*NC03R Nitrate-Nitrogen in Water by Discrete Analyser Calculation (Trace)</b> |      |            |      |
| Nitrate nitrogen   | 3.18 | mg/l       | 0.01 |
| <b>*NC03M Total Nitrogen in Water by Discrete Analyser (Trace)</b>               |      |            |      |
| Total Nitrogen (N)   | 8.82 | mg/l       | 0.01 |
| <b>*NC76G Total Phosphorus in Water by Discrete Analyser (Trace)</b>             |      |            |      |
| Total phosphorus   | 1.96 | mg/l       | 0.01 |

## Food & Water Testing

### RESULTS

### LOQ

**SAMPLE CODE** 817-2025-00034058

|                                   |                  |                               |                      |
|-----------------------------------|------------------|-------------------------------|----------------------|
| <b>Sampling Point code:</b>       | NC0001572023     | <b>Sampling Point name:</b>   | Shotover WWTP Bore 5 |
| <b>Reception Date &amp; Time:</b> | 03/04/2025 14:02 | <b>Reception temperature:</b> | 7.1 °C               |
| <b>Analysis Started on:</b>       | 04/04/2025       | <b>Analysis Ending Date:</b>  | 08/04/2025           |
| <b>Sampled Date &amp; Time</b>    | 03/04/2025 12:00 | <b>Sampler(s)</b>             |                      |
| <b>Sampling Purpose</b>           | Monitoring       |                               |                      |

### RESULTS

### LOQ

④\*NC0AK **Ammoniacal Nitrogen by Discrete Analyser**

|                  |      |      |      |
|------------------|------|------|------|
| Ammonia nitrogen | 15.4 | mg/l | 0.01 |
|------------------|------|------|------|

\*ZMJU7 **Enumeration of Escherichia coli by Membrane Filtration**

|                  |   |            |   |
|------------------|---|------------|---|
| Escherichia coli | 3 | cfu/100 ml | 1 |
|------------------|---|------------|---|

\*NC03R **Nitrate-Nitrogen in Water by Discrete Analyser Calculation (Trace)**

|                  |      |      |      |
|------------------|------|------|------|
| Nitrate nitrogen | 0.06 | mg/l | 0.01 |
|------------------|------|------|------|

\*NC03M **Total Nitrogen in Water by Discrete Analyser (Trace)**

|                    |      |      |      |
|--------------------|------|------|------|
| Total Nitrogen (N) | 15.6 | mg/l | 0.01 |
|--------------------|------|------|------|

\*NC76G **Total Phosphorus in Water by Discrete Analyser (Trace)**

|                  |      |      |      |
|------------------|------|------|------|
| Total phosphorus | 2.61 | mg/l | 0.01 |
|------------------|------|------|------|

**SAMPLE CODE** 817-2025-00034059

|                                   |                  |                               |                      |
|-----------------------------------|------------------|-------------------------------|----------------------|
| <b>Sampling Point code:</b>       | NC0001572024     | <b>Sampling Point name:</b>   | Shotover WWTP Bore 6 |
| <b>Reception Date &amp; Time:</b> | 03/04/2025 14:02 | <b>Reception temperature:</b> | 7.1 °C               |
| <b>Analysis Started on:</b>       | 04/04/2025       | <b>Analysis Ending Date:</b>  | 08/04/2025           |
| <b>Sampled Date &amp; Time</b>    | 03/04/2025 12:10 | <b>Sampler(s)</b>             |                      |
| <b>Sampling Purpose</b>           | Monitoring       |                               |                      |

### RESULTS

### LOQ

④\*NC0AK **Ammoniacal Nitrogen by Discrete Analyser**

|                  |      |      |      |
|------------------|------|------|------|
| Ammonia nitrogen | 10.3 | mg/l | 0.01 |
|------------------|------|------|------|

\*ZMJU7 **Enumeration of Escherichia coli by Membrane Filtration**

|                  |   |            |   |
|------------------|---|------------|---|
| Escherichia coli | 2 | cfu/100 ml | 1 |
|------------------|---|------------|---|

\*NC03R **Nitrate-Nitrogen in Water by Discrete Analyser Calculation (Trace)**

|                  |      |      |      |
|------------------|------|------|------|
| Nitrate nitrogen | 1.44 | mg/l | 0.01 |
|------------------|------|------|------|

\*NC03M **Total Nitrogen in Water by Discrete Analyser (Trace)**

|                    |      |      |      |
|--------------------|------|------|------|
| Total Nitrogen (N) | 12.3 | mg/l | 0.01 |
|--------------------|------|------|------|

\*NC76G **Total Phosphorus in Water by Discrete Analyser (Trace)**

|                  |      |      |      |
|------------------|------|------|------|
| Total phosphorus | 2.41 | mg/l | 0.01 |
|------------------|------|------|------|

**SAMPLE CODE** 817-2025-00034060

|                                   |                  |                               |                      |
|-----------------------------------|------------------|-------------------------------|----------------------|
| <b>Sampling Point code:</b>       | NC0001572025     | <b>Sampling Point name:</b>   | Shotover WWTP Bore 7 |
| <b>Reception Date &amp; Time:</b> | 03/04/2025 14:02 | <b>Reception temperature:</b> | 7.1 °C               |
| <b>Analysis Started on:</b>       | 04/04/2025       | <b>Analysis Ending Date:</b>  | 08/04/2025           |
| <b>Sampled Date &amp; Time</b>    | 03/04/2025 12:20 | <b>Sampler(s)</b>             |                      |
| <b>Sampling Purpose</b>           | Monitoring       |                               |                      |

### RESULTS

### LOQ

④\*NC0AK **Ammoniacal Nitrogen by Discrete Analyser**

|                  |      |      |      |
|------------------|------|------|------|
| Ammonia nitrogen | 10.0 | mg/l | 0.01 |
|------------------|------|------|------|

\*ZMJU7 **Enumeration of Escherichia coli by Membrane Filtration**

|                  |   |            |   |
|------------------|---|------------|---|
| Escherichia coli | 1 | cfu/100 ml | 1 |
|------------------|---|------------|---|

## Food & Water Testing

| RESULTS  |      |      | LOQ  |
|--|------|------|------|
| <b>*NC03R Nitrate-Nitrogen in Water by Discrete Analyser Calculation (Trace)</b> |      |      |      |
| Nitrate nitrogen   | 0.89 | mg/l | 0.01 |
| <b>*NC03M Total Nitrogen in Water by Discrete Analyser (Trace)</b>               |      |      |      |
| Total Nitrogen (N)   | 12.2 | mg/l | 0.01 |
| <b>*NC76G Total Phosphorus in Water by Discrete Analyser (Trace)</b>             |      |      |      |
| Total phosphorus   | 2.14 | mg/l | 0.01 |
| <b>SAMPLE CODE 817-2025-00034061</b>   |      |      |      |

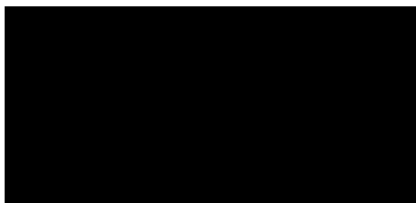
|                                   |                  |                               |                      |
|-----------------------------------|------------------|-------------------------------|----------------------|
| <b>Sampling Point code:</b>       | NC0001572026     | <b>Sampling Point name:</b>   | Shotover WWTP Bore 8 |
| <b>Reception Date &amp; Time:</b> | 03/04/2025 14:02 | <b>Reception temperature:</b> | 7.1 °C               |
| <b>Analysis Started on:</b>       | 03/04/2025       | <b>Analysis Ending Date:</b>  | 08/04/2025           |
| <b>Sampled Date &amp; Time</b>    | 03/04/2025 12:25 | <b>Sampler(s)</b>             |                      |
| <b>Sampling Purpose</b>           | Monitoring       |                               |                      |

| RESULTS  |      |            | LOQ   |
|--|------|------------|-------|
| <b>*NC0AK Ammoniacal Nitrogen by Discrete Analyser</b>                           |      |            |       |
| Ammonia nitrogen   | 5.39 | mg/l       | 0.01  |
| <b>*ZMJU7 Enumeration of Escherichia coli by Membrane Filtration</b>             |      |            |       |
| Escherichia coli   | <1   | cfu/100 ml | 1     |
| <b>*NC03R Nitrate-Nitrogen in Water by Discrete Analyser Calculation (Trace)</b> |      |            |       |
| Nitrate nitrogen   | 0.02 | mg/l       | 0.01  |
| <b>*NC04Q Piezometer Level</b>   |      |            |       |
| Water Level  | 3.76 | m          | 0.005 |
| <b>*NC03M Total Nitrogen in Water by Discrete Analyser (Trace)</b>               |      |            |       |
| Total Nitrogen (N)   | 6.33 | mg/l       | 0.01  |
| <b>*NC76G Total Phosphorus in Water by Discrete Analyser (Trace)</b>             |      |            |       |
| Total phosphorus   | 2.64 | mg/l       | 0.01  |

### LIST OF METHODS

|  |  |
|--|--|
| NC03M <b>Total Nitrogen in Water by Discrete Analyser (Trace):</b><br>APHA Online Edition 4500-P J/4500-NH                                     | NC03N <b>Carbonaceous Biochemical Oxygen Demand in Water by DO Meter:</b> APHA Online Edition 5210 B             |
| NC03R <b>Nitrate-Nitrogen in Water by Discrete Analyser Calculation (Trace):</b> Calculated, Calculation [(Nitrate-N + Nitrite-N) - Nitrite-N] | NC04Q <b>Piezometer Level:</b> Internal Method, Performance test   |
| NC05B <b>Total Biochemical Oxygen Demand (TBOD 5 Days) by Electrode:</b> APHA Online Edition 5210 B  | NC0AE <b>Total Suspended Solids in Water by Gravimetry:</b> APHA Online Edition 2540 D                           |
| NC0AK <b>Ammoniacal Nitrogen by Discrete Analyser:</b> ISBN 0117516139 mod.  | NC76G <b>Total Phosphorus in Water by Discrete Analyser (Trace):</b> APHA Online Edition 4500-P B/J mod.         |
| ZMJU7 <b>Escherichia coli E (Water) [NZ Water] &lt;1 &gt;8 000 /100 ml (0) mTEC Agar-F:</b> US-EPA 1603:2014                                   | ZMJU9 <b>Escherichia coli E (Water) [NZ Water] &lt;10 &gt;80 000 /100 ml (0-1) mTEC Agar-F:</b> US-EPA 1603:2014 |

Signature



Head of Southern  
Laboratory (K.T.P.)



Team Lead KTP

### EXPLANATORY NOTE

## Food & Water Testing

- ① Test is not accredited
- ② Test is subcontracted within Eurofins group and is accredited
- ③ Test is subcontracted within Eurofins group and is not accredited
- ④ Test is subcontracted outside Eurofins group and is accredited
- ⑤ Test is subcontracted outside Eurofins group and is not accredited
- ⑥ Test result is provided by the customer and is not accredited
- ⑦ Tested at the sampling point by Eurofins and is not accredited
- ⑧ Tested at the sampling point by Eurofins and is accredited
- ⑨ Test is RLP accredited
- ⑩ Test is subcontracted within Eurofins group and is RLP accredited

\*Test was performed at Eurofins ELS Limited, Unit 1/74 Glenda Drive, Frankton, Queenstown

N/A means Not Applicable

**Not Detected** means not detected at or above the Limit of Quantification (LOQ)

**LOQ** means Limit of Quantification and the unit of LOQ is the same as the result unit

✗ (Unsatisfactory) means does not meet the specification

✓ (Satisfactory) means meets the specification

**MAV** means Maximum Allowable Value

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Accreditation does not apply to comments or graphical representations.

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