

Food & Water Testing

ANALYTICAL REPORT

REPORT CODE	AR-26-NC-007264-01	REPORT DATE	02/03/2026
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Attention Otago Regional Council

Copy to: regulatory

Contact for your orders: [REDACTED] Contract: Shotover WWTP Submission Reference: Emergency Discharge to Shotover River	Order code: EUNZCH-00246785 Purchase Order Number: [REDACTED]
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SAMPLE CODE 817-2026-00017274

Sample Name GT7800RC Sampling Point code: GT7800RC Reception Date & Time: 23/02/2026 14:39 Analysis Started on: 24/02/2026 Product Type Surface water, raw water Sampled Date & Time 23/02/2026 13:00	Sampling Point name: 1. Upstream WWTP (before the SH6 bridge) - ORC Sam Reception temperature: 8.4 °C Analysis Ending Date: 02/03/2026 Sampler(s) [REDACTED]
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RESULTS	LOQ
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NC03M	Total Nitrogen in Water by Discrete Analyser (Trace)		
	Total Nitrogen (N)	<0.01 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	2.8 mg/l	2.5
NCOAF	pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)		
	pH	8.0	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	3 cfu/100 ml	1

SAMPLE CODE 817-2026-00017275

Sample Name GT7790RC Sampling Point code: GT7790RC Reception Date & Time: 23/02/2026 14:39 Analysis Started on: 24/02/2026 Product Type treated Effluent Sampled Date & Time 23/02/2026 13:00	Sampling Point name: 2. Final Discharge post UV - ORC Sampling Reception temperature: 8.4 °C Analysis Ending Date: 02/03/2026 Sampler(s) [REDACTED]
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RESULTS	LOQ
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	RESULTS		LOQ
NC03M	Total Nitrogen in Water by Discrete Analyser (Trace)		
	Total Nitrogen (N)	4.29	mg/l
			0.01
NC04C	Total Oxidised Nitrogen in Water by Discrete Analyser		
	Total Oxidised Nitrogen	3.5	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	5.8	mg/l
			2.5
NC0AF	pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)		
	pH	7.3	
			0.1
© NC0AK	Ammoniacal Nitrogen by Discrete Analyser		
	Ammonia nitrogen	0.06	mg/l
			0.01
NC76G	Total Phosphorus in Water by Discrete Analyser (Trace)		
	Total phosphorus	1.80	mg/l
			0.01
ZMJU7	Enumeration of Escherichia coli by Membrane Filtration		
	Escherichia coli	110	cfu/100 ml
			1

SAMPLE CODE	817-2026-00017276		
Sample Name	GT781ORC		
Sampling Point code:	GT781ORC	Sampling Point name:	3. Discharge to the river - ORC Sampling
Reception Date & Time:	23/02/2026 14:39	Reception temperature:	8.4 °C
Analysis Started on:	24/02/2026	Analysis Ending Date:	02/03/2026
Product Type	Surface water, raw water	Sampler(s)	[REDACTED]
Sampled Date & Time	23/02/2026 13:00		

	RESULTS		LOQ
NC03M	Total Nitrogen in Water by Discrete Analyser (Trace)		
	Total Nitrogen (N)	4.84	mg/l
			0.01
NC04C	Total Oxidised Nitrogen in Water by Discrete Analyser		
	Total Oxidised Nitrogen	3.4	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	5.5	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	0.03	mg/l
			0.01
NC76G	Total Phosphorus in Water by Discrete Analyser (Trace)		
	Total phosphorus	1.83	mg/l
			0.01
ZMJU7	Enumeration of Escherichia coli by Membrane Filtration		
	Escherichia coli	170	cfu/100 ml
			1

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SAMPLE CODE	817-2026-00017277
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Sample Name	GT782ORC	Sampling Point name:	4. 200 meters downstream - ORC Sampling
Sampling Point code:	GT782ORC	Reception temperature:	8.4 °C
Reception Date & Time:	23/02/2026 14:39	Analysis Ending Date:	02/03/2026
Analysis Started on:	24/02/2026	Sampler(s)	[REDACTED]
Product Type	Surface water, raw water		
Sampled Date & Time	23/02/2026 13:00		

RESULTS

LOQ

NC03M	Total Nitrogen in Water by Discrete Analyser (Trace)		
	Total Nitrogen (N)	0.61 mg/l	0.01
NC04C	Total Oxidised Nitrogen in Water by Discrete Analyser		
	Total Oxidised Nitrogen	0.50 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	9.7 mg/l	2.5
NC0AF	pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)		
	pH	7.8	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	0.25 mg/l	0.01
ZMJU7	Enumeration of Escherichia coli by Membrane Filtration		
	Escherichia coli	370 cfu/100 ml	1

SAMPLE CODE	817-2026-00017278
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Sample Name	GT784ORC	Sampling Point name:	5. Upstream of Kawarau River - ORC Sampling
Sampling Point code:	GT784ORC	Reception temperature:	8.4 °C
Reception Date & Time:	23/02/2026 14:39	Analysis Ending Date:	02/03/2026
Analysis Started on:	24/02/2026	Sampler(s)	[REDACTED]
Product Type	Surface water, raw water		
Sampled Date & Time	23/02/2026 13:00		

RESULTS

LOQ

NC03M	Total Nitrogen in Water by Discrete Analyser (Trace)		
	Total Nitrogen (N)	0.20 mg/l	0.01
NC04C	Total Oxidised Nitrogen in Water by Discrete Analyser		
	Total Oxidised Nitrogen	0.10 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	3.0 mg/l	2.5
NC0AF	pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)		
	pH	7.5	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)		

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	RESULTS	LOQ
NC76G Total Phosphorus in Water by Discrete Analyser (Trace)		
Total phosphorus	0.02	mg/l 0.01
ZMJU7 Enumeration of Escherichia coli by Membrane Filtration		
Escherichia coli	18	cfu/100 ml 1

SAMPLE CODE	817-2026-00017279		
Sample Name	GT783ORC		
Sampling Point code:	GT785ORC	Sampling Point name:	6. Downstream of Kawarau River - ORC Sampling
Reception Date & Time:	23/02/2026 14:39	Reception temperature:	8.4 °C
Analysis Started on:	24/02/2026	Analysis Ending Date:	02/03/2026
Product Type	Surface water, raw water	Sampler(s)	[REDACTED]
Sampled Date & Time	23/02/2026 13:00		

	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	0.03	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	34.7	mg/l 2.5
NC0AF pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)		
pH	8.0	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	0.04	mg/l 0.01
ZMJU7 Enumeration of Escherichia coli by Membrane Filtration		
Escherichia coli	23	cfu/100 ml 1

LIST OF METHODS	
<p>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</p>	<p>NC04C Total Oxidised Nitrogen in Water by Discrete Analyser: APHA 24th Edition 4500-NO3 H * Test was performed at 142 Esk Street, Invercargill</p>
<p>NC05B Total Biochemical Oxygen Demand (TBOD 5 Days) by Electrode: APHA 24th Edition 5210 B * Test was performed at 142 Esk Street, Invercargill</p>	<p>NC0AE Total Suspended Solids in Water by Gravimetry: APHA 24th Edition 2540 D * Test was performed at 142 Esk Street, Invercargill</p>
<p>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</p>	<p>NC0AK Ammoniacal Nitrogen by Discrete Analyser: ISBN 0117516139 mod. * Test was performed at 142 Esk Street, Invercargill</p>
<p>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</p>	<p>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</p>

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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