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# Food & Water Testing

**ANALYTICAL REPORT** 

REPORT CODE AR-25-NC-013704-01		REPORT DATE	14/05/2025		
Attentio	Otago Regiona compliance	Il Council			
	Private Bag 19	954			
	9054 DUNED				
	NEW ZEALAN	D			
Phone	(0800) 474 082			Copy to: regulatory (	
Email					
	for your orders:			Order code:	EUNZCH-00216384
Contrac	t: ion Reference:	Shotover WWTP Emergency discharge	to Shotover River	Purchase Order Number:	
	E CODE	817-2025-000457	60		
Sample Sample	Name Reference	GT7800RC U/S WWTP and SH6 E	Bridge		
-	on Date & Time:	05/05/2025 14:43		Reception temperature:	10.8 °C
-	s Started on:	05/05/2025		Analysis Ending Date: Sampler(s)	14/05/2025
Product		,	Surface water, raw water		
Sampleo	I Date & Time	05/05/2025 12:41			
		RESULT		LOQ	
@NCOAK		ogen by Discrete Analy	/ser		
	Ammonia nitrogen	<0.01	mg/l	0.01	
@NW340	Chlorophyll a				
*	Chlorophyll A	<1.9	µg/I	1.9	
*ZMJU7		scherichia coli by Mer			
*	Escherichia coli	1	cfu/100 ml	1	
*NCOAF	pH in Water by Ma	anual Electrode (Teste 7.9	d beyond 15 min	ute APHA holding time)	
	·			0.1	
NCOSE	*NC05B Total Biochemical Oxygen Demand (TBOD 5 Biochemical oxygen demand <2 (BOD)		mg/l	2	
*NC03М		Water by Discrete Ana	lyser (Trace)		
	Total Nitrogen (N)	0.02	mg/l	0.01	
*NC04C	Total Oxidised Nit	trogen in Water by Dis	crete Analyser		
	Total Oxidised Nitrogen <0.01 mg/l		0.01		
*NC76G	Total Phosphorus	s in Water by Discrete	Analyser (Trace)		
	Total phosphorus	0.03	mg/l	0.01	
*NCOAE	Total Suspended	Solids in Water by Gra	vimetry		
4	Suspended Solids	20.9	mg/l	2.5	
@NC03Q	•	r by Nephelometry			
	Turbidity	1.6	NTU	0.1	





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## Food & Water Testing

SAMPL	E CODE	817-2025-00045766				
Sample Name Sample Reference Reception Date & Time: Analysis Started on: Product Type		GT779ORC Final discharge post UV 05/05/2025 14:43 05/05/2025		Reception temperature: Analysis Ending Date:	10.8 °C 14/05/2025	
	Type Date & Time	Surface water, raw water 05/05/2025 14:10		Sampler(s)		
Jampieu		RESULTS		LOQ		
	A					
GNCOAK	Ammonia nitrogen	ogen by Discrete Analyse 0.07	r mg/l	0.01		
@NW340	Chlorophyll a		5			
*ZMJU7	Chlorophyll A	<1.9 scherichia coli by Memb	µg/l	1.9		
ZWJU7	Enumeration of E Escherichia coli		cfu/100 ml	n 1		
*NCOAF		∠ Anual Electrode (Tested k		nute APHA holding time)		
NCOAF	pH III water by Wa		eyona 15 mi	0.1		
*NC05B	-	I Oxygen Demand (TBOD	5 Dave) by 5			
ROODD	Biochemical oxygen (BOD)		mg/l	2		
*NC03М	Total Nitrogen in	Water by Discrete Analys	er (Trace)			
	Total Nitrogen (N)	4.69	mg/l	0.01		
*NC04C	Total Oxidised Nit	trogen in Water by Discre	ete Analyser			
	Total Oxidised Nitrog	en 3.9	mg/l	0.01		
*NC76G	Total Phosphorus Total phosphorus	in Water by Discrete An 0.15	alyser (Trace) mg/l	<b>)</b> 0.01		
*NCOAE	Total Suspended	Solids in Water by Gravi	netry			
	Suspended Solids	5.0	mg/l	2.5		
@ <sup>*</sup> NC03Q	Turbidity in Water	by Nephelometry				
	Turbidity	0.85	NTU	0.1		
SAMPL	E CODE	817-2025-00045767				
Reception	Name Reference on Date & Time: s Started on:	GT7810RC Shotover WWTP discharg 05/05/2025 14:43 05/05/2025	e to Shotover	River Reception temperature: Analysis Ending Date:	10.8 °C 14/05/2025	
Product	••	Surface water, raw water		Sampler(s)		
Sampled	Date & Time	05/05/2025 13:36				
		RESULTS		LOQ		
©ÎNC0AK	Ammoniacal Nitro	ogen by Discrete Analyse	r			
@NW340	Ammonia nitrogen Chlorophyll a	0.09	mg/l	0.01		
	Chlorophyll A	<1.9	µg/I	1.9		
*ZMJU7	Enumeration of E Escherichia coli	scherichia coli by Memb 19	rane Filtration cfu/100 ml	<b>n</b> 1		
*NCOAF	pH in Water by Ma	anual Electrode (Tested b	eyond 15 mi	nute APHA holding time)		
	рH	7.2		0.1		
*NC05B	Total Biochemica Biochemical oxygen ( (BOD)	I Oxygen Demand (TBOD demand <2	<b>5 Days) by E</b> mg/l	Electrode 2		
43 Detroit Rolleston Christchur		Eurofins ELS Limi 142 Esk Street Invercargill 9810 NEW ZEALAND	ited	Phone (Christchurch) +64 Phone (Invercargill) www.eurofins.co.nz	4 3 343 5227	



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		Food & V	Nater Te	sting				
		RESULT	S	LOQ				
*NC03М	Total Nitrogen in	Water by Discrete Ana	lyser (Trace)					
	Total Nitrogen (N)	4.44	mg/l	0.01				
*NC04C	Total Oxidised Nit	trogen in Water by Dis	crete Analyse	r				
	Total Oxidised Nitrog	en 3.7	mg/l	0.01				
*NC76G	<b>Total Phosphorus</b>	in Water by Discrete	Analyser (Trac	e)				
	Total phosphorus	0.17	mg/l	0.01				
*NCOAE	Total Suspended	Solids in Water by Gra						
	Suspended Solids	3.4	2.5					
@NC03Q	Turbidity in Water	r by Nephelometry						
	Turbidity	1.1	NTU	0.1				
SAMPL	E CODE	817-2025-000457	68					
Sample		GT7820RC						
	Reference	Approx 200m d/s of d	ischarge to Sho	tover River				
	on Date & Time:	05/05/2025 14:43		Reception temperature:	10.8 °C			
-	s Started on:	05/05/2025		Analysis Ending Date:	14/05/2025			
Product	••	Surface water, raw wat	ter	Sampler(s)				
Sampled	Date & Time	05/05/2025 13:24						
		RESULT	S	LOQ				
℗ <sup>*</sup> NCOAK	Ammoniacal Nitro	ogen by Discrete Analy	<b>/ser</b>					
	Ammonia nitrogen	0.03	mg/l	0.01				
2NW340	Chlorophyll a							
	Chlorophyll A	<1.9	µg/l	1.9				
*ZMJU7	Enumeration of Escherichia coli by Membrane Filtration							
	Escherichia coli	1	cfu/100 m	1				
*NCOAF	pH in Water by Manual Electrode (Tested beyond 15 minute APHA holding time)							
	рH	7.8		0.1				
*NC05B	Total Biochemica	I Oxygen Demand (TB	OD 5 Days) by	Electrode				
	Biochemical oxygen ( (BOD)	demand <2	mg/l	2				
*NC03М	Total Nitrogen in Water by Discrete Analyser (Trace)							
	Total Nitrogen (N)	0.32	mg/l	0.01				
*NC04C	Total Oxidised Nitrogen in Water by Discrete Analyser		r					
	Total Oxidised Nitrog	en 0.26	mg/l	0.01				
*NC76G	Total Phosphorus in Water by Discrete Analyser (Trace)							
	Total phosphorus	0.03	mg/l	0.01				
*NCOAE	Total Suspended	Solids in Water by Gra						
	Suspended Solids	3.2	mg/l	2.5				
©™003Q	Turbidity in Water	· by Nephelometry						
	-							

SAMPLE CODE Sample Name Sample Reference Reception Date & Time: Analysis Started on: Product Type Sampled Date & Time 817-2025-00045769 GT7840RC U/S of Kawarau River 05/05/2025 14:43 05/05/2025 Surface water, raw water 05/05/2025 12:57

Reception temperature: Analysis Ending Date: Sampler(s) 10.8 °C 14/05/2025

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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## Food & Water Testing

L		RESUL	TS	LOQ				
<b>İNCOAK</b>	Ammoniacal Nitro	ogen by Discrete Ana	alyser					
	Ammonia nitrogen	<0.01	mg/l	0.01				
2NW340	Chlorophyll a							
	Chlorophyll A	<1.9	µg/l	1.9				
*ZMJU7	Enumeration of E	Scherichia coli by M	embrane Filtrati	on				
	Escherichia coli	23	cfu/100 ml	1				
*NCOAF	pH in Water by M	anual Electrode (Tes	ted beyond 15 m	ninute APHA holding time)				
	рН	7.5		0.1				
*NC05B	Total Biochemica	l Oxygen Demand (T	BOD 5 Days) by	Electrode				
	Biochemical oxygen (BOD)	demand <2	mg/l	2				
*NC03М	Total Nitrogen in Water by Discrete Analyser (Trace)							
	Total Nitrogen (N)	0.03	mg/l	0.01				
*NC04C	Total Oxidised Ni	trogen in Water by D	iscrete Analysei					
	Total Oxidised Nitrogen <0.01 mg/l			0.01				
*NC76G	Total Phosphorus	s in Water by Discret	e Analyser (Trac	e)				
	Total phosphorus	0.01	mg/l	0.01				
*NCOAE	Total Suspended	Solids in Water by G	ravimetry					
	Suspended Solids	3.5	mg/l	2.5				
@*NC03Q	Turbidity in Wate	r by Nephelometry						
	Turbidity	0.4	NTU	0.1				
SAMPL	E CODE	817-2025-00045	770					
Sample	Name	GT7850RC						
-	Reference	D/S of Kawarau Rive						
Reception Date & Time:		05/05/2025 14:43		Reception temperature:	10.8 °C			
-	Started on:	05/05/2025		Analysis Ending Date:	14/05/2025			
Product Sampled	Date & Time	Surface water, raw w 05/05/2025 12:25		Sampler(s)				
		RESUL		100				
_*				LOQ				
<pre>⑨NCOAK</pre>		ogen by Discrete Ana						
			mg/l					
<b></b>	Ammonia nitrogen	0.01	iiig/i	0.01				
@NW340	Chlorophyll a		Ū.					
4	Chlorophyll a Chlorophyll A	<1.9	μg/l	1.9				
-t-	Chlorophyll a Chlorophyll A Enumeration of E	<1.9 Escherichia coli by M	µg/I embrane Filtrati	1.9 on				
*ZMJU7	Chlorophyll a Chlorophyll A Enumeration of E Escherichia coli	<1.9 Escherichia coli by M 3	µg/l embrane Filtrati cfu/100 ml	1.9 <b>on</b> 1				
-t-	Chlorophyll a Chlorophyll A Enumeration of E Escherichia coli pH in Water by M	<1.9 Escherichia coli by M 3 anual Electrode (Tes	µg/l embrane Filtrati cfu/100 ml	1.9 on 1 ninute APHA holding time)				
*ZMJU7 *NCOAF	Chlorophyll a Chlorophyll A Enumeration of E Escherichia coli pH in Water by M pH	<1.9 Escherichia coli by M 3 anual Electrode (Tes 7.9	µg/l embrane Filtrati cfu/100 ml ted beyond 15 m	1.9 on 1 ninute APHA holding time) 0.1				
*ZMJU7	Chlorophyll a Chlorophyll A Enumeration of E Escherichia coli pH in Water by M pH Total Biochemica	<1.9 Escherichia coli by M 3 anual Electrode (Tes 7.9 Il Oxygen Demand (T	µg/l embrane Filtrati cfu/100 ml ted beyond 15 m BOD 5 Days) by	1.9 on 1 ninute APHA holding time) 0.1 Electrode				
*ZMJU7 *NCOAF *NCO5B	Chlorophyll a Chlorophyll A Enumeration of E Escherichia coli pH in Water by M pH Total Biochemica Biochemical oxygen (BOD)	<1.9 Escherichia coli by M 3 anual Electrode (Tes 7.9 Il Oxygen Demand (T demand <2	µg/l embrane Filtrati cfu/100 ml ted beyond 15 m BOD 5 Days) by mg/l	1.9 on 1 ninute APHA holding time) 0.1				
*ZMJU7 *NCOAF *NCO5B	Chlorophyll a Chlorophyll A Enumeration of E Escherichia coli pH in Water by M pH Total Biochemical Biochemical oxygen (BOD) Total Nitrogen in	<1.9 Escherichia coli by Ma 3 anual Electrode (Tes 7.9 Il Oxygen Demand (T demand <2 Water by Discrete Ar	µg/l embrane Filtrati cfu/100 ml ted beyond 15 m BOD 5 Days) by mg/l	1.9 on 1 ninute APHA holding time) 0.1 Electrode 2				
*ZMJU7 *NCOAF *NCO5B *NCO3M	Chlorophyll a Chlorophyll A Enumeration of E Escherichia coli pH in Water by M pH Total Biochemica Biochemical oxygen (BOD)	<1.9 Escherichia coli by M 3 anual Electrode (Tes 7.9 Il Oxygen Demand (T demand <2	µg/l embrane Filtrati cfu/100 ml ted beyond 15 m BOD 5 Days) by mg/l	1.9 on 1 ninute APHA holding time) 0.1 Electrode				
*ZMJU7 *NCOAF *NCO5B *NCO3M	Chlorophyll a Chlorophyll A Enumeration of E Escherichia coli pH in Water by M pH Total Biochemica Biochemical oxygen (BOD) Total Nitrogen in Total Nitrogen (N) Total Oxidised Ni	<1.9 Escherichia coli by Ma 3 anual Electrode (Tes 7.9 Al Oxygen Demand (T demand <2 Water by Discrete Ar 0.03 trogen in Water by D	μg/l embrane Filtrati cfu/100 ml ted beyond 15 m BOD 5 Days) by mg/l halyser (Trace) mg/l	1.9 on 1 <b>hinute APHA holding time)</b> 0.1 <b>Electrode</b> 2 0.01				
*ZMJU7 *NCOAF *NCO5B *NCO3M *NCO4C	Chlorophyll a Chlorophyll A Enumeration of E Escherichia coli pH in Water by M pH Total Biochemical Biochemical oxygen (BOD) Total Nitrogen in Total Nitrogen (N) Total Oxidised Nitrogen	<1.9 Escherichia coli by Ma 3 anual Electrode (Tes 7.9 al Oxygen Demand (T demand <2 Water by Discrete Ar 0.03 trogen in Water by D gen 0.02	μg/l embrane Filtrati cfu/100 ml ted beyond 15 m BOD 5 Days) by mg/l nalyser (Trace) mg/l iscrete Analysen mg/l	1.9 on 1 hinute APHA holding time) 0.1 Electrode 2 0.01				
*ZMJU7 *NCOAF *NCO5B *NCO3M *NCO4C	Chlorophyll a Chlorophyll A Enumeration of E Escherichia coli pH in Water by M pH Total Biochemical Biochemical oxygen (BOD) Total Nitrogen in Total Nitrogen (N) Total Oxidised Nitrogen	<1.9 Escherichia coli by Ma 3 anual Electrode (Tes 7.9 Al Oxygen Demand (T demand <2 Water by Discrete Ar 0.03 trogen in Water by D	μg/l embrane Filtrati cfu/100 ml ted beyond 15 m BOD 5 Days) by mg/l nalyser (Trace) mg/l iscrete Analysen mg/l	1.9 on 1 hinute APHA holding time) 0.1 Electrode 2 0.01				
*ZMJU7 *NCOAF *NCO5B *NCO3M *NCO4C	Chlorophyll a Chlorophyll A Enumeration of E Escherichia coli pH in Water by M pH Total Biochemical Biochemical oxygen (BOD) Total Nitrogen in Total Nitrogen (N) Total Oxidised Nitrogen	<1.9 Escherichia coli by Ma 3 anual Electrode (Tes 7.9 al Oxygen Demand (T demand <2 Water by Discrete Ar 0.03 trogen in Water by D gen 0.02	μg/l embrane Filtrati cfu/100 ml ted beyond 15 m BOD 5 Days) by mg/l nalyser (Trace) mg/l iscrete Analysen mg/l	1.9 on 1 hinute APHA holding time) 0.1 Electrode 2 0.01				

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### Food & Water Testing

		RESULTS	3	LOQ
*NCOAE	Total Suspended So	otal Suspended Solids in Water by Gravimetry		
	Suspended Solids	6.2	mg/l	2.5
©™CO3Q	Turbidity in Water by Nephelometry			
	Turbidity	0.6	NTU	0.1

#### LIST OF METHODS

NC03M	Total Nitrogen in Water by Discrete Analyser (Trace): APHA Online Edition 4500-P J/4500-NH	NC03Q	Turbidity in Water by Nephelometry: APHA 24th Edition 2130 B mod.
NC04C	Total Oxidised Nitrogen in Water by Discrete Analyser: APHA Online Edition 4500-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	Total Phosphorus in Water by Discrete Analyser (Trace): APHA Online Edition 4500-P B/J mod.
NW340	Chlorophyll a: APHA Online Edition 10200 H	ZMJU7	Escherichia coli E (Water) [NZ Water] <1 >8 000 /100 ml (0) mTEC Agar-F: US-EPA 1603:2014

Signature



#### EXPLANATORY NOTE

Test is not accredited

- Test is subcontracted within Eurofins group and is accredited
- 3 Test is subcontracted within Eurofins group and is not accredited
- Test is subcontracted outside Eurofins group and is accredited
- <sup>(5)</sup> Test is subcontracted outside Eurofins group and is not accredited
- © Test result is provided by the customer and is not accredited
- Ø 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
- 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

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### Food & Water Testing

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