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Service Provider No. 488



Drinking Water Quality Management Plan

Annual Report

1 July 2019 – 30 June 2020

December 2020

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GLOSSARY OF TERMS

ADWG	Australian Drinking Water Guidelines (2011). Published by the National Health and Medical Research Council of Australia
CFU/100mL	Colony forming units per 100 millilitres
DWQMP	Drinking Water Quality Management Plan
<i>E. coli</i>	<i>Escherichia coli</i> , a bacterium which is considered to indicate the presence of faecal contamination and therefore potential health risk
LRC	Longreach Regional Council
mg/L	Milligrams per litre
NTU	Nephelometric <i>Turbidity</i> Unit

1. Introduction

This report documents the performance of Longreach Regional Council's drinking water service with respect to water quality and performance in implementing the actions detailed in the Drinking Water Quality Management Plan (DWQMP) as required under the Water Supply (Safety and Reliability) Act 2008 (the Act).

The report assists the Regulator to determine whether the approved DWQMP and any approval conditions have been complied with and provides a mechanism for providers to report publicly on their performance in managing drinking water quality.

2. Overview of Operations

Refer to the DWQMP for an overview of operations.

3. Actions Taken to Implement The DWQMP

Risk management improvements are being implemented according to prioritisation based on risk and available budget. The risk management improvement list is in the process of being extended to include additional risks identified by a third-party consultant, appointed by the service provider.

3.1 Progress in Implementing the Risk Management Improvement Program

Refer to Appendix B for a summary of progress in implementing each of the Improvement Program actions. Progress is ongoing but is largely dependent on available budget. Risk management items with low cost and high risk are generally being attended to first, while expensive risk management items are generally still in progress. The latter require detailed investigation to ensure the solution will be suitable and cost effective.

3.2 Revisions to the Operational Monitoring Program to Maintaining Compliance with Approved DWQMP

3.2.1 Review of Operations

The verification testing regime has been brought into line with the approved DWQMP. Water treatment plant operators have been issued with a comprehensive list of all the verification testing they are required to complete for each year.

3.3 Amendments Made to the DWQMP

3.3.1 2017 DWQMP Review

A formal review is to be undertaken early in 2021 to identify any changes required to bring the DWQMP into line with best practices. Since the changes incorporated through the investigations undertaken by the Outback Regional Water Alliance and results of the last DWQMP Audit and formal review there has been no additional updates to the DWQMP. The latest version of the DWQMP was issued to the Regulator for approval and adopted in August 2019.

4. Compliance with Water Quality Criteria for Drinking Water

Table 1 in Appendix A summarises the compliance test results for the four (4) schemes in 2019-2020.

The verification monitoring program as stated in the DWQMP, in most part has been carried out at all schemes for coliforms and E. coli. Only partial verification testing was conducted for pH, chlorine, and turbidity. Deficiencies in the verification testing and recording process have been identified and addressed with significant improvement anticipated for the next financial year.

5. Notifications to the Regulator Under Sections 102 And 102a of the Act

Longreach Regional Council is required to report on the number of notifications to the Regulator, general details of incident, and the preventative measures undertaken.

This financial year there was no instances where the Regulator was notified under sections 102 or 102A of the Act.

6. Customer Complaints Related to Water Quality

Longreach Regional Council is required to report on the number of complaints, general details of complaints, and the responses undertaken.

The following table outlines the details of the incident.

Table 5 – Customer Complaints Related to Water Quality

Incident Date	Scheme / Location	Parameter / Issue	Response Undertaken
08/10/2019	Longreach	Water a residence has bad odour	Location of residence in a low usage zone. Mains were scoured and the smell dissipated and has not returned
18/10/2019	Longreach	Dirty water in Emu Street	Common occurrence in this location. Scouring was done and is now done more frequently and has alleviated the problem.
18/02/2020	Isisford	Sediment and taste issues	Mains were scoured and a interconnection with the raw water system was discovered
31/03/2020	Isisford	Dirty Water	This was a result of Air Scouring done by contractors causing dirty water in the town for approximately 36 hrs
17/04/2020	Ilfracombe	Brown Dirty Water	Resident located and the end of the system and the cause was the Air Scouring done by contractors causing dirty water in the town for approximately 36 hrs

7. Findings and Recommendations of the DWQMP Auditor

A DWQMP Audit of was undertaken by Bligh Tanner in October 2017 with the next Audit to be completed in 2021. The Audit identified three (3) non-compliances and made several recommendations for opportunities for improvement. The DWQMP was subsequently amended, submitted to the Regulator for approval and adopted in August 2019.

Appendix A – Summary of Compliance with Water Quality Criteria

The results from the verification monitoring program have been compared against the levels of the water quality criteria specified by the Regulator in the *Water Quality and Reporting Guideline for a Drinking Water Service*.

The reported statistics do not include results derived from repeat samples, or from emergency or investigative samples undertaken in response to an elevated result.

Verification monitoring was generally conducted as per the program set out in the approved DWQMP.

Table 1 - Verification Monitoring Results

Scheme name	Scheme component	Parameter	Units	Frequency of sampling	Total No. samples collected	No. of samples in which parameter was detected	No. of samples exceeding water quality criteria	Min	Max	Average (Mean)	Limit of reporting	Laboratory name
Longreach	Test Point 1	Coliforms	mg/L	Weekly	52	0	0	0	0	0	0	QHFS
	Test Point 1	E. coli	mg/L	Weekly	52	0	0	0	0	0	0	QHFS
	Test Point 1	PH	-	Weekly	52	0	0	7.02	7.76	7.45	6.5 – 8.5	QHFS
	Test Point 1	Chlorine	mg/L	Weekly	52	0	0	1.12	2.07	1.35	5	QHFS
	Test Point 1	Turbidity	NTU	Weekly	52	0	0	0.21	0.89	0.43	5	QHFS
	Reticulation	Coliforms	mg/L	Monthly	33	0	0	0	0	0	0	QHFS
	Reticulation	E. coli	mg/L	Monthly	33	0	0	0	0	0	0	QHFS
	Reticulation	PH	-	Monthly	33	0	0	7.00	7.71	7.41	6.5 – 8.5	QHFS
	Reticulation	Chlorine	mg/L	Monthly	33	0	0	1.01	1.76	1.35	5	QHFS
	Reticulation	Turbidity	NTU	Monthly	33	0	0	0.10	0.97	0.40	5	QHFS
Ilfracombe	Reticulation	Coliforms	mg/L	Monthly	48	0	0	0	0	0	0	QHFS
	Reticulation	E. coli	mg/L	Monthly	48	0	0	0	0	0	0	QHFS
	Reticulation	PH	-	Monthly	48	0	0	7.25	7.68	7.50	6.5 – 8.5	QHFS
	Reticulation	Chlorine	mg/L	Monthly	48	0	0	1.18	1.84	1.43	5	QHFS
	Reticulation	Turbidity	NTU	Monthly	48	2	0	0.20	1.55	0.55	5	QHFS
Isisford	Reticulation	Coliforms	mg/L	Monthly	48	0	0	0	0	0	0	QHFS
	Reticulation	E. coli	mg/L	Monthly	48	0	0	0	0	0	0	QHFS
	Reticulation	PH	-	Monthly	48	0	0	6.99	8.27	7.51	6.5 – 8.5	QHFS
	Reticulation	Chlorine	mg/L	Monthly	48	4	0	0.23	2.82	1.26	5	QHFS
	Reticulation	Turbidity	NTU	Monthly	48	0	0	0.35	2.59	1.03	5	QHFS
Yaraka	Reticulation	Coliforms	mg/L	Monthly	23	0	0	0	0	0	0	QHFS
	Reticulation	E. coli	mg/L	Monthly	24	0	0	0	0	0	0	QHFS
	Reticulation	PH	-	Monthly	20	0	0	7.45	7.88	7.69	6.5 – 8.5	QHFS
	Reticulation	Chlorine	mg/L	Monthly	22	1	0	0.92	2.20	1.45	5	QHFS
	Reticulation	Turbidity	NTU	Monthly	22	0	0	0.28	2.38	1.05	5	QHFS

Table 2 – Longreach Reticulation E. coli Verification Monitoring

Drinking water scheme: Longreach

Year	2019 – 2020											
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
No. of samples collected	8	7	7	8	7	7	5	7	7	8	7	7
No. of samples collected in which E. coli is detected (i.e. a failure)	0	0	0	0	0	0	0	0	0	0	0	0
No. of samples collected in previous 12 month period	4	6	6	8	7	7	8	7	7	5	7	7
No. of failures for previous 12 month period	0	0	0	0	0	0	0	0	0	0	0	0
% of samples that comply	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Compliance with 98% annual value	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 3 – Ilfracombe Reticulation E. coli Verification MonitoringDrinking water scheme: Ilfracombe

Year	2019 – 2020											
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
No. of samples collected	4	4	4	4	4	4	4	4	8	4	4	0
No. of samples collected in which E. coli is detected (i.e. a failure)	0	0	0	0	0	0	0	0	0	0	0	0
No. of samples collected in previous 12 month period	0	0	4	0	4	0	4	0	0	0	0	0
No. of failures for previous 12 month period	0	0	0	0	0	0	0	0	0	0	0	0
% of samples that comply	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Compliance with 98% annual value	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 4 – Isisford Reticulation E. coli Verification Monitoring

Drinking water scheme: Isisford

Year	2019 – 2020											
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
No. of samples collected	4	4	4	4	4	4	4	4	4	4	4	4
No. of samples collected in which E. coli is detected (i.e. a failure)	0	0	0	0	0	0	0	0	0	0	0	0
No. of samples collected in previous 12 month period	8	4	4	4	4	4	4	4	4	4	4	4
No. of failures for previous 12 month period	0	0	0	0	0	0	0	0	0	0	0	0
% of samples that comply	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Compliance with 98% annual value	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 5 – Yaraka Reticulation E. coli Verification MonitoringDrinking water scheme: Yaraka

Year	2019 – 2020											
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
No. of samples collected	2	2	2	2	2	2	2	2	2	2	2	2
No. of samples collected in which E. coli is detected (i.e. a failure)	0	0	0	0	0	0	0	0	0	0	0	0
No. of samples collected in previous 12 month period	2	2	2	2	2	2	2	2	2	2	2	2
No. of failures for previous 12 month period	0	0	0	0	0	0	0	0	0	0	0	0
% of samples that comply	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Compliance with 98% annual value	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Appendix B – Implementation of the DWQMP Risk Management Improvement Program

Abbreviations: All, IIFracombe, Longreach, ISisford, Yaraka

Table 6 – Progress Against the Risk Management Improvement Program in the Approved DWQMP

Ref	Sch	Hazard / Hazardous Event	Actions	Priority	Target date	Status as at 10-12-2019	Implications on the DWQMP
1	FSY	Ineffective treatment, disinfection	Investigate purchase and installation of on-line monitors for treated turbidity, free chlorine and pH with alarms and history at each plant.	Medium	June 2021	In Progress	Relying on manual monitoring while investigating options. Budget item 2020/21 – currently reviewing SCADA programs for all sites. Through the RAPADWSA ARCS Group are preparing SCADA/Telemetry specifications for implementation in 2021.
2	A	Animals in off-stream storages (in the water or inside the fence).	Formal reporting currently in TPO diaries. QA procedures to be updated to incorporate.	high	30-Jun-20	Complete	Inspections carried out as before, while developing formal procedures Developing Procedures IIFracombe Dams have Exclusion Fencing Installed. Isisford and Yaraka Dama – Exclusion fencing put back to 2019/20 budget
3	LS	Minimise use of water from the first run of the river to minimise crypto exposure.	Establish operating procedures to utilise off-stream storage. Minimise use of first run in the river. JD to implement formally.	high	30-Jun-20	Complete	Procedure to be documented. Developing Procedures On going and Protocol tested at Isisford and worked well
4	SL	Pollution from camping / recreation areas beside weirs (Longreach and Isisford).	Appropriate signage to be erected. Regular inspections to be carried out.	medium	N/A	Complete	Developing Procedures Ongoing and working well
5	FSY	Blue-green algae in off-stream storages	Program scope established. Routine testing taking place each two months in winter and monthly in summer or as pH > 9.	high	N/A	On going	Procedure to be documented. Signage to be ordered
6	FSY	Bench top turbidity meters have 1 NTU resolution	Completed	medium	N/A	Completed	Completed in 2014/15 F/Y
8	S	Turbidity at Isisford ranges up to 5 NTU	Rectify issues with new Filtration system and upgrade to achieve 0.5 NTU	High	30-Jun-21	In Progress	Review of current system to determine upgrades required and rectification works required on existing system
9	S	Fluctuating chlorine levels in supply to Isisford apparently caused by depletion of	Monitor free chlorine in high level tank and GLR separately, dose point to be relocated for direct injection in line after filter. Clean out Elevated Tank,	high	N/A	Completed	Procedure to be documented. Ongoing monitoring following minor operational changes

Ref	Sch	Hazard / Hazardous Event	Actions	Priority	Target date	Status as at 10-12-2019	Implications on the DWQMP
		chlorine in high level tank	GLR has been cleaned.				
10	S	The town supply flow meter is indicating unrealistic drops in wet weather	Digital meter has been installed. Continue monitoring. Temporarily shut down raw water reticulation to check for cross-connections.	high	N/A	Completed	Completed June 2016 – Ongoing monitoring, following elimination of 2 cross connection's on domestic services
11	A	Effect of power failure on treatment and supply	Longreach – Complete Ilfracombe – Hire generator available. Funding options to be investigated for portable generator to run at Shannon Dam Isisford – Complete Yaraka - Complete	high	N/A	Completed	Ilfracombe gen set installed Shannon Dam Oct 2017 – Completed
12	Y	Various cross-connections between systems at Yaraka	Review water usage, eliminate cross connections, JD to replace water tank.	high	N/A	Completed	New Raw Water Tank
13	Y	Stoppage of dam pump at Yaraka - WTP may continue to operate and receive "mud" from the header tank	New pump installed.	high	N/A	Completed	New type of pumps installed
14	A	Security of service reservoirs	Inspections carried out weekly and recorded in TPO diaries.	medium	N/A	Ongoing	Developing Procedures – Ongoing and Reservoir Maintenance program underway
15	A	Reticulation renewals / repairs	JD to implement appropriate training.	high	N/A	Ongoing	Staff training – P Mosse. Procedures in LRC-SMS
16	L	Failure of alarms/monitoring equipment (Longreach)	'Blue I' installed to monitor turbidity pH, free and total chlorine.	medium	May-20	In Progress	Quotes for new Blue I in progress – procurement by end 1 st Q 2018
17	A	Loss of key operating staff	Review WTP O&M manuals to ensure that provide adequate current information.	high	N/A	On going	Ongoing – current staffing and operational review underway – not likely to be completed before June 2018.
18	Y	Lack of water quality data for Yaraka	KL now carries out routine testing of water and records results.	high	N/A	Complete	Carries out routine testing and monthly reporting to SWIM.
19	A	Sodium hypochlorite breakdown to chlorate	GT to look at current technical information and report if practical to manage hypo in this way.	medium	30-Jun-21	In Progress	More investigation work required. ORWA – currently reviewing disinfection options
19a	A	Sodium hypo chloride breakdown to chlorate	Sampling to take place. May look at switch to gas chlorine to eliminate problem.	medium	31-Dec-20	In Progress	More investigation work required ORWA – currently reviewing disinfection options
20	A	Incorrect reticulation operational practices	Investigate Review LGAQ manuals WAT004, WAT005 and WAT010 and distribute to operations staff.	medium	1-Jul-21	In Progress	Under Review – Staff training.
21	L	Contamination from return water from sludge dams	JD to carry out sampling for E Coli and turbidity for two months and results to be reviewed.	medium	N/A	Completed	This is an additional item to the DWQMP. This is under investigation and review as part as Risk management process to pump back into the front of the plant.

Appendix C – 2019/2020 LRC Verification Monitoring Data

Date	Test Point 1						Test Point 2						Test Point 3						Test Point 4						External Tests Required
	Location	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	Location	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	Location	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	Location	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	
3/07/2019	Wren St	0.00	0.00	7.21	1.31	0.42																			
10/07/2019	PCYC	0.00	0.00	7.18	1.26	0.51																			
17/07/2019	Edkins Park	0.00	0.00	7.26	1.14	0.36																			
24/07/2019	Gull St	0.00	0.00	7.18	1.21	0.40																			
31/07/2019	DPI	0.00	0.00	7.25	1.15	0.27	GLR	0.00	0.00	7.31	1.55	0.34	Wren St	0.00	0.00	7.24	1.59	0.26	PCYC	0.00	0.00	7.24	1.47	0.24	External Test Required
7/08/2019	GLR	0.00	0.00	7.76	1.31	0.38																			
14/08/2019	Wren St	0.00	0.00	7.30	1.31	0.45																			
21/08/2019	PCYC	0.00	0.00	7.02	1.20	0.42																			
28/08/2019	Edkins Park	0.00	0.00	7.16	1.18	0.45	Gull St	0.00	0.00	7.22	1.26	0.48	DPI	0.00	0.00	7.10	1.27	0.30	GLR	0.00	0.00	7.03	1.36	0.33	
4/09/2019	Gull St	0.00	0.00	7.56	1.32	0.38																			
11/09/2019	DPI	0.00	0.00	7.33	1.28	0.44																			
18/09/2019	GLR	0.00	0.00	7.50	1.44	0.24																			
25/09/2019	Wren St	0.00	0.00	7.66	1.51	0.38	PCYC	0.00	0.00	7.71	1.28	0.47	Edkins Park	0.00	0.00	7.70	1.32	0.31	Gull St	0.00	0.00	7.68	1.22	0.37	
2/10/2019	PCYC	0.00	0.00	7.60	1.32	0.41																			
9/10/2019	Edkins Park	0.00	0.00	7.58	1.38	0.42																			
16/10/2019	Gull St	0.00	0.00	7.62	1.29	0.37																			
23/10/2019	DPI	0.00	0.00	7.58	1.61	0.51																			
30/10/2019	GLR	0.00	0.00	7.71	1.12	0.21	Wren St	0.00	0.00	7.51	1.32	0.40	PCYC	0.00	0.00	7.56	1.22	0.42	Edkins Park	0.00	0.00	7.58	1.34	0.36	
6/11/2019	Wren St	0.00	0.00	7.68	1.21	0.42																			
13/11/2019	PCYC	0.00	0.00	7.58	1.28	0.41																			
20/11/2019	Edkins Park	0.00	0.00	7.51	1.32	0.42																			
27/11/2019	Gull St	0.00	0.00	7.04	1.53	0.22	DPI	0.00	0.00	7.08	1.23	0.36	GLR	0.00	0.00	7.00	1.58	0.23	Wren St	0.00	0.00	7.35	1.51	0.26	External Test Required
4/12/2019	DPI	0.00	0.00	7.51	1.28	0.36																			
11/12/2019	GLR	0.00	0.00	7.49	1.51	0.30																			
18/12/2019	Wren St	0.00	0.00	7.48	1.42	0.89																			
25/12/2019	PCYC	0.00	0.00	7.58	1.22	0.72	Edkins Park	0.00	0.00	7.60	1.30	0.51	Gull St	0.00	0.00	7.62	1.16	0.10	DPI	0.00	0.00	7.69	1.01	0.97	
1/01/2020	Edkins Park	0.00	0.00	7.56	1.24	0.36																			
8/01/2020	Gull St	0.00	0.00	7.52	1.27	0.41																			
15/01/2020	DPI	0.00	0.00	7.56	1.38	0.44																			
22/01/2020	GLR	0.00	0.00	7.28	1.61	0.29																			
29/01/2020	Wren St	0.00	0.00	7.32	1.40	0.38	PCYC						Edkins Park						Gull St						
5/02/2020	PCYC	0.00	0.00	7.36	1.28	0.37																			
12/02/2020	Edkins Park	0.00	0.00	7.56	1.34	0.42																			
19/02/2020	Gull St	0.00	0.00	7.33	1.28	0.44																			
26/02/2020	DPI	0.00	0.00	7.32	1.28	0.61	GLR	0.00	0.00	7.30	1.51	0.53	Wren St	0.00	0.00	7.36	1.40	0.55	PCYC	0.00	0.00	7.38	1.36	0.59	
4/03/2020	GLR	0.00	0.00	7.31	2.07	0.85																			
11/03/2020	Wren St	0.00	0.00	7.42	1.36	0.46																			
18/03/2020	PCYC	0.00	0.00	7.32	1.28	0.61																			
25/03/2020	Edkins Park	0.00	0.00	7.20	1.75	0.30	Gull St	0.00	0.00	7.14	1.66	0.33	DPI	0.00	0.00	7.06	1.41	0.28	GLR	0.00	0.00	7.59	1.76	0.41	External Test Required
1/04/2020	Gull St	0.00	0.00	7.61	1.68	0.38																			
8/04/2020	DPI	0.00	0.00	7.48	1.42	0.44																			
15/04/2020	GLR	0.00	0.00	7.47	1.42	0.43																			
22/04/2020	Wren St	0.00	0.00	7.41	1.26	0.51																			
29/04/2020	PCYC	0.00	0.00	7.36	1.28	0.48	Edkins Park	0.00	0.00	7.38	1.33	0.41	Gull St	0.00	0.00	7.41	1.22	0.43	DPI	0.00	0.00	7.51	1.27	0.51	
6/05/2020	Edkins Park	0.00	0.00	7.50	1.19	0.38																			
13/05/2020	Gull St	0.00	0.00	7.48	1.23	0.52																			
20/05/2020	DPI	0.00	0.00	7.46	1.28	0.55																			
27/05/2020	GLR	0.00	0.00	7.65	1.24	0.35	Wren St	0.00	0.00	7.58	1.18	0.39	PCYC	0.00	0.00	7.61	1.15	0.46	Edkins Park	0.00	0.00	7.63	1.21	0.42	
3/06/2020	Wren St	0.00	0.00	7.57	1.41	0.46																			
10/06/2020	PCYC	0.00	0.00	7.71	1.42	0.48																			
17/06/2020	Edkins Park	0.00	0.00	7.68	1.20	0.42																			
24/06/2020	Gull St	0.00	0.00	7.56	1.31	0.38	DPI	0.00	0.00	7.50	1.22	0.42	GLR	0.00	0.00	7.49	1.52	0.26	Wren St	0.00	0.00	7.53	1.40	0.34	

Township: Ilfracombe

Date	Rec Centre					Memorial Park					Mitchell Street					WTP					External Tests Required
	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	
5/07/2019	0	0	7.58	1.3	0.86	0	0	7.59	1.28	0.4	0	0	7.6	1.36	0.81	0	0	7.6	1.55	0.31	
4/08/2019	0	0	7.66	1.25	1.05	0	0	7.65	1.32	0.51	0	0	7.64	1.32	1.26	0	0	7.65	1.54	0.32	
3/09/2019	0	0	7.62	1.36	1.25	0	0	7.63	1.46	0.29	0	0	7.62	1.44	1.55	0	0	7.61	1.84	0.31	External Test Required
3/10/2019	0	0	7.61	1.21	0.92	0	0	7.65	1.31	0.38	0	0	7.56	1.38	0.76	0	0	7.68	1.66	0.28	
2/11/2019	0	0	7.51	1.19	0.61	0	0	7.66	1.3	0.41	0	0	7.61	1.3	0.55	0	0	7.62	1.52	0.22	
2/12/2019	0	0	7.56	1.21	0.66	0	0	7.61	1.18	0.45	0	0	7.55	1.28	0.46	0	0	7.49	1.48	0.2	
1/01/2020	0	0	7.25	1.23	0.87	0	0	7.28	1.56	0.42	0	0	7.29	1.36	0.29	0	0	7.32	1.79	0.25	External Test Required
31/01/2020	0	0	7.32	1.31	0.68	0	0	7.26	1.59	0.45	0	0	7.31	1.46	0.33	0	0	7.36	1.61	0.27	
1/03/2020	0	0	7.41	1.22	0.61	0	0	7.33	1.41	0.48	0	0	7.36	1.31	0.51	0	0	7.33	1.82	0.31	
31/03/2020	0	0	7.44	1.43	0.55	0	0	7.38	1.62	0.56	0	0	7.42	1.28	0.59	0	0	7.44	1.76	0.28	
30/04/2020	0	0	7.56	1.38	0.67	0	0	7.42	1.51	0.58	0	0	7.41	1.33	0.55	0	0	7.48	1.71	0.27	
30/05/2020	0	0	7.55	1.77	0.58	0	0	7.51	1.27	0.59	0	0	7.58	1.27	0.55	0	0	7.47	1.83	0.28	External Test Required

Ilfracombe Verification Monitoring required to be tested every 30 x Days in the 4 x Locations.

Task Procedure:
 For: Ilfracombe W & S Operator
 Operator: Will Krcmer
 Supervisor: James Doyle
 Occurance: Monthly

Task: Verification Monitoring Monthly Testing
 Verification Monitoring Testing to be completed Monthly at above locations
 Enter Data into Verification Monitoring Database **Doc ID:**

Verification Monitoring Quarterly External Testing
 Verification Monitoring Testing to be completed Quarterly at above locations
 Enter Data into Verification Monitoring Database **Doc ID:**
 Populate External Testing Sheet: Water Sample Submission Form - FSSQHS **Doc ID: 197775**
 Send Samples via Courier
 Enter into DIS Outgoing Mail Database in InfoXpert (EDIT) **Doc ID: 54404**

Task Procedure:
 For: W & S Administration Officer
 Operator: Kate Flemming | Shae-Ellyn King
 Supervisor: Neil Stiles

Task: Verification Monitoring Monthly SWIM Local Data Upload
 Export SWIM Local LRC Verification Monitoring Database into Excel
 Copy Data from Verification Monitoring Database into Exported SWIM Local File & Save
 Upload SWIM Local File into SWIM

Township: **Isisford**

Date	WTP					Race Course					Depot Lunch Room					Town Park or Skate Park					External Tests Required	
	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	Location	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)		Turbidity (NTU)
8/07/2019	0.0	0	7.32	1.83	2.41	0	0	7.45	0.67	0.99	0	0	7.4	1.62	2.59	Skate Park	0	0	7.37	1.9	2.56	
7/08/2019	0.0	0	7.57	1.6	1.95	0	0	7.44	0.97	1.49	0	0	7.29	0.9	1.78	Town Park	0	0	7.28	1.55	1.35	
6/09/2019	0.0	0	7.02	1.63	1.08	0	0	7.11	1.2	1.34	0	0	7.09	1.58	1.14	Town Park	0	0	7.1	1.22	1.18	
6/10/2019	0.0	0	6.99	1.16	1.44	0	0	7.73	0.4	1.03	0	0	7.29	1.36	1.68		0	0	7.22	0.63	0.74	External Test Required
5/11/2019	0.0	0	7.61	2.09	1.14	0	0	7.21	1.54	1.97	0	0	7.76	1.99	1.21	Town Park	0	0	7.76	1.35	1.09	
5/12/2019	0.0	0	8.22	0.85	0.61	0	0	8.27	0.32	1.1	0	0	8.2	0.79	0.8	Town Park	0	0	8.19	0.44	1.02	
4/01/2020	0.0	0	8.11	1.99	0.58	0	0	8.15	0.98	1.02	0	0	8.12	1.87	0.62	Skate Park	0	0	8.11	1.62	0.86	
3/02/2020	0.0	0	7.17	1.13	0.78	0	0	7.51	0.23	1.66	0	0	7.36	1.34	0.93	Lunch Room	0	0	7.36	1.34	0.93	External Test Required
4/03/2020	0.0	0	7.32	2.82	0.43	0	0	7.64	1.1	0.52	0	0	7.46	0.23	0.38	Town Park	0	0	7.53	0.51	0.54	
3/04/2020	0.0	0	7.33	1.86	0.66	0	0	7.41	1.42	0.89	0	0	7.36	1.8	0.68	Skate Park	0	0	7.36	1.78	0.69	
3/05/2020	0.0	0	7.16	1.14	0.56	0	0	7.41	0.87	0.35	0	0	7.52	0.97	0.35	Skate Park	0	0	7.35	1.17	0.51	
2/06/2020	0.0	0	7.31	1.4	0.41	0	0	7.47	0.79	0.74	0	0	7.41	1.38	0.4	Skate Park	0	0	7.43	1.29	0.37	

Isisford Verification Monitoring required to be tested every 30 x Days in the 4 x Locations.

Task Procedure:
 For: Isisford W & S Operator
 Operator: Skye Jackson
 Supervisor: James Doyle
 Occurance: Monthly

Task: **Verification Monitoring Monthly Testing**
 Verification Monitoring Testing to be completed Monthly at above locations
 Enter Data into Verification Monitoring Database **Doc ID:**

Verification Monitoring Quarterly External Testing
 Verification Monitoring Testing to be completed Quarterly at above locations
 Enter Data into Verification Monitoring Database **Doc ID:**
 Populate External Testing Sheet: Water Sample Submission Form - FSSQHS **Doc ID: 197775**
 Send Samples via Courier
 Enter into DIS Outgoing Mail Database in InfoXpert (EDIT) **Doc ID: 54404**

6.99 0.23 0.35
 8.27 2.82 2.59
 7.51 1.26 1.03

Task Procedure:
 For: W & S Administration Officer
 Operator: Anne Lines | Shae-Ellyn King
 Supervisor: Neil Stiles

Task: **Verification Monitoring Monthly SWIM Local Data Upload**
 Export SWIM Local LRC Verification Monitoring Database into Excel
 Copy Data from Verification Monitoring Database into Exported SWIM Local File & Save
 Upload SWIM Local File into SWIM

Township: **Yaraka**

Date	WTP					Bob & Kathy Long Residence					External Tests Required
	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	Coliforms (mg/L)	E.coli (mg/L)	pH	Free Chlorine (mg/L)	Turbidity (NTU)	
8/07/2019	0	0		1.26	0.41	0	0		1.18	2.38	
7/08/2019	0	0	7.71	1.42	1.15	0	0	7.69	1.42	1.79	
6/09/2019	0	0	7.52	1.36	0.49	0	0	7.66	1.37	1.9	
6/10/2019	0	0	7.59	0.92	0.3	0	0	7.6	1.43	1.28	
5/11/2019	0	0	7.57	1.07	0.29	0	0	7.45	1.41	1.69	
5/12/2019	0	0	7.72	1.86	0.39	0	0	7.79	2.2	1.89	
4/01/2020	0	0	7.7	1.38	0.29	0	0				
3/02/2020	0	0	7.67	1.42	1.14	0	0	7.67	1.42	1.25	
4/03/2020	0	0	7.66	1.74	0.28	0	0				External Test Required
3/04/2020	0	0	7.73	1.23	0.32		0	7.72	1.74	1.54	
3/05/2020	0	0	7.84	1.11	0.39	0	0	7.77	1.78	1.66	
2/06/2020	0	0	7.88	1.51	0.59	0	0	7.88	1.68	1.76	

Yaraka Verification Monitoring required to be tested every 30 x Days in the 2 x Locations.

Task Procedure:
 For: Ilfracombe W & S Operator
 Operator: Skye Jackson
 Supervisor: James Doyle
 Occurance: Monthly

Task: **Verification Monitoring Monthly Testing**
 Verification Monitoring Testing to be completed Monthly at above locations
 Enter Data into Verification Monitoring Database **Doc ID:**

Verification Monitoring Quarterly External Testing
 Verification Monitoring Testing to be completed Quarterly at above locations
 Enter Data into Verification Monitoring Database **Doc ID:**
 Populate External Testing Sheet: Water Sample Submission Form - FSSQHS **Doc ID: 197775**
 Send Samples via Courier
 Enter into DIS Outgoing Mail Database in InfoXpert (EDIT) **Doc ID: 54404**

Task Procedure:
 For: W & S Administration Officer
 Operator: Anne Lines | Shae-Ellyn King
 Supervisor: Neil Stiles

Task: **Verification Monitoring Monthly SWIM Local Data Upload**
 Export SWIM Local LRC Verification Monitoring Database into Excel
 Copy Data from Verification Monitoring Database into Exported SWIM Local File & Save
 Upload SWIM Local File into SWIM

CERTIFICATE OF ANALYSIS

CLIENT : Longreach Regional Council - Longreach
(HLONLN) PO Box 144
ILFRACOMBE QLD 4727

Laboratory Reference : SSP0065084
Client Order No. : JACKSON_S
Date Received : 15-May-2019
Laboratory Number/s : SS19MW7422-SS19MW7427

Copies sent to: Environmental Health Central QLD

Number of Samples : 6

Reason for Analysis : Compliance

Method/s of Analysis : 20902 - SHW17 - Coliforms and Escherichia coli - enzyme hydrolysable substrate

Remarks : One or more samples > 18 hours old on testing. This exceeds the maximum acceptable holding time for E. coli according to AS 2031-Water Quality-Sampling for microbiological analysis. Accuracy of results may be reduced.

Key :

- cfu = Colony Forming Units
- est = Estimated Count
- FDMEAS = Field Measurements as provided by Submitting Authority
- mg = Milligrams
- mpn = Most Probable Number
- NA = Not Applicable
- NR = No Result
- NT = Not Tested
- NTU = Nephelometric Turbidity Units
- pfu = Plaque Forming Units
- Positive = Detected, but no count possible due to confluent growth on the plate(s)
- TFOL = Results to Follow
- = Not Ordered



SS19MW7422-SS19MW7427



Lawrence Ariotti
Analyst
16-May-19

This report overrides all previous reports. The results relate solely to the sample/s as received and are limited to the specific tests undertaken as listed on the report. The results on this report are confidential and are not to be used or disclosed to any other person or used for any other purpose, whether directly or indirectly, unless that use is disclosed or the purpose is expressly authorised in writing by Queensland Health and the named recipient on this report. To the fullest extent permitted by law, Queensland Health will not be liable for any loss or claim (including legal costs calculated on an indemnity basis) which arise because of (a) problems related to the merchantability, fitness or quality of the sample/s, or (b) any negligent or unlawful act or omissions by Queensland Health that is connected with any activities or services provided by Queensland Health under this agreement (including the timing and/or method under which the sample/s were taken, stored or transported).

Enquiries Lawrence Ariotti	39 Kessels Road	PO Box 594	Phone (+61) 1800 000 FSS (377)
Phone	Coopers Plains QLD 4108	Archerfield QLD 4108	Fax (+61 7) 3096 2977
	AUSTRALIA	AUSTRALIA	Email FSS@health.qld.gov.au

Client Reference			1576	1577	1578	1579
Sample Type			Water Dam Treated	Water Dam Treated	Water Dam Treated	Water Dam Treated
Sampling Time/Date			07:00 14-May-2019	07:00 14-May-2019	08:00 14-May-2019	08:05 14-May-2019
Testing Time/Date			12:01 15-May-2019	12:01 15-May-2019	12:01 15-May-2019	12:01 15-May-2019
Sample Description			Long Res	Yoraka WTP	Skate Park	Depot Lunch Room
Method	Test Microorganisms	Units	SS19MW7422	SS19MW7423	SS19MW7424	SS19MW7425
20902	Coliforms	mpn/100mL	0	0	0	0
20902	E. coli	mpn/100mL	0	0	0	0
Interpretation of Results			PASS	PASS	PASS	PASS

Client Reference			1580	1581
Sample Type			Water Dam Treated	Water Dam Treated
Sampling Time/Date			08:15 14-May-2019	08:20 14-May-2019
Testing Time/Date			12:01 15-May-2019	12:01 15-May-2019
Sample Description			Race Course	Isisford WTP
Method	Test Microorganisms	Units	SS19MW7426	SS19MW7427
20902	Coliforms	mpn/100mL	0	0
20902	E. coli	mpn/100mL	0	0
Interpretation of Results			PASS	PASS



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Notes on the Interpretation of Results

PASS means that a sample is microbiologically fit-for-purpose, and FAIL means that a sample is not microbiologically fit-for-purpose. The fitness-for-purpose of a water sample is determined by reference to relevant regulations and guidelines:

Cooling System Water - AS/NZS 3666.3:2011: Australian/New Zealand Standard: Air-handling and water systems of buildings-Microbial Control: Part 3: Performance based maintenance of cooling water systems. (Tables 3.1 and 3.2)

Dental Unit Waterline Water (Immunocompromised Patients) - Australian Dental Association Guidelines for Infection Control, Second Edition (Section C2)

Drinking Water - The Public Health Regulation 2005 and the Australian Drinking Water Guidelines 2011. (Section 10.2.2 and microorganism factsheets)

Recycled Water - The Public Health Regulation 2005. (Schedules 3B, 3C, 3D, 3E)

Swimming and Spa Pool Water - The Queensland Health Swimming and Spa Pool Water Quality and Operational Guidelines. (Microbiological criteria)

Washer - Disinfectors, Final Rinse Water - AS/NZS 4187: 2014 Reprocessing of reusable medical devices in health service organizations. (Table 7.2.1)

An interpretation may be made where none of the above guidelines or regulation apply. In such cases, an explanation for the interpretation will be provided on the report.

Maximum Acceptable Delays Between Sampling and Analysis (Holding Times)

Test Required	Maximum Sample Storage Time (hr)
Coliphages	72
Campylobacter	24
Clostridium perfringens (spores)	72
Clostridium perfringens (vegetative cells)	18
Cryptosporidium/Giardia	96
Total Coliforms/E. coli	18
Enterococci	18
Heterotrophic Colony Count	12
Total Viable Count	12
Legionella	48
Pseudomonas	12
Salmonella	18
Shiga-toxigenic E. coli	18
Vibrio cholerae	18



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CERTIFICATE OF ANALYSIS

CLIENT : Longreach Regional Council - Longreach
(HLONLN) PO Box 144
ILFRACOMBE QLD 4727

Laboratory Reference : SSP0066605
Client Order No. : DIRECTOR
Date Received : 05-Sep-2019
Date Commenced : 09-Sep-2019
Date Completed : 17-Sep-2019
Laboratory Number/s : 19KE7535-19KE7537

ATTN: Director of Infrastructure Services

Number of Samples : 3

Reason for Analysis :

Method/s of Analysis : 16307 - Haloacetic Acids in Water by GC
28017 - Trihalomethanes in Water by Purge and Trap GCMS

Remarks : Health Values based on the Australian Drinking Water Guidelines 2011.

THM results have been released by A. Tronoff

The samples submitted for analysis, therefore, comply with the Australian Drinking Water Guidelines (2011) for total trihalomethanes and haloacetic acids in water.

Please note the LOR has been raised for BDCAA due to interferences.



19KE7535-19KE7537



Rebecca Morgan
Analyst
17-Sep-19

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Enquiries **Rebecca Morgan**
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Phone **(+61) 1800 000 FSS (377)**
Fax **(+61 7) 3096 2977**
Email **FSS@health.qld.gov.au**

Client Reference		1625	1626	1627			
Sample Type		Water River	Water River	Water River			
Sampling Time/Date		10:00 03-Sep-2019	10:15 03-Sep-2019	10:30 03-Sep-2019			
Sample Description		GLR	PCYC	OPI			
Method	Trihalomethanes	ADWG Health Value	Units	Reporting Limit	19KE7535	19KE7536	19KE7537
28017	Chloroform	250	µg/L	1	71	73	81
28017	Bromodichloromethane	250	µg/L	1	6	6	7
28017	Dibromochloromethane	250	µg/L	1	<1	<1	<1
28017	Bromoform	250	µg/L	1	<1	<1	<1
28017	Total Trihalomethanes	250	µg/L	4	77	79	88
Haloacetic Acids							
16307	Monochloroacetic Acid (MCAA)	150	µg/L	5	<5	<5	<5
16307	Monobromoacetic Acid (MBAA)		µg/L	5	<5	<5	<5
16307	Dichloroacetic Acid (DCAA)	100	µg/L	5	44	44	53
16307	Trichloroacetic Acid (TCAA)	100	µg/L	5	83	81	95
16307	Bromoacetic Acid (BCAA)		µg/L	5	<5	<5	<5
16307	Bromodichloroacetic Acid (BDCAA)		µg/L	5	<15	<15	<15
16307	Dibromoacetic Acid (DBAA)		µg/L	5	<5	<5	<5
16307	Chlorodibromoacetic Acid (CDBAA)		µg/L	5	<5	<5	<5
16307	Dalapon (2,2-DPA)	500	µg/L	10	<10	<10	<10

CERTIFICATE OF ANALYSIS

CLIENT : Longreach Regional Council - Longreach
(HLONLN) PO Box 144
ILFRACOMBE QLD 4727

Laboratory Reference : SSP0066741
Client Order No. : Ilfracombe
Date Received : 17-Sep-2019
Laboratory Number/s : SS19MW13931-SS19MW13934

Number of Samples : 4

Reason for Analysis : Human Consumption - Compliance

Method/s of Analysis : 20902 - SHW17 - Coliforms and Escherichia coli - enzyme hydrolysable substrate

Remarks : One or more samples > 18 hours old on testing. This exceeds the maximum acceptable holding time for E. coli according to AS 2031-Water Quality-Sampling for microbiological analysis. Accuracy of results may be reduced.

Key :

- cfu = Colony Forming Units
- est = Estimated Count
- FDMEAS = Field Measurements as provided by Submitting Authority
- mg = Milligrams
- mpn = Most Probable Number
- NA = Not Applicable
- NR = No Result
- NT = Not Tested
- NTU = Nephelometric Turbidity Units
- pfu = Plaque Forming Units
- Positive = Detected, but no count possible due to confluent growth on the plate(s)
- TFOL = Results to Follow
- = Not Ordered
- < = Less than
- > = More than



SS19MW13931-SS19MW13934



Lawrence Ariotti
Analyst
19-Sep-19

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Enquiries	Lawrence Ariotti	39 Kessels Road	PO Box 594	Phone	(+61) 1800 000 FSS (377)
Phone		Coopers Plains QLD 4108	Archerfield QLD 4108	Fax	(+61 7) 3096 2977
		AUSTRALIA	AUSTRALIA	Email	FSS@health.qld.gov.au

Client Reference			1630	1631	1632	1633
Sample Type			Water River Treated	Water River Treated	Water River Treated	Water River Treated
Sampling Time/Date			11:00 16-Sep-2019	11:10 16-Sep-2019	11:20 16-Sep-2019	11:30 16-Sep-2019
Testing Time/Date			09:27 17-Sep-2019	09:27 17-Sep-2019	09:27 17-Sep-2019	09:27 17-Sep-2019
Sample Description			Memorial Park	GLR Ilfracombe	Mitchell St	Rec Centre
Method	Test Microorganisms	Units	SS19MW13931	SS19MW13932	SS19MW13933	SS19MW13934
20902	Coliforms	mpn/100mL	0	0	0	0
20902	E. coli	mpn/100mL	0	0	0	0
Interpretation of Results			PASS	PASS	PASS	PASS

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with ISO/IEC 17025 - Testing.

SS19MW13931-SS19MW13934

20699-75172 Printed: 14:19 19-Sep-19 root

Notes on the Interpretation of Results

The '<' symbol means 'less than'. For a number of tests, if the target organism is not detected, the result is reported as < the lower limit of detection for the method used. For the Heterotrophic Colony Count test, a less than result is reported if the precision of the count falls below a lower limit.

PASS means that a sample is microbiologically fit-for-purpose, and FAIL means that a sample is not microbiologically fit-for-purpose. The fitness-for-purpose of a water sample is determined by reference to relevant regulations and guidelines:

Cooling System Water - AS/NZS 3666.3:2011: *Australian/New Zealand Standard: Air-handling and water systems of buildings-Microbial Control: Part 3: Performance based maintenance of cooling water systems.* (Tables 3.1 and 3.2)

Dental Unit Waterline Water (Immunocompromised Patients) - *Australian Dental Association Guidelines for Infection Control, Second Edition* (Section C2)

Drinking Water - *The Public Health Regulation 2018 and the Australian Drinking Water Guidelines 2011.* (Section 10.2.2 and microorganism factsheets)

Recycled Water - *The Public Health Regulation 2018.* (Schedule 6 and Schedule 7)

Swimming and Spa Pool Water - *The Queensland Health Swimming and Spa Pool Water Quality and Operational Guidelines.* (Microbiological criteria)

Washer - Disinfectors, Final Rinse Water - AS/NZS 4187: 2014 *Reprocessing of reusable medical devices in health service organizations.* (Table 7.2.1)

An interpretation may be made where none of the above guidelines or regulation apply. In such cases, an explanation for the interpretation will be provided on the report.

Maximum Acceptable Delays Between Sampling and Analysis (Holding Times)	
Test Required	Maximum Sample Storage Time (hr)
Coliphages	72
Campylobacter	24
Clostridium perfringens (spores)	72
Clostridium perfringens (vegetative cells)	18
Cryptosporidium/Giardia	96
Total Coliforms/E. coli	18
Enterococci	18
Heterotrophic Colony Count	12
Total Viable Count	12
Legionella	48
Pseudomonas	12
Salmonella	18
Shiga-toxigenic E. coli	18
Vibrio cholerae	18

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CERTIFICATE OF ANALYSIS

CLIENT : Longreach Regional Council - Longreach
(HLONLN) PO Box 144
ILFRACOMBE QLD 4727

Laboratory Reference : SSP0066991
Client Order No. : JACKSON_S
Date Received : 09-Oct-2019
Laboratory Number/s : SS19MW15073-SS19MW15077

Copies sent to: Environmental Health Central QLD

Number of Samples : 5

Reason for Analysis : Human Consumption - Compliance

Method/s of Analysis : 20902 - SHW17 - Coliforms and Escherichia coli - enzyme hydrolysable substrate

Remarks : One or more samples > 18 hours old on testing. This exceeds the maximum acceptable holding time for E. coli according to AS 2031-Water Quality-Sampling for microbiological analysis. Accuracy of results may be reduced.

Key :

- cfu = Colony Forming Units
- est = Estimated Count
- FDMEAS = Field Measurements as provided by Submitting Authority
- mg = Milligrams
- mpn = Most Probable Number
- NA = Not Applicable
- NR = No Result
- NT = Not Tested
- NTU = Nephelometric Turbidity Units
- pfu = Plaque Forming Units
- Positive = Detected, but no count possible due to confluent growth on the plate(s)
- TFOL = Results to Follow
- = Not Ordered
- < = Less than
- > = More than



SS19MW15073-SS19MW15077



Lawrence Ariotti
Analyst
10-Oct-19

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Client Reference			1640	1641	1642	1643
Sample Type			Water River Treated	Water River Treated	Water River Treated	Water River Treated
Sampling Time/Date			07:00 08-Oct-2019	07:50 08-Oct-2019	08:00 08-Oct-2019	07:00 08-Oct-2019
Testing Time/Date			11:27 09-Oct-2019	11:27 09-Oct-2019	11:27 09-Oct-2019	11:27 09-Oct-2019
Sample Description			Skate Park	Depot Lunch Room	Isiford WTP	Yaraka WTP
Method	Test Microorganisms	Units	SS19MW15073	SS19MW15074	SS19MW15075	SS19MW15076
20902	Coliforms	mpn/100mL	0	0	0	0
20902	E. coli	mpn/100mL	0	0	0	0
Interpretation of Results			PASS	PASS	PASS	PASS

Client Reference			1644
Sample Type			Water River Treated
Sampling Time/Date			07:00 08-Oct-2019
Testing Time/Date			11:27 09-Oct-2019
Sample Description			Res
Method	Test Microorganisms	Units	SS19MW15077
20902	Coliforms	mpn/100mL	0
20902	E. coli	mpn/100mL	0
Interpretation of Results			PASS

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Notes on the Interpretation of Results

The '<' symbol means 'less than'. For a number of tests, if the target organism is not detected, the result is reported as < the lower limit of detection for the method used. For the Heterotrophic Colony Count test, a less than result is reported if the precision of the count falls below a lower limit.

PASS means that a sample is microbiologically fit-for-purpose, and FAIL means that a sample is not microbiologically fit-for-purpose. The fitness-for-purpose of a water sample is determined by reference to relevant regulations and guidelines:

Cooling System Water - AS/NZS 3666.3:2011: *Australian/New Zealand Standard: Air-handling and water systems of buildings-Microbial Control: Part 3: Performance based maintenance of cooling water systems.* (Tables 3.1 and 3.2)

Dental Unit Waterline Water (Immunocompromised Patients) - *Australian Dental Association Guidelines for Infection Control, Second Edition* (Section C2)

Drinking Water - *The Public Health Regulation 2018 and the Australian Drinking Water Guidelines 2011.* (Section 10.2.2 and microorganism factsheets)

Recycled Water - *The Public Health Regulation 2018.* (Schedule 6 and Schedule 7)

Swimming and Spa Pool Water - *The Queensland Health Swimming and Spa Pool Water Quality and Operational Guidelines.* (Microbiological criteria)

Washer - Disinfectors, Final Rinse Water - AS/NZS 4187: 2014 *Reprocessing of reusable medical devices in health service organizations.* (Table 7.2.1)

An interpretation may be made where none of the above guidelines or regulation apply. In such cases, an explanation for the interpretation will be provided on the report.

Maximum Acceptable Delays Between Sampling and Analysis (Holding Times)	
Test Required	Maximum Sample Storage Time (hr)
Coliphages	72
Campylobacter	24
Clostridium perfringens (spores)	72
Clostridium perfringens (vegetative cells)	18
Cryptosporidium/Giardia	96
Total Coliforms/E. coli	18
Enterococci	18
Heterotrophic Colony Count	12
Total Viable Count	12
Legionella	48
Pseudomonas	12
Salmonella	18
Shiga-toxigenic E. coli	18
Vibrio cholerae	18

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CERTIFICATE OF ANALYSIS

CLIENT : Longreach Regional Council - Longreach
(HLONLN) PO Box 144
ILFRACOMBE QLD 4727

Laboratory Reference : SSP0067719
Client Order No. : JACKSON_S
Date Received : 28-Nov-2019
Laboratory Number/s : SS19MW18165-SS19MW18169

Copies sent to: Environmental Health Central QLD

Number of Samples : 5

Reason for Analysis : Compliance

Method/s of Analysis : 20902 - SHW17 - Coliforms and Escherichia coli - enzyme hydrolysable substrate

Remarks : One or more samples > 18 hours old on testing. This exceeds the maximum acceptable holding time for E. coli according to AS 2031-Water Quality-Sampling for microbiological analysis. Accuracy of results may be reduced.

Key :

- cfu = Colony Forming Units
- est = Estimated Count
- FDMEAS = Field Measurements as provided by Submitting Authority
- mg = Milligrams
- mpn = Most Probable Number
- NA = Not Applicable
- NR = No Result
- NT = Not Tested
- NTU = Nephelometric Turbidity Units
- pfu = Plaque Forming Units
- Positive = Detected, but no count possible due to confluent growth on the plate(s)
- TFOL = Results to Follow
- = Not Ordered
- < = Less than
- > = More than



SS19MW18165-SS19MW18169

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Client Reference			1664	1665	1666	1667
Sample Type			Water Dam Treated	Water River Treated	Water River Treated	Water River Treated
Sampling Time/Date			08:00 27-Nov-2019	09:00 27-Nov-2019	09:15 27-Nov-2019	09:30 27-Nov-2019
Testing Time/Date			10:09 28-Nov-2019	10:09 28-Nov-2019	10:09 28-Nov-2019	10:09 28-Nov-2019
Sample Description			Isisford Park	Longreach GLR	Longreach DPI	Wren St
Method	Test Microorganisms	Units	SS19MW18165	SS19MW18166	SS19MW18167	SS19MW18168
20902	Coliforms	mpn/100mL	0	0	0	0
20902	E. coli	mpn/100mL	0	0	0	0
Interpretation of Results			PASS	PASS	PASS	PASS

Client Reference			1668
Sample Type			Water River Treated
Sampling Time/Date			09:45 27-Nov-2019
Testing Time/Date			10:09 28-Nov-2019
Sample Description			Gull St
Method	Test Microorganisms	Units	SS19MW18169
20902	Coliforms	mpn/100mL	0
20902	E. coli	mpn/100mL	0
Interpretation of Results			PASS

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PASS means that a sample is microbiologically fit-for-purpose, and FAIL means that a sample is not microbiologically fit-for-purpose. The fitness-for-purpose of a water sample is determined by reference to relevant regulations and guidelines:

Cooling System Water - AS/NZS 3666.3:2011: *Australian/New Zealand Standard: Air-handling and water systems of buildings-Microbial Control: Part 3: Performance based maintenance of cooling water systems.* (Tables 3.1 and 3.2)

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Swimming and Spa Pool Water - *The Queensland Health Swimming and Spa Pool Water Quality and Operational Guidelines.* (Microbiological criteria)

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An interpretation may be made where none of the above guidelines or regulation apply. In such cases, an explanation for the interpretation will be provided on the report.

Maximum Acceptable Delays Between Sampling and Analysis (Holding Times)	
Test Required	Maximum Sample Storage Time (hr)
Coliphages	72
Campylobacter	24
Clostridium perfringens (spores)	72
Clostridium perfringens (vegetative cells)	18
Cryptosporidium/Giardia	96
Total Coliforms/E. coli	18
Enterococci	18
Heterotrophic Colony Count	12
Total Viable Count	12
Legionella	48
Pseudomonas	12
Salmonella	18
Shiga-toxigenic E. coli	18
Vibrio cholerae	18

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CERTIFICATE OF ANALYSIS

CLIENT : Longreach Regional Council - Longreach
(HLONLN) PO Box 144
ILFRACOMBE QLD 4727

Laboratory Reference : SSP0068333
Client Order No. : RC_GROUP
Date Received : 22-Jan-2020
Laboratory Number/s : SS20MW1159-SS20MW1162

Copies sent to: Environmental Health Central QLD

Number of Samples : 4

Reason for Analysis : Compliance

Method/s of Analysis : 20902 - SHW17 - Coliforms and Escherichia coli - enzyme hydrolysable substrate

Remarks : One or more samples > 18 hours old on testing. This exceeds the maximum acceptable holding time for E. coli according to AS 2031-Water Quality-Sampling for microbiological analysis. Accuracy of results may be reduced.

Key :

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- est = Estimated Count
- FDMEAS = Field Measurements as provided by Submitting Authority
- mg = Milligrams
- mpn = Most Probable Number
- NA = Not Applicable
- NR = No Result
- NT = Not Tested
- NTU = Nephelometric Turbidity Units
- pfu = Plaque Forming Units
- Positive = Detected, but no count possible due to confluent growth on the plate(s)
- TFOL = Results to Follow
- = Not Ordered
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SS20MW1159-SS20MW1162

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Email **FSS@health.qld.gov.au**



Leonie Cover
Laboratory Technician, Water Microbiology
23-Jan-20

Client Reference			1742	1743	1744	1745
Sample Type			Water Dam Treated	Water Dam Treated	Water Dam Treated	Water Dam Treated
Sampling Time/Date			09:00 21-Jan-2020	09:15 21-Jan-2020	09:30 21-Jan-2020	09:45 21-Jan-2020
Testing Time/Date			09:45 22-Jan-2020	09:45 22-Jan-2020	09:45 22-Jan-2020	09:45 22-Jan-2020
Sample Description			Rec Centre	Memorial Park	Mitchell Street	Iffracombe WTP
Method	Test Microorganisms	Units	SS20MW1159	SS20MW1160	SS20MW1161	SS20MW1162
20902	Coliforms	mpn/100mL	0	0	0	0
20902	E. coli	mpn/100mL	0	0	0	0
Interpretation of Results			PASS	PASS	PASS	PASS

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Notes on the Interpretation of Results

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PASS means that a sample is microbiologically fit-for-purpose, and FAIL means that a sample is not microbiologically fit-for-purpose. The fitness-for-purpose of a water sample is determined by reference to relevant regulations and guidelines:

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Drinking Water - *The Public Health Regulation 2018 and the Australian Drinking Water Guidelines 2011.* (Section 10.2.2 and microorganism factsheets)

Recycled Water - *The Public Health Regulation 2018.* (Schedule 6 and Schedule 7)

Swimming and Spa Pool Water - *The Queensland Health Swimming and Spa Pool Water Quality and Operational Guidelines.* (Microbiological criteria)

Washer - Disinfectors, Final Rinse Water - AS/NZS 4187: 2014 *Reprocessing of reusable medical devices in health service organizations.* (Table 7.2.1)

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Campylobacter	24
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Pseudomonas	12
Salmonella	18
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CERTIFICATE OF ANALYSIS

CLIENT : Longreach Regional Council - Longreach
(HLONLN) PO Box 144
ILFRACOMBE QLD 4727

Laboratory Reference : SSP0068646
Client Order No. : RC_GROUP
Date Received : 12-Feb-2020
Laboratory Number/s : SS20MW2276-SS20MW2281

Copies sent to: Environmental Health Central QLD

Number of Samples : 6

Reason for Analysis : Compliance

Method/s of Analysis : 20902 - SHW17 - Coliforms and Escherichia coli - enzyme hydrolysable substrate

Remarks : One or more samples > 18 hours old on testing. This exceeds the maximum acceptable holding time for E. coli according to AS 2031-Water Quality-Sampling for microbiological analysis. Accuracy of results may be reduced.

Key :

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- est = Estimated Count
- FDMEAS = Field Measurements as provided by Submitting Authority
- mg = Milligrams
- mpn = Most Probable Number
- NA = Not Applicable
- NR = No Result
- NT = Not Tested
- NTU = Nephelometric Turbidity Units
- pfu = Plaque Forming Units
- Positive = Detected, but no count possible due to confluent growth on the plate(s)
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- < = Less than
- > = More than



SS20MW2276-SS20MW2281

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Client Reference			1749	1750	1751	1752
Sample Type			Water Dam Chlorinated	Water Dam Chlorinated	Water Dam Chlorinated	Water Dam Chlorinated
Sampling Time/Date			06:45 11-Feb-2020	07:00 11-Feb-2020	07:15 11-Feb-2020	07:30 11-Feb-2020
Testing Time/Date			09:20 12-Feb-2020	09:20 12-Feb-2020	09:20 12-Feb-2020	09:20 12-Feb-2020
Sample Description			Depot Lunchroom	Skate Park	Racecourse	Isisford WTP
Method	Test Microorganisms	Units	SS20MW2276	SS20MW2277	SS20MW2278	SS20MW2279
20902	Coliforms	mpn/100mL	0	0	0	0
20902	E. coli	mpn/100mL	0	0	0	0
Interpretation of Results			PASS	PASS	PASS	PASS

Client Reference			1753	1754
Sample Type			Water Dam Chlorinated	Water Dam Chlorinated
Sampling Time/Date			07:00 11-Feb-2020	07:00 11-Feb-2020
Testing Time/Date			09:20 12-Feb-2020	09:20 12-Feb-2020
Sample Description			Yaraka WTP	Yaraka Long Res
Method	Test Microorganisms	Units	SS20MW2280	SS20MW2281
20902	Coliforms	mpn/100mL	0	0
20902	E. coli	mpn/100mL	0	0
Interpretation of Results			PASS	PASS

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Notes on the Interpretation of Results

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PASS means that a sample is microbiologically fit-for-purpose, and FAIL means that a sample is not microbiologically fit-for-purpose. The fitness-for-purpose of a water sample is determined by reference to relevant regulations and guidelines:

Cooling System Water - AS/NZS 3666.3:2011: *Australian/New Zealand Standard: Air-handling and water systems of buildings-Microbial Control: Part 3: Performance based maintenance of cooling water systems.* (Tables 3.1 and 3.2)

Dental Unit Waterline Water (Immunocompromised Patients) - *Australian Dental Association Guidelines for Infection Control, Second Edition* (Section C2)

Drinking Water - *The Public Health Regulation 2018 and the Australian Drinking Water Guidelines 2011.* (Section 10.2.2 and microorganism factsheets)

Recycled Water - *The Public Health Regulation 2018.* (Schedule 6 and Schedule 7)

Swimming and Spa Pool Water - *The Queensland Health Swimming and Spa Pool Water Quality and Operational Guidelines.* (Microbiological criteria)

Washer - Disinfectors, Final Rinse Water - AS/NZS 4187: 2014 *Reprocessing of reusable medical devices in health service organizations.* (Table 7.2.1)

An interpretation may be made where none of the above guidelines or regulation apply. In such cases, an explanation for the interpretation will be provided on the report.

Maximum Acceptable Delays Between Sampling and Analysis (Holding Times)	
Test Required	Maximum Sample Storage Time (hr)
Coliphages	72
Campylobacter	24
Clostridium perfringens (spores)	72
Clostridium perfringens (vegetative cells)	18
Cryptosporidium/Giardia	96
Total Coliforms/E. coli	18
Enterococci	18
Heterotrophic Colony Count	12
Total Viable Count	12
Legionella	48
Pseudomonas	12
Salmonella	18
Shiga-toxigenic E. coli	18
Vibrio cholerae	18

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SS20MW2276-SS20MW2281

20852-92337 Printed: 15:22 13-Feb-20 root

CERTIFICATE OF ANALYSIS

CLIENT : Longreach Regional Council - Longreach
(HLONLN) PO Box 144
ILFRACOMBE QLD 4727

Laboratory Reference : SSP0068646
Client Order No. : RC_GROUP
Date Received : 12-Feb-2020
Laboratory Number/s : SS20MW2276-SS20MW2281

Copies sent to: Environmental Health Central QLD

Number of Samples : 6

Reason for Analysis : Compliance

Method/s of Analysis : 20902 - SHW17 - Coliforms and Escherichia coli - enzyme hydrolysable substrate

Remarks : One or more samples > 18 hours old on testing. This exceeds the maximum acceptable holding time for E. coli according to AS 2031-Water Quality-Sampling for microbiological analysis. Accuracy of results may be reduced.

Key :

- cfu = Colony Forming Units
- est = Estimated Count
- FDMEAS = Field Measurements as provided by Submitting Authority
- mg = Milligrams
- mpn = Most Probable Number
- NA = Not Applicable
- NR = No Result
- NT = Not Tested
- NTU = Nephelometric Turbidity Units
- pfu = Plaque Forming Units
- Positive = Detected, but no count possible due to confluent growth on the plate(s)
- TFOL = Results to Follow
- = Not Ordered
- < = Less than
- > = More than



SS20MW2276-SS20MW2281



Lawrence Ariotti
Supervising Scientist, Water Microbiology
13-Feb-20

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Enquiries	Lawrence Ariotti	39 Kessels Road	PO Box 594	Phone	(+61) 1800 000 FSS (377)
Phone	(+61 7) 3096 2822	Coopers Plains QLD 4108	Archerfield QLD 4108	Fax	(+61 7) 3096 2977
Email	Lawrence.Ariotti@health.qld.gov.au	AUSTRALIA	AUSTRALIA	Email	FSS@health.qld.gov.au

Client Reference			1749	1750	1751	1752
Sample Type			Water Dam Chlorinated	Water Dam Chlorinated	Water Dam Chlorinated	Water Dam Chlorinated
Sampling Time/Date			06:45 11-Feb-2020	07:00 11-Feb-2020	07:15 11-Feb-2020	07:30 11-Feb-2020
Testing Time/Date			09:20 12-Feb-2020	09:20 12-Feb-2020	09:20 12-Feb-2020	09:20 12-Feb-2020
Sample Description			Depot Lunchroom	Skate Park	Racecourse	Isisford WTP
Method	Test Microorganisms	Units	SS20MW2276	SS20MW2277	SS20MW2278	SS20MW2279
20902	Coliforms	mpn/100mL	0	0	0	0
20902	E. coli	mpn/100mL	0	0	0	0
Interpretation of Results			PASS	PASS	PASS	PASS

Client Reference			1753	1754
Sample Type			Water Dam Chlorinated	Water Dam Chlorinated
Sampling Time/Date			07:00 11-Feb-2020	07:00 11-Feb-2020
Testing Time/Date			09:20 12-Feb-2020	09:20 12-Feb-2020
Sample Description			Yaraka WTP	Yaraka Long Res
Method	Test Microorganisms	Units	SS20MW2280	SS20MW2281
20902	Coliforms	mpn/100mL	0	0
20902	E. coli	mpn/100mL	0	0
Interpretation of Results			PASS	PASS

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Notes on the Interpretation of Results

The '<' symbol means 'less than'. For a number of tests, if the target organism is not detected, the result is reported as < the lower limit of detection for the method used. For the Heterotrophic Colony Count test, a less than result is reported if the precision of the count falls below a lower limit.

PASS means that a sample is microbiologically fit-for-purpose, and FAIL means that a sample is not microbiologically fit-for-purpose. The fitness-for-purpose of a water sample is determined by reference to relevant regulations and guidelines:

Cooling System Water - AS/NZS 3666.3:2011: *Australian/New Zealand Standard: Air-handling and water systems of buildings-Microbial Control: Part 3: Performance based maintenance of cooling water systems.* (Tables 3.1 and 3.2)

Dental Unit Waterline Water (Immunocompromised Patients) - *Australian Dental Association Guidelines for Infection Control, Second Edition* (Section C2)

Drinking Water - *The Public Health Regulation 2018 and the Australian Drinking Water Guidelines 2011.* (Section 10.2.2 and microorganism factsheets)

Recycled Water - *The Public Health Regulation 2018.* (Schedule 6 and Schedule 7)

Swimming and Spa Pool Water - *The Queensland Health Swimming and Spa Pool Water Quality and Operational Guidelines.* (Microbiological criteria)

Washer - Disinfectors, Final Rinse Water - AS/NZS 4187: 2014 *Reprocessing of reusable medical devices in health service organizations.* (Table 7.2.1)

An interpretation may be made where none of the above guidelines or regulation apply. In such cases, an explanation for the interpretation will be provided on the report.

Maximum Acceptable Delays Between Sampling and Analysis (Holding Times)	
Test Required	Maximum Sample Storage Time (hr)
Coliphages	72
Campylobacter	24
Clostridium perfringens (spores)	72
Clostridium perfringens (vegetative cells)	18
Cryptosporidium/Giardia	96
Total Coliforms/E. coli	18
Enterococci	18
Heterotrophic Colony Count	12
Total Viable Count	12
Legionella	48
Pseudomonas	12
Salmonella	18
Shiga-toxigenic E. coli	18
Vibrio cholerae	18

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CERTIFICATE OF ANALYSIS

CLIENT : Longreach Regional Council - Longreach
(HLONLN) PO Box 144
ILFRACOMBE QLD 4727

Laboratory Reference : SSP0069396
Client Order No. : -
Date Received : 26-Mar-2020
Laboratory Number/s : SS20MW4755-SS20MW4758

Copies sent to: Environmental Health Central QLD

Number of Samples : 4

Reason for Analysis : Human Consumption - Compliance

Method/s of Analysis : 20902 - SHW17 - Coliforms and Escherichia coli - enzyme hydrolysable substrate

Remarks : One or more samples > 18 hours old on testing. This exceeds the maximum acceptable holding time for E. coli according to AS 2031-Water Quality-Sampling for microbiological analysis. Accuracy of results may be reduced.

Key :

- cfu = Colony Forming Units
- est = Estimated Count
- FDMEAS = Field Measurements as provided by Submitting Authority
- mg = Milligrams
- mpn = Most Probable Number
- NA = Not Applicable
- NR = No Result
- NT = Not Tested
- NTU = Nephelometric Turbidity Units
- pfu = Plaque Forming Units
- Positive = Detected, but no count possible due to confluent growth on the plate(s)
- TFOL = Results to Follow
- = Not Ordered
- < = Less than
- > = More than



SS20MW4755-SS20MW4758



Lawrence Ariotti
Supervising Scientist, Water Microbiology
27-Mar-20

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Phone **(+61) 1800 000 FSS (377)**
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Email **FSS@health.qld.gov.au**

Client Reference			1766	1767	1768	1769
Sample Type			Water River Treated	Water River Treated	Water River Treated	Water River Treated
Sampling Time/Date			09:15 25-Mar-2020	09:30 25-Mar-2020	09:45 25-Mar-2020	10:00 25-Mar-2020
Testing Time/Date			09:30 26-Mar-2020	09:30 26-Mar-2020	09:30 26-Mar-2020	09:30 26-Mar-2020
Sample Description			Edkins	Gull	DPI	GLR
Method	Test Microorganisms	Units	SS20MW4755	SS20MW4756	SS20MW4757	SS20MW4758
20902	Coliforms	mpn/100mL	0	0	0	0
20902	E. coli	mpn/100mL	0	0	0	0
Interpretation of Results			PASS	PASS	PASS	PASS

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SS20MW4755-SS20MW4758

20520-46156 Printed: 11:06 27-Mar-20 root

Notes on the Interpretation of Results

The '<' symbol means 'less than'. For a number of tests, if the target organism is not detected, the result is reported as < the lower limit of detection for the method used. For the Heterotrophic Colony Count test, a less than result is reported if the precision of the count falls below a lower limit.

PASS means that a sample is microbiologically fit-for-purpose, and FAIL means that a sample is not microbiologically fit-for-purpose. The fitness-for-purpose of a water sample is determined by reference to relevant regulations and guidelines:

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Campylobacter	24
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Pseudomonas	12
Salmonella	18
Shiga-toxigenic E. coli	18
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CERTIFICATE OF ANALYSIS

CLIENT : Longreach Regional Council - Longreach
(HLONLN) PO Box 144
ILFRACOMBE QLD 4727

Laboratory Reference : SSP0070210
Client Order No. : RC_Group
Date Received : 02-Jun-2020
Laboratory Number/s : SS20MW8171-SS20MW8174

Copies sent to: Environmental Health Central QLD

Number of Samples : 4

Reason for Analysis : Compliance

Method/s of Analysis : 20902 - SHW17 - Coliforms and Escherichia coli - enzyme hydrolysable substrate

Remarks : One or more samples > 18 hours old on testing. This exceeds the maximum acceptable holding time for E. coli according to AS 2031-Water Quality-Sampling for microbiological analysis. Accuracy of results may be reduced.

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- pfu = Plaque Forming Units
- Positive = Detected, but no count possible due to confluent growth on the plate(s)
- TFOL = Results to Follow
- = Not Ordered
- < = Less than
- > = More than



Lawrence Ariotti
Supervising Scientist, Water Microbiology
03-Jun-20

SS20MW8171-SS20MW8174

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Email	Lawrence.Ariotti@health.qld.gov.au	AUSTRALIA	AUSTRALIA	Email	FSS@health.qld.gov.au

Client Reference			1786	1787	1788	1789
Sample Type			Water Dam Chlorinated	Water Dam Chlorinated	Water Dam Chlorinated	Water Dam Chlorinated
Sampling Time/Date			09:00 01-Jun-2020	09:15 01-Jun-2020	09:30 01-Jun-2020	09:45 01-Jun-2020
Testing Time/Date			09:21 02-Jun-2020	09:21 02-Jun-2020	09:21 02-Jun-2020	09:21 02-Jun-2020
Sample Description			Rec Centre	Memorial Park	Mitchell St	Macomba WTP
Method	Test Microorganisms	Units	SS20MW8171	SS20MW8172	SS20MW8173	SS20MW8174
20902	Coliforms	mpn/100mL	0	0	0	0
20902	E. coli	mpn/100mL	0	0	0	0
Interpretation of Results			PASS	PASS	PASS	PASS

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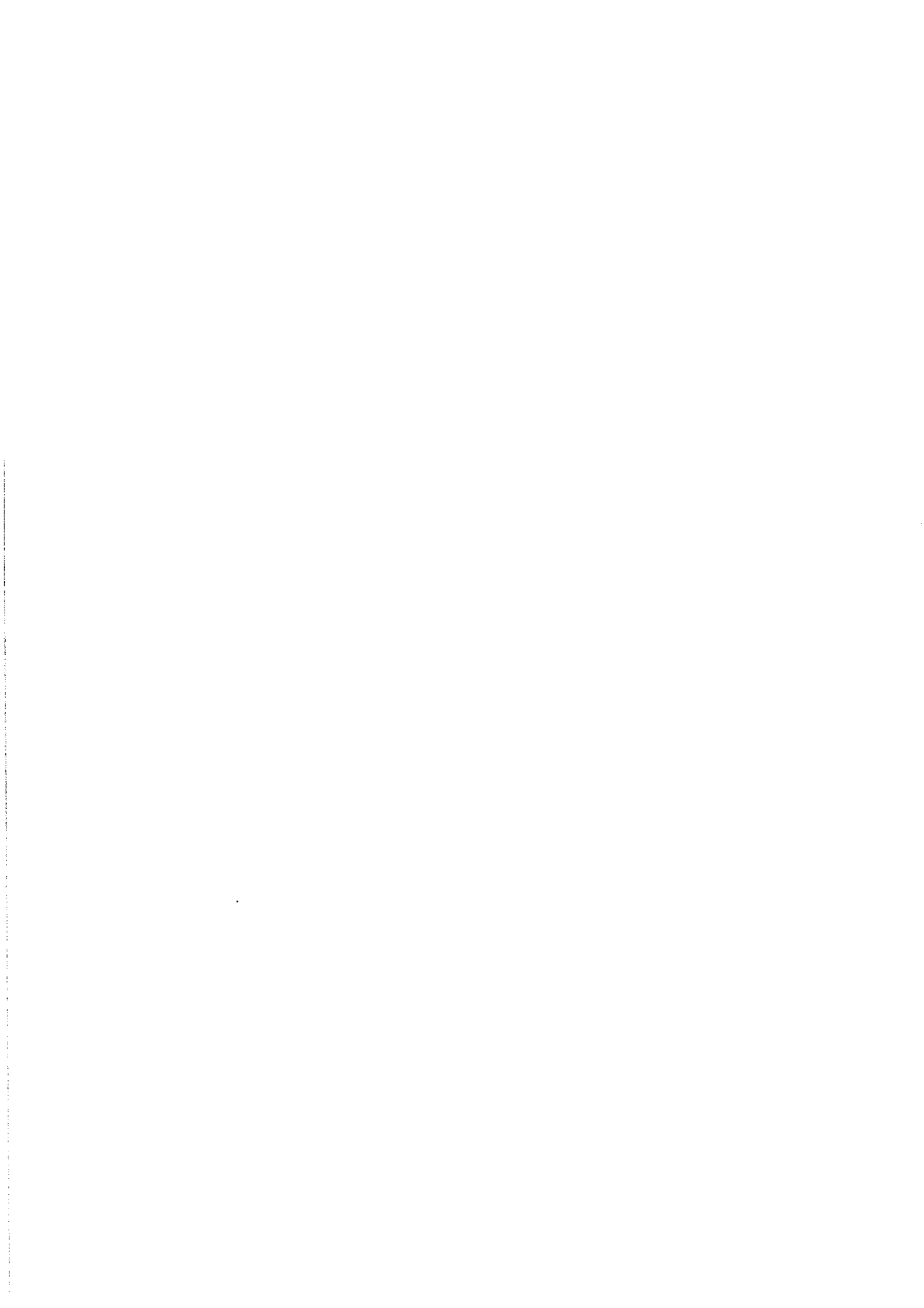
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- Recycled Water** - The Public Health Regulation 2018. (Schedule 6 and Schedule 7)
- Swimming and Spa Pool Water** - The Queensland Health Swimming and Spa Pool Water Quality and Operational Guidelines. (Microbiological criteria)
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Appendix D – Notification of a drinking water event or detection of a parameter with no water quality criteria

Nil for this reporting period

Appendix E – Record of complaints 2019/2020



2019-20 SWIM Annual Report - Complaints & Requests Data

Water

	Longreach	Ilfracombe	Isisford	Yaraka	Total
Water Complaints: Water Quality	3	1	1		5
Water Complaints: Service	4		4		8
Water Complaints: Other	25				25
Water Complaints: Rates Billing & Accounts	5	3	3		11
Number of Connections Affected due to Unplanned Interruptions	30				30
Water Requests: Number of Water Main Breaks Bursts & Leaks	155	1	8		164
Water Totals:	222	5	16	0	243

Sewerage

	Longreach	Ilfracombe	Isisford	Yaraka	Total
Sewerage Complaints: Service	10		1		11
Sewerage Complaints: Other	1				1
Sewerage Complaints: Rates Billing & Accounts					0
Sewerage Requests: Number of Sewer Main Breaks Blockages / Breaks / Chokes	31	1	4		36
Sewerage Totals:	42	1	5	0	48

Water & Sewerage Totals:	264	6	21	0	291
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