

Food & Water Testing

ANALYTICAL REPORT

REPORT CODE

AR-26-NC-003749-01

REPORT DATE

04/02/2026

Attention Otago Regional Council
compliance

Copy to: regulatory

Contact for your orders:

Shotover WWTP

Order code:

EUNZCH-00243875

Contract:

Shotover WWTP

Submission Reference:

Emergency Discharge to Shotover River

Purchase Order Number:

SAMPLE CODE

817-2026-00007966

Sample Name

GT7800RC

Sampling Point code:

GT7800RC

Sampling Point name:

1. Upstream WWTP (before the SH6
bridge) - ORC Sam

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)

Sampled Date & Time

27/01/2026 11:45

RESULTS

LOQ

NC03M Total Nitrogen in Water by Discrete Analyser (Trace)

Parameter	Result	Unit	LOQ
Total Nitrogen (N)	0.04	mg/l	0.01

NC04C Total Oxidised Nitrogen in Water by Discrete Analyser

Parameter	Result	Unit	LOQ
Total Oxidised Nitrogen	0.02	mg/l	0.01

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

Parameter	Result	Unit	LOQ
Biochemical oxygen demand (BOD)	<2	mg/l	2

NC0AE Total Suspended Solids in Water by Gravimetry

Parameter	Result	Unit	LOQ
Suspended Solids	24.6	mg/l	2.5

NC0AF pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)

Parameter	Result	LOQ
pH	8.0	0.1

© NC0AK Ammoniacal Nitrogen by Discrete Analyser

Parameter	Result	Unit	LOQ
Ammonia nitrogen	<0.01	mg/l	0.01

NC76G Total Phosphorus in Water by Discrete Analyser (Trace)

Parameter	Result	Unit	LOQ
Total phosphorus	0.04	mg/l	0.01

ZMJU7 Enumeration of Escherichia coli by Membrane Filtration

Parameter	Result	Unit	LOQ
Escherichia coli	3	cfu/100 ml	1

SAMPLE CODE

817-2026-00007967

Sample Name

GT7790RC

Sampling Point code:

GT7790RC

Sampling Point name:

2. Final Discharge post UV - 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

treated effluent

Sampler(s)

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
			0.01
NC04C	Total Oxidised Nitrogen in Water by Discrete Analyser		
	Total Oxidised Nitrogen	3.3	mg/l
			0.01
NC05B	Total Biochemical Oxygen Demand (TBOD 5 Days) by Electrode		
	Biochemical oxygen demand (BOD)	<2	mg/l
			2
NC0AE	Total Suspended Solids in Water by Gravimetry		
	Suspended Solids	2.9	mg/l
			2.5
NC0AF	pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)		
	pH	7.0	
			0.1
© NC0AK	Ammoniacal Nitrogen by Discrete Analyser		
	Ammonia nitrogen	0.07	mg/l
			0.01
NC76G	Total Phosphorus in Water by Discrete Analyser (Trace)		
	Total phosphorus	3.63	mg/l
			0.01
ZMJU7	Enumeration of Escherichia coli by Membrane Filtration		
	Escherichia coli	2	cfu/100 ml
			1

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)
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
			0.01
NC04C	Total Oxidised Nitrogen in Water by Discrete Analyser		
	Total Oxidised Nitrogen	3.1	mg/l
			0.01
NC05B	Total Biochemical Oxygen Demand (TBOD 5 Days) by Electrode		
	Biochemical oxygen demand (BOD)	<2	mg/l
			2
NC0AE	Total Suspended Solids in Water by Gravimetry		
	Suspended Solids	<2.5	mg/l
			2.5
NC0AF	pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)		
	pH	7.2	
			0.1
© NC0AK	Ammoniacal Nitrogen by Discrete Analyser		
	Ammonia nitrogen	0.07	mg/l
			0.01
NC76G	Total Phosphorus in Water by Discrete Analyser (Trace)		
	Total phosphorus	3.64	mg/l
			0.01
ZMJU7	Enumeration of Escherichia coli by Membrane Filtration		
	Escherichia coli	80	cfu/100 ml
			1

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SAMPLE CODE 817-2026-00007969

Sample Name GT782ORC
Sampling Point code: GT782ORC

Sampling Point name: 4. 200 meters downstream - ORC Sampling

Reception Date & Time: 27/01/2026 14:19
Analysis Started on: 28/01/2026

Reception temperature: 14.7 °C
Analysis Ending Date: 04/02/2026

Product Type Surface water, raw water
Sampled Date & Time 27/01/2026 12:20

Sampler(s)

RESULTS

LOQ

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

NC0AE Total Suspended Solids in Water by Gravimetry

Suspended Solids 9.2 mg/l 2.5

NC0AF pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)

pH 7.7 0.1

©NC0AK 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 GT784ORC
Sampling Point code: GT784ORC

Sampling Point name: 5. Upstream of Kawarau River - ORC Sampling

Reception Date & Time: 27/01/2026 14:19
Analysis Started on: 28/01/2026

Reception temperature: 14.7 °C
Analysis Ending Date: 04/02/2026

Product Type Surface water, raw water
Sampled Date & Time 27/01/2026 11:56

Sampler(s)

RESULTS

LOQ

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

NC0AE Total Suspended Solids in Water by Gravimetry

Suspended Solids <2.5 mg/l 2.5

NC0AF pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)

pH 7.6 0.1

©NC0AK 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	GT783ORC		
Sampling Point code:	GT785ORC	Sampling Point name:	6. Downstream of Kawarau 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)	
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
NC0AE	Total Suspended Solids in Water by Gravimetry		
	Suspended Solids	<2.5 mg/l	2.5
NC0AF	pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)		
	pH	7.9	0.1
© NC0AK	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

✗ (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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