

Food & Water Testing

ANALYTICAL REPORT

REPORT CODE

AR-26-NC-003749-01

REPORT DATE

04/02/2026

Attention: Otago Regional Council
compliance

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Copy to: regulatory [REDACTED]

Contact for your orders:

[REDACTED]

Order code:

EUNZCH-00243875

Contract:

Shotover WWTP

Submission Reference:

Emergency Discharge to Shotover River

Purchase Order Number:

[REDACTED]

SAMPLE CODE

817-2026-00007966

Sample Name	GT7800RC	Sampling Point name:	1. Upstream WWTP (before the SH6 bridge) - ORC Sam
Sampling Point code:	GT7800RC		14.7 °C
Reception Date & Time:	27/01/2026 14:19	Reception temperature:	04/02/2026
Analysis Started on:	28/01/2026	Analysis Ending Date:	
Product Type	Surface water, raw water	Sampler(s)	[REDACTED]
Sampled Date & Time	27/01/2026 11:45		

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

Total Nitrogen (N) 0.04 mg/l 0.01

NC04C Total Oxidised Nitrogen in Water by Discrete Analyser

Total Oxidised Nitrogen 0.02 mg/l 0.01

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

Biochemical oxygen demand (BOD) <2 mg/l 2

NCOAE Total Suspended Solids in Water by Gravimetry

Suspended Solids 24.6 mg/l 2.5

NCOAF pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)

pH 8.0 0.1

⑨NCOAK Ammoniacal Nitrogen by Discrete Analyser

Ammonia nitrogen <0.01 mg/l 0.01

NC76G Total Phosphorus in Water by Discrete Analyser (Trace)

Total phosphorus 0.04 mg/l 0.01

ZMJU7 Enumeration of Escherichia coli by Membrane Filtration

Escherichia coli 3 cfu/100 ml 1

SAMPLE CODE

817-2026-00007967

Sample Name	GT7790RC	Sampling Point name:	2. Final Discharge post UV - ORC Sampling
Sampling Point code:	GT7790RC		14.7 °C
Reception Date & Time:	27/01/2026 14:19	Reception temperature:	04/02/2026
Analysis Started on:	28/01/2026	Analysis Ending Date:	
Product Type	treated effluent	Sampler(s)	[REDACTED]
Sampled Date & Time	27/01/2026 12:40		

RESULTS**LOQ**

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	RESULTS	LOQ
NC03M Total Nitrogen in Water by Discrete Analyser (Trace)		
Total Nitrogen (N)	4.24	mg/l
NC04C Total Oxidised Nitrogen in Water by Discrete Analyser		
Total Oxidised Nitrogen	3.3	mg/l
NC05B Total Biochemical Oxygen Demand (TBOD 5 Days) by Electrode		
Biochemical oxygen demand (BOD)	<2	mg/l
NCOAE Total Suspended Solids in Water by Gravimetry		
Suspended Solids	2.9	mg/l
NCOAF pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)		
pH	7.0	0.1
⑨NCOAK Ammoniacal Nitrogen by Discrete Analyser		
Ammonia nitrogen	0.07	mg/l
NC76G Total Phosphorus in Water by Discrete Analyser (Trace)		
Total phosphorus	3.63	mg/l
ZMJU7 Enumeration of Escherichia coli by Membrane Filtration		
Escherichia coli	2	cfu/100 ml

SAMPLE CODE	817-2026-00007968		
Sample Name	GT781ORC		
Sampling Point code:	GT781ORC	Sampling Point name:	3. Discharge to the river - ORC Sampling
Reception Date & Time:	27/01/2026 14:19	Reception temperature:	14.7 °C
Analysis Started on:	28/01/2026	Analysis Ending Date:	04/02/2026
Product Type	Surface water, raw water	Sampler(s)	[REDACTED]
Sampled Date & Time	27/01/2026 12:10		

	RESULTS	LOQ
NC03M Total Nitrogen in Water by Discrete Analyser (Trace)		
Total Nitrogen (N)	4.33	mg/l
NC04C Total Oxidised Nitrogen in Water by Discrete Analyser		
Total Oxidised Nitrogen	3.1	mg/l
NC05B Total Biochemical Oxygen Demand (TBOD 5 Days) by Electrode		
Biochemical oxygen demand (BOD)	<2	mg/l
NCOAE Total Suspended Solids in Water by Gravimetry		
Suspended Solids	<2.5	mg/l
NCOAF pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)		
pH	7.2	0.1
⑨NCOAK Ammoniacal Nitrogen by Discrete Analyser		
Ammonia nitrogen	0.07	mg/l
NC76G Total Phosphorus in Water by Discrete Analyser (Trace)		
Total phosphorus	3.64	mg/l
ZMJU7 Enumeration of Escherichia coli by Membrane Filtration		
Escherichia coli	80	cfu/100 ml

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SAMPLE CODE	817-2026-00007969		
Sample Name	GT7820RC	Sampling Point name:	4. 200 meters downstream - ORC
Sampling Point code:	GT7820RC	Sampling	
Reception Date & Time:	27/01/2026 14:19	Reception temperature:	14.7 °C
Analysis Started on:	28/01/2026	Analysis Ending Date:	04/02/2026
Product Type	Surface water, raw water	Sampler(s)	[REDACTED]
Sampled Date & Time	27/01/2026 12:20		

	RESULTS	LOQ
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NC03M Total Nitrogen in Water by Discrete Analyser (Trace)

Total Nitrogen (N) 0.43 mg/l 0.01

NC04C Total Oxidised Nitrogen in Water by Discrete Analyser

Total Oxidised Nitrogen 0.29 mg/l 0.01

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

Biochemical oxygen demand (BOD) <2 mg/l 2

NCOAE Total Suspended Solids in Water by Gravimetry

Suspended Solids 9.2 mg/l 2.5

NCOAF pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)

pH 7.7 0.1

⑨NCOAK Ammoniacal Nitrogen by Discrete Analyser

Ammonia nitrogen 0.02 mg/l 0.01

NC76G Total Phosphorus in Water by Discrete Analyser (Trace)

Total phosphorus 0.35 mg/l 0.01

ZMJU7 Enumeration of Escherichia coli by Membrane Filtration

Escherichia coli 10 cfu/100 ml 1

SAMPLE CODE 817-2026-00007970

Sample Name	GT7840RC	Sampling Point name:	5. Upstream of Kawarau River - ORC
Sampling Point code:	GT7840RC	Sampling	
Reception Date & Time:	27/01/2026 14:19	Reception temperature:	14.7 °C
Analysis Started on:	28/01/2026	Analysis Ending Date:	04/02/2026
Product Type	Surface water, raw water	Sampler(s)	[REDACTED]
Sampled Date & Time	27/01/2026 11:56		

	RESULTS	LOQ
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NC03M Total Nitrogen in Water by Discrete Analyser (Trace)

Total Nitrogen (N) 0.24 mg/l 0.01

NC04C Total Oxidised Nitrogen in Water by Discrete Analyser

Total Oxidised Nitrogen 0.05 mg/l 0.01

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

Biochemical oxygen demand (BOD) <2 mg/l 2

NCOAE Total Suspended Solids in Water by Gravimetry

Suspended Solids <2.5 mg/l 2.5

NCOAF pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)

pH 7.6 0.1

⑨NCOAK Ammoniacal Nitrogen by Discrete Analyser

Ammonia nitrogen 0.11 mg/l 0.01

NC76G Total Phosphorus in Water by Discrete Analyser (Trace)

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RESULTS LOQ

NC76G Total Phosphorus in Water by Discrete Analyser (Trace)

Total phosphorus 0.01 mg/l 0.01

ZMJU7 Enumeration of Escherichia coli by Membrane Filtration

Escherichia coli <1 cfu/100 ml 1

SAMPLE CODE 817-2026-00007971

Sample Name	GT7830RC	Sampling Point name:	6. Downstream of Kawarau River - ORC Sampling
Sampling Point code:	GT7850RC		14.7 °C
Reception Date & Time:	27/01/2026 14:19	Reception temperature:	04/02/2026
Analysis Started on:	28/01/2026	Analysis Ending Date:	
Product Type	Surface water, raw water	Sampler(s)	
Sampled Date & Time	27/01/2026 11:12		

RESULTS LOQ

NC03M Total Nitrogen in Water by Discrete Analyser (Trace)

Total Nitrogen (N) 0.15 mg/l 0.01

NC04C Total Oxidised Nitrogen in Water by Discrete Analyser

Total Oxidised Nitrogen 0.17 mg/l 0.01

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

Biochemical oxygen demand (BOD) <2 mg/l 2

NCOAE Total Suspended Solids in Water by Gravimetry

Suspended Solids <2.5 mg/l 2.5

NCOAF pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)

pH 7.9 0.1

⑨NCOAK Ammoniacal Nitrogen by Discrete Analyser

Ammonia nitrogen 0.01 mg/l 0.01

NC76G Total Phosphorus in Water by Discrete Analyser (Trace)

Total phosphorus 0.01 mg/l 0.01

ZMJU7 Enumeration of Escherichia coli by Membrane Filtration

Escherichia coli 1 cfu/100 ml 1

LIST OF METHODS
NC03M Total Nitrogen in Water by Discrete Analyser (Trace):
 APHA 24th Edition 4500-P J/4500-NH

* Test was performed at 142 Esk Street, Invercargill

NC04C Total Oxidised Nitrogen in Water by Discrete Analyser:
 APHA 24th Edition 4500-NO3 H

* Test was performed at 142 Esk Street, Invercargill

NC05B Total Biochemical Oxygen Demand (TBOD 5 Days) by Electrode: APHA 24th Edition 5210 B

* Test was performed at 142 Esk Street, Invercargill

NC0AE Total Suspended Solids in Water by Gravimetry: APHA 24th Edition 2540 D

* Test was performed at 142 Esk Street, Invercargill

NC0AF pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time): APHA 24th Edition 4500-H B

* Test was performed at 142 Esk Street, Invercargill

NC0AK Ammoniacal Nitrogen by Discrete Analyser: ISBN 0117516139 mod.

* Test was performed at 142 Esk Street, Invercargill

NC76G Total Phosphorus in Water by Discrete Analyser (Trace): APHA 24th Edition 4500 P B/J mod

* Test was performed at 142 Esk Street, Invercargill

ZMJU7 Escherichia coli E [IVC] <1 >8 000 cfu/100 ml (0) mTEC

Agar-F: US EPA 1603 2014

* Test was performed at 142 Esk Street, Invercargill

Signature

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EXPLANATORY NOTE

- 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

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

X (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.

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 16 Lorne Street, Dunedin.

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