

Food & Water Testing

ANALYTICAL REPORT

| REPOR | RT CODE | AR-25-NC-016 | 616-01 | REPORT DATE | 11/06/2025 |
|--|---|---|--------------------------------|--|-----------------------|
| Attention | Otago Regiona Private Bag 19 9054 DUNED NEW ZEALAN | 954 IN | | | |
| Phone Email | | | | Copy to: regulatory | |
| Contrac | for your orders: t: ion Reference: | Shotover WWTP emergency discharge to | shotover river | Order code: Purchase Order Number: | EUNZCH-00219425 |
| SAMPL | E CODE | 817-2025-0005598 | 7 | | |
| Receptio Analysis Product | Reference on Date & Time: s Started on: | GT7800RC U/S WWTP and SH6 Bri 03/06/2025 13:47 04/06/2025 Surface water, raw wate 03/06/2025 12:00 | - | Reception temperature: Analysis Ending Date: Sampler(s) | 10.1 °C 11/06/2025 |
| | | RESULTS | | LOQ | |
| | Ammonia nitrogen | ogen by Discrete Analys <0.01 | mg/l | 0.01 | |
| *ZMJU7 | Enumeration of E Escherichia coli | scherichia coli by Meml <1 | brane Filtration cfu/100 ml | 1 | |
| *NCOAF | | | | nute APHA holding time) 0.1 | |
| *NC05B | Total Biochemica Biochemical oxygen (BOD) | I Oxygen Demand (TBO demand <2 | D 5 Days) by E mg/l | Electrode | |
| *NC03М | | Water by Discrete Analy | r ser (Trace) mg/l | 0.01 | |
| *NCO4C | Total Oxidised Ni | trogen in Water by Discu gen 0.03 | rete Analyser | 0.01 | |
| *NC76G | | s in Water by Discrete An 0.01 | e | | |
| *NCOAE | Total Suspended Suspended Solids | Solids in Water by Grav 6.6 | imetry mg/l | 2.5 | |
| SAMPL | E CODE | 817-2025-0005598 | 8 | | |
| Receptio Analysis Product | Reference on Date & Time: s Started on: | GT779ORC final discharge post UV 03/06/2025 13:47 04/06/2025 treated Effluent 03/06/2025 13:22 | | Reception temperature: Analysis Ending Date: Sampler(s) | 10.1 °C 11/06/2025 |
| | | RESULTS | | LOQ | |
| ๎© [*] NCOAK | Ammoniacal Nitro Ammonia nitrogen | ogen by Discrete Analys 8.15 | e r mg/l | 0.01 | |
| Eurofins E 43 Detroit Rolleston Christchur NEW ZEA | ch 7614 | Eurofins ELS Lin 142 Esk Street Invercargill 9810 NEW ZEALAND | | Phone (Christchurch) + Phone (Invercargill) www.eurofins.co.nz | 64 3 343 5227 |



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| | | RESU | | LOQ | | | | |
|---------------|---|---------------------------------|-------------------|---------------------------|------------|--|--|--|
| *ZMJU7 | Francisco et la constitución de la | | | | | | | |
| ZMJU7 | Enumeration of E Escherichia coli | Escherichia coli by M 7 | cfu/100 m | | | | | |
| * | | • | | · | | | | |
| *NCOAF | pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time) | | | | | | | |
| * | pH 7.3 0.1 Total Biochemical Oxygen Demand (TBOD 5 Days) by Electrode | | | | | | | |
| *NC05B | | | | | | | | |
| | Biochemical oxygen (BOD) | demand 10 | mg/l | 2 | | | | |
| *NC03М | Total Nitrogen in | Water by Discrete A | nalyser (Trace) | | | | | |
| | Total Nitrogen (N) | 16.0 | mg/l | 0.01 | | | | |
| *NCO4C | Total Oxidised Nitrogen in Water by Discrete Analyser | | | r | | | | |
| | Total Oxidised Nitrogen 3.0 mg/l | | | 0.01 | | | | |
| *NC76G | Total Phosphorus in Water by Discrete Analyser (Trace) | | | | | | | |
| | Total phosphorus | 1.88 | mg/l | 0.01 | | | | |
| *NCOAE | Total Suspended | Solids in Water by G | ravimetrv | | | | | |
| | Suspended Solids | 15.4 | mg/l | 2.5 | | | | |
| | | | 0 | | | | | |
| SAMPL | E CODE | 817-2025-00055 | 989 | | | | | |
| Sample | Name | GT7810RC | | | | | | |
| | Reference | shotover WWPT disc | harge to shotover | r river | | | | |
| Recepti | on Date & Time: | 03/06/2025 13:47 | _ | Reception temperature: | 10.1 °C | | | |
| Analysi | s Started on: | 04/06/2025 | | Analysis Ending Date: | 11/06/2025 | | | |
| Product | • • | Surface water, raw w | | Sampler(s) | | | | |
| Sampleo | d Date & Time | 03/06/2025 12:32 | | | | | | |
| | | RESU | LTS | LOQ | | | | |
| SNCOAK | Ammoniacal Nitr | ogen by Discrete An | alvser | | | | | |
| | Ammonia nitrogen | 8.92 | mg/l | 0.01 | | | | |
| *ZMJU7 | Enumeration of E | Escherichia coli by M | embrane Filtrati | ion | | | | |
| | Escherichia coli | 4 | cfu/100 m | | | | | |
| *NCOAF | | anual Electrode (Tes | ted beyond 15 r | ninute APHA holding time) | | | | |
| 1100/11 | pH | 7.5 | ted beyond 101 | | | | | |
| *NC05B | • | | | | | | | |
| NCOOD | | al Oxygen Demand (T demand 9 | mg/l | | | | | |
| | Biochemical oxygen (BOD) | demand 9 | ilig/i | 2 | | | | |
| *NCO3M | | Water by Discrete A | nalyser (Trace) | | | | | |
| nooom | Total Nitrogen (N) | 16.2 | mg/l | 0.01 | | | | |
| *NCO4C | - | trogen in Water by D | | | | | | |
| 10040 | Total Oxidised Nitro | | mg/l | 0.01 | | | | |
| *NC76G | | - | 6 | | | | | |
| NC/0G | • | s in Water by Discret | • | • | | | | |
| * | Total phosphorus | 2.02 | mg/l | 0.01 | | | | |
| *NCOAE | • | Solids in Water by G | - | | | | | |
| | Suspended Solids | 35.8 | mg/l | 2.5 | | | | |
| SAMPI | E CODE | 817-2025-00055 | 990 | | | | | |
| Sample | | GT7820RC | | | | | | |
| - | Reference | Approx 200m d/s of | discharge | | | | | |
| - | on Date & Time: | 03/06/2025 13:47 | - | Reception temperature: | 10.1 °C | | | |
| | s Started on: | 04/06/2025 | | Analysis Ending Date: | 11/06/2025 | | | |
| Product | t Туре | Surface water, raw water | | Sampler(s) | | | | |
| Sampleo | d Date & Time | 03/06/2025 12:43 | | | | | | |

Eurofins ELS Limited 43 Detroit Drive Rolleston Christchurch 7614 NEW ZEALAND Eurofins ELS Limited 142 Esk Street Invercargill 9810 NEW ZEALAND Phone (Christchurch) +64 3 343 5227 Phone (Invercargill) www.eurofins.co.nz





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| | | RESUL | TS | LOQ | | | | |
|------------------------|--|---|--|-------------------------------------|------------|--|--|--|
| © NCOAK | Ammoniacal Nitro | gen by Discrete Ana | lyser | | | | | |
| | Ammonia nitrogen | 0.55 | mg/l | 0.01 | | | | |
| *ZMJU7 | Enumeration of Escherichia coli by Membrane Filtration | | | | | | | |
| | Escherichia coli | 5 | cfu/100 ml | 1 | | | | |
| *NCOAF | pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time) | | | | | | | |
| | рН | 7.8 | | 0.1 | | | | |
| *NC05B | Total Biochemical | Oxygen Demand (T | BOD 5 Days) by | Electrode | | | | |
| | Biochemical oxygen c (BOD) | lemand <2 | mg/l | 2 | | | | |
| *NC03М | Total Nitrogen in V | Nater by Discrete An | alyser (Trace) | | | | | |
| | Total Nitrogen (N) | 1.25 | mg/l | 0.01 | | | | |
| *NC04C | Total Oxidised Nit | rogen in Water by Di | screte Analyser | | | | | |
| | Total Oxidised Nitroge | en 0.23 | mg/l | 0.01 | | | | |
| *NC76G | Total Phosphorus | in Water by Discrete | e Analyser (Trace | e) | | | | |
| | Total phosphorus | 0.22 | mg/l | 0.01 | | | | |
| *NCOAE | Total Suspended | Solids in Water by G | ravimetry | | | | | |
| | Suspended Solids | 13.3 | mg/l | 2.5 | | | | |
| SAMPL | E CODE | 817-2025-00055 | 991 | | | | | |
| Sample | Name | GT7840RC | | | | | | |
| - | Reference | U/S of Kawarau | | _ | | | | |
| Reception Date & Time: | | 03/06/2025 13:47 04/06/2025 | | Reception temperature: | 10.1 °C | | | |
| Product | s Started on: | | ator | Analysis Ending Date: Sampler(s) | 11/06/2025 | | | |
| | I Date & Time | Surface water, raw w 03/06/2025 12:15 | aler | Sampler(S) | | | | |
| | | RESUL | TS | LOQ | | | | |
| ⅆNCOAK | Ammoniacal Nitro | gen by Discrete Ana | | | | | | |
| | Ammonia nitrogen | <0.01 | mg/l | 0.01 | | | | |
| *ZMJU7 | - | scherichia coli by Me | embrane Filtratio | n | | | | |
| | Escherichia coli | 10 | cfu/100 ml | 1 | | | | |
| *NCOAF | pH in Water by Ma | anual Electrode (Test | ed bevond 15 m | inute APHA holding time) | | | | |
| | рН | 7.5 | , , | 0.1 | | | | |
| *NC05B | Total Biochemical | Oxygen Demand (T | BOD 5 Davs) bv | | | | | |
| | | | mg/l | 2 | | | | |
| | Biochemical oxygen c (BOD) | | U | | | | | |
| *NC03М | (BOD) | | alyser (Trace) | | | | | |
| *NCO3M | (BOD) | Water by Discrete An 0.10 | alyser (Trace) | 0.01 | | | | |
| *NC03M *NC04C | (BOD) Total Nitrogen in N Total Nitrogen (N) | Nater by Discrete An 0.10 | mg/l | 0.01 | | | | |
| | (BOD) Total Nitrogen in N Total Nitrogen (N) | Nater by Discrete An 0.10 rogen in Water by Di | mg/l | 0.01 | | | | |
| *NC04C | (BOD) Total Nitrogen in N Total Nitrogen (N) Total Oxidised Nitrogen Total Oxidised Nitrogen | Water by Discrete An 0.10 rogen in Water by Di en 0.05 | mg/l screte Analyser mg/l | 0.01 | | | | |
| *NC04C | (BOD) Total Nitrogen in N Total Nitrogen (N) Total Oxidised Nitrogen Total Oxidised Nitrogen | Nater by Discrete An 0.10 rogen in Water by Di | mg/l screte Analyser mg/l | 0.01 | | | | |
| *NC04C | (BOD) Total Nitrogen in N Total Nitrogen (N) Total Oxidised Nitrogen Total Oxidised Nitrogen Total Phosphorus Total phosphorus | Water by Discrete An 0.10 rogen in Water by Di en 0.05 in Water by Discrete | mg/l screte Analyser mg/l e Analyser (Trace mg/l | 0.01 •) | | | | |





Food & Water Testing

| SAMPL | E CODE 8 | 17-2025-0005599 | 2 | | | | |
|--|--|--|--------------|--|--|------------|---------|
| Sample Name Sample Reference Reception Date & Time: Analysis Started on: Product Type Sampled Date & Time | | T785ORC | | | | | |
| | |)/S of Kawarau River | | _ | | | |
| | | 3/06/2025 13:47 | | Reception temperature: | - | 10.1 °C | |
| | | 04/06/2025 Surface water, raw water | | - | ysis Ending Date: pler(s) | 11/06/2025 | |
| | | | | | | | Sampled |
| ± | | RESULTS | | | -0Q | | |
| ĨNCOAK | Ammoniacal Nitroge | | er | | | | |
| | Ammonia nitrogen | 0.05 | mg/l | | 0.01 | | |
| *ZMJU7 | Enumeration of Escherichia coli by Membrane Filtration | | | | | | |
| | Escherichia coli | 7 | cfu/100 ml | | 1 | | |
| *NCOAF | pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time) | | | | | | |
| | pН | 7.7 | | | 0.1 | | |
| *NCO5B | Total Biochemical O | xygen Demand (TBO | D 5 Days) by | Electrod | e | | |
| | Biochemical oxygen den (BOD) | nand <2 | mg/l | | 2 | | |
| *NCO3M | Total Nitrogen in Water by Discrete Analyser (Trace) | | | | | | |
| | Total Nitrogen (N) | 0.14 | mg/l | | 0.01 | | |
| *NCO4C | Total Oxidised Nitrogen in Water by Discrete Analyser | | | | | | |
| | Total Oxidised Nitrogen | 0.04 | mg/l | | 0.01 | | |
| *NC76G | | | | | | | |
| | Total phosphorus | 0.11 | mg/l | , | 0.01 | | |
| *NCOAE | | | | | | | |
| | Suspended Solids | 27.8 | mg/l | | 2.5 | | |
| LIST OF | METHODS | | | | | | |
| NC03M | Total Nitrogen in Water by Discrete Analyser (Trace): APHA Online Edition 4500-P J/4500-NH | | NC04C | Total Oxidised Nitroge APHA Online Edition 45 | n in Water by Discrete Analyser: 00-NO3 H | | |
| NC05B | Total Biochemical Oxygen Demand (TBOD 5 Days) by Electrode: APHA Online Edition 5210 B | | NC0AE | Total Suspended Solids in Water by Gravimetry: APHA Online Edition 2540 D | | | |
| NC0AF | pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time): APHA 24th Edition 4500-H B | | | NC0AK | Ammoniacal Nitrogen by Discrete Analyser: ISBN 0117516139 mod. | | |
| NC76G | '6G Total Phosphorus in Water by Discrete Analyser (Trace): APHA Online Edition 4500-P B/J mod. | | ZMJU7 | Escherichia coli E [IVO Agar-F: US-EPA 1603:2 | C] <1 >8 000 cfu/100 ml (0) mTEC 2014 | | |
| | | | Signatur | | | | |



EXPLANATORY NOTE

Eurofins ELS Limited 43 Detroit Drive Rolleston Christchurch 7614 NEW ZEALAND Eurofins ELS Limited 142 Esk Street Invercargill 9810 NEW ZEALAND





Food & Water Testing

①Test is not accredited

② Test is subcontracted within Eurofins group and is accredited

③ Test is subcontracted within Eurofins group and is not accredited

 ${f igoplus}$ Test is subcontracted outside Eurofins group and is accredited

 $\ensuremath{\mathfrak{G}}$ 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

Tested at the sampling point by Eurofins and is accredited

Test is RLP accredited

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

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

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