

## Food &amp; Water Testing

## ANALYTICAL REPORT

REPORT CODE

AR-25-NC-003875-01

REPORT DATE

11/02/2025

Attention Otago Regional Council

Private Bag 1954  
9054 DUNEDIN  
NEW ZEALAND

Phone

Email

Copy to: compliance regulatory

Contact for your orders:

Contract: Incident Response

Submission Reference: Shotover WWTP IN24.0004

Order code:

EUNZCH-00206203

Purchase Order Number:

SAMPLE CODE

817-2025-00010363

Sample Name Shotover WWTP Discharge from Disposal Field

Sample Reference IN24.0004A - Shotover WWTP Discharge from disposal Feild

Reception Date &amp; Time: 30/01/2025 13:45

Reception temperature: 17.1 °C

Analysis Started on: 31/01/2025

Analysis Ending Date: 11/02/2025

Product Type Surface Water

Sampled Date &amp; Time 30/01/2025 10:30

Sampler(s)

Sampling Purpose Monitoring

FAECAL SOURCE TRACKING

RESULTS

LOQ

## ⑤ NC04R Microbial Source Tracking (Faecal Source Tracking)

Dna Extraction Complete N/A  
See Document Attached see attached document N/A

## ④ NCAI2 Quantification of Canine DG72 MST marker by ddPCR

Canine DG72 &lt;180 copies/100 ml N/A

## ④ NCAJ2 Quantification of Avian GFD MST marker by ddPCR

Avian GFD 420 copies/100 ml N/A

## ④ NCWF6 Quantification of Avian Gull4 MST marker by ddPCR

Avian Gull4 &lt;180 copies/100 ml N/A

## ④ NCWG6 Quantification of Human HF183 MST marker by ddPCR

Human HF183 960 copies/100 ml N/A

## ④ NCWH6 Quantification of Human HumM2 MST marker by ddPCR

Human HumM2 &lt;180 copies/100 ml N/A

RESULTS

LOQ

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

Escherichia coli 900 cfu/100 ml 1

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

Biochemical oxygen demand (BOD) 13 mg/l 2

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

Total Nitrogen (N) 16.4 mg/l 0.01

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

Suspended Solids 16.8 mg/l 2.5

## Food & Water Testing

|                                   |   |                                |                  |
|-----------------------------------|---|--------------------------------|------------------|
| <b>SAMPLE CODE</b>                | 817-2025-00010368                                 |                                |                  |
| <b>Sample Name</b>                | Final Effluent Post UV Shotover WWTP              |                                |                  |
| <b>Sample Reference</b>           | IN24.0004J - Final Effluent Post UV Shotover WWTP |                                |                  |
| <b>Reception Date &amp; Time:</b> | 30/01/2025 13:45                                  | <b>Reception temperature:</b>  | 17.1 °C          |
| <b>Analysis Started on:</b>       | 31/01/2025  | <b>Analysis Ending Date:</b>   | 06/02/2025       |
| <b>Product Type</b>               | effluent  | <b>Sampled Date &amp; Time</b> | 30/01/2025 10:56 |
| <b>Sampler(s)</b>                 |   | <b>Sampling Purpose</b>        | Monitoring       |

| RESULTS |  |      | LOQ        |
|---------|--|------|------------|
| *ZMJUN  | Enumeration of Escherichia coli by Membrane Filtration     |      |            |
|         | Escherichia coli   | 80   | cfu/100 ml |
|         |  |      | 1          |
| *NC05B  | Total Biochemical Oxygen Demand (TBOD 5 Days) by Electrode |      |            |
|         | Biochemical oxygen demand (BOD)                            | 16   | mg/l       |
|         |  |      | 2          |
| *NC03M  | Total Nitrogen in Water by Discrete Analyser (Trace)       |      |            |
|         | Total Nitrogen (N)   | 17.4 | mg/l       |
|         |  |      | 0.01       |
| *NCOAE  | Total Suspended Solids in Water by Gravimetry              |      |            |
|         | Suspended Solids   | 34.7 | mg/l       |
|         |  |      | 2.5        |

| LIST OF METHODS |  |       |  |
|-----------------|--|-------|--|
| NC03M           | <b>Total Nitrogen in Water by Discrete Analyser (Trace):</b><br>APHA Online Edition 4500-P J/4500-NH   | NC04R | <b>Microbial Source Tracking (Faecal Source Tracking):</b><br>Method of the subcontractor (subcontract)              |
| 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                                     |
| NCAI2           | <b>Quantification of Canine DG72 MST marker by ddPCR:</b>  | NCAJ2 | <b>Quantification of Avian GFD MST marker by ddPCR:</b><br>Method of the subcontractor (subcontract)                 |
| NCWF6           | <b>Quantification of Avian Gull4 MST marker by ddPCR:</b><br>Method of the subcontractor (subcontract) | NCWG6 | <b>Quantification of Human HF183 MST marker by ddPCR:</b><br>Method of the subcontractor (subcontract)               |
| NCWH6           | <b>Quantification of Human HumM2 MST marker by ddPCR:</b> Method of the subcontractor (subcontract)    | ZMJUN | <b>Escherichia coli E (Water) [NZ Water] &lt;1 &gt;6 000 /100 ml (0) m-FC Agar-F:</b> SMEWW 9222I; APHA 24th Edition |

Signature



|                         |
|-------------------------|
| <b>EXPLANATORY NOTE</b> |
|-------------------------|

## 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, 142 Esk Street, Invercargill

**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

The Customer acknowledges and accepts that: (a) where Eurofins is not responsible for sampling, the test result(s) in this report apply only to the sample as received. Customer is solely responsible for the sampling process and warrants that the sample provided to Eurofins is representative of the lot / batch from which the samples were drawn; and (b) Eurofins expresses no opinion and accepts no liability in respect of the Customer's production process or homogeneity of the product.

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The tests are identified by a five-digit code, their description is available on request.

Accreditation does not apply to comments or graphical representations.

Unless otherwise stated, all tests in this analytical report (except for subcontracted tests) are performed at 43 Detroit Drive, Rolleston, Christchurch, NEW ZEALAND.

The laboratory is not responsible for the information provided by the customer which can affect the validity of the results, for example: sampling information such as date/time, field data etc.

Eurofins may subcontract the performance of part or all of the Services to a third party and the Customer authorises the release of all information necessary to the third party for the provision of the Services.

All samples become the property of Eurofins to the extent necessary for the performance of the Services.

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### END OF REPORT