



AQWEST

DOH REPORT

MOU - DRINKING WATER QUALITY

REPORTING PERIOD 01 OCTOBER 2015 TO 31 DECEMBER 2015

JANUARY 2016

REPORT TEMPLATE VERSION: 2.0.2

Document Revision

Version #	Date Changed	Requested By	Changes
1.2.2	5/10/2012		*Radiological Units to be Corrected *Header to be repeated on tables on new pages *Add Section for Assumptions *Note any value that has a less than symbol to have Zero (0) value *Remove compliance % for items that do not have AWDG Limits *Remove Raw Water ADWG Guidelines *Include Max Value for ADWG Limits *5th Percentile to be removed *Report to include document history *Include Calculations in assumptions section
1.2.3	18/10/2012		*Added Micro Results
2.0.0	9/01/2013	K Woods	*Moved Report to Excel Template
2.0.1	10/01/2014	Water Quality Committee	*Added chlorine residual explanations
2.0.2	20/05/2015	Water Quality Committee	*Remove technical zero statement from assumptions

Assumptions and Explanations

Field Assessable Tests (Chlorine Residual and pH) are undertaken by competent sampling staff from both Aqwest and City of Bunbury

As noted in ADWG 2004, 0.6mg/L is the odour threshold of chlorine residual for most people. In some instances it may be necessary to exceed the aesthetic guideline to maintain an effective disinfection residual throughout the system

1 Introduction

1.1 Water Provider Information

Name: Aqwest
Address: 5 Mackinnon Way, Bunbury
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Company Email: aqwest@aqwest.com.au
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DOH Liaison Officer: Gary Hallsworth
DOH Liaison Officer Email: gary.hallsworth@aqwest.com.au

1.2 System Information

Aqwest operates one large interconnected system with multiple bore sites as raw water sources. Theoretical water supply "zones" of influence have been determined using network modelling, and the location of sample points has been selected to represent these theoretical water supply zones. Aqwest supplies potable water to a customer population base of approximately 35,000. The average daily system demand is 18 ML/day.

1.3 Performance Summary

Table 1 shows the overall performance of Aqwest against the 2004 ADWG for the period of 01 October 2015 to 31 December 2015.

Table 1: Aqwest Performance Summary Table

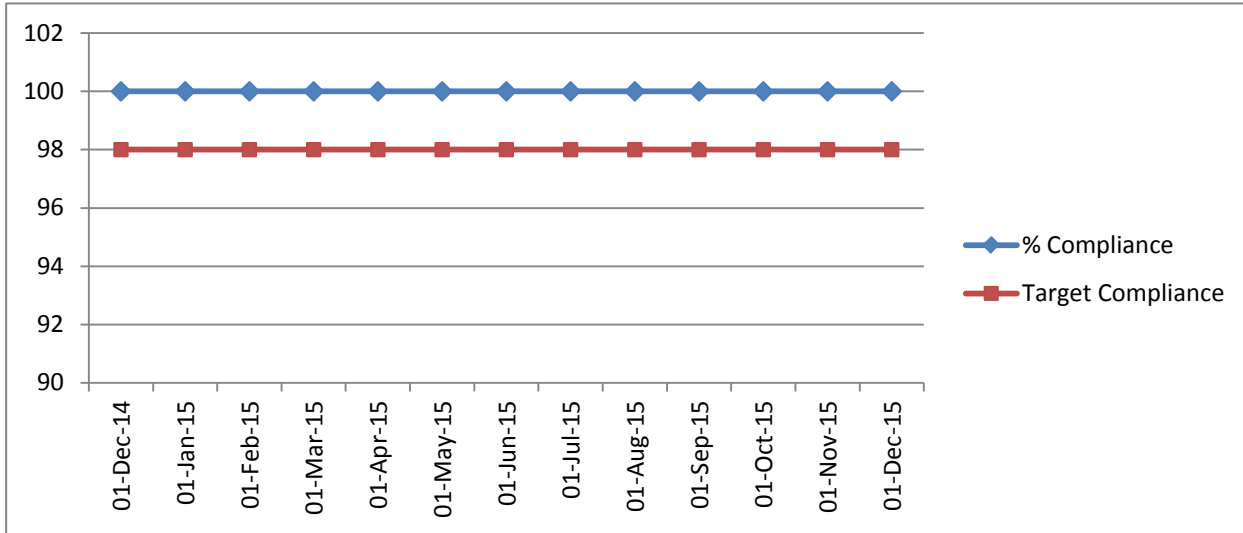
	Compliance From 01 October 2015 to 31 December 2015			
	Number of Zones	Number of Compliant Zones	% Compliance	% Compliance 12 Month Rolling Period
<i>Microbiological Quality</i>				
Escherichia coli	7	7	100.00	100.00
Naegleria	7	7	100.00	100.00
<i>Chemical Quality</i>				
Health Related	7	7	100.00	100.00
Non-Health Related	7	7	100.00	98.69

2 Microbiological

2.1 Microbiological Charts

The following charts graphically represent the microbiological information displayed in Table 1.

Graph 1: Rolling 12 Months Escherichia coli Compliance against the 2004 ADWG.



Graph 2: Rolling 12 Months Naegleria Compliance against the 2004 ADWG.

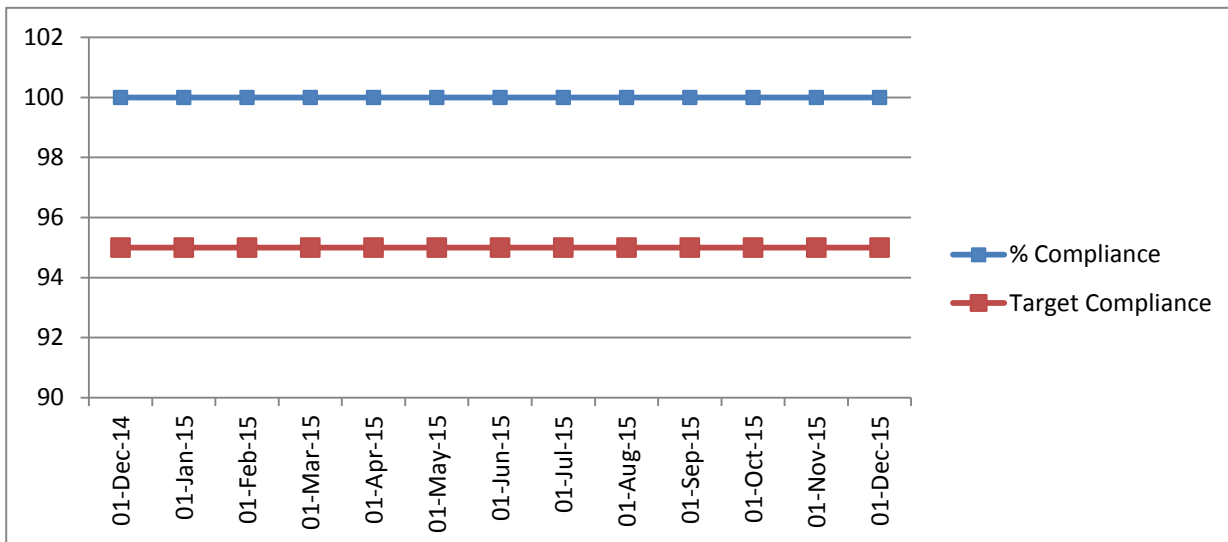


Table 2 lists those sample locations where non-compliant microbiological results were detected, and the remedial actions taken to rectify these non-compliances. An unpopulated table indicates that for the period of analysis, all results were compliant with the 2004 ADWG.

Table 2: Non-Compliant Microbiological Results and Remedial Action.

Sample Date	Sample Location	Parameter	Result	Units	Guideline	Comment

3 Health Related

Table 3 lists those sample locations where non-compliant health related results were detected, and the remedial actions taken to rectify these non-compliances. An unpopulated table indicates that for the period of analysis, all results were compliant with the 2004 ADWG.

Table 3: Non-Compliant Health Related Results and Remedial Action.

Sample Date	Sample Location	Parameter	Result	Units	Guideline	Comment

4 Non-Health Related (Aesthetic) Chemical

Table 4 lists those sample locations where non-compliant non-health related (Aesthetic) results were detected, and the remedial actions taken to rectify these non-compliances. An unpopulated table indicates that for the period of analysis, all results were compliant with the 2004 ADWG. This data is supplied for information only, as no remedial actions are required. However, it is important to note that the customer perception of water quality is heavily influenced by aesthetic concerns, and in an era of increasing public expectations of water suppliers, these aesthetic issues may need to be addressed in order to provide customer satisfaction.

Table 4: Non-Compliant Non-Health Related (Aesthetic) Chemical Results and Remedial Action.

Sample Date	Sample Location	Parameter	Result	Units	Guideline	Comment
9/11/2015	Hammersley Drive	Chlorine	0.7	mg/L	0.6	Due to Tech Reservoir Re-commissioning
9/11/2015	Knight Street	Chlorine	0.7	mg/L	0.6	Due to Tech Reservoir Re-commissioning
9/11/2015	Tech Reservoir	Chlorine	0.7	mg/L	0.6	Due to Tech Reservoir Re-commissioning
9/11/2015	Keble Heights	Chlorine	0.8	mg/L	0.6	Due to Tech Reservoir Re-commissioning

5 Radiological Related

Table 5 lists those sample locations where non-compliant Radiological results were detected, and the remedial actions taken to rectify these non-compliances. An unpopulated table indicates that for the period of analysis, all results were compliant with the 2004 ADWG. Note: Samples in this category are taken on a Biennial basis*

*Sample results from October 2015 are currently under review by AQWEST and the Department of Health. Once resolved these results will be published in the January - March 2016 MoU report

Table 5: Non-Compliant Radiological Results and Remedial Action.

Sample Date	Sample Location	Parameter	Result	Units	Guideline	Comment

6 Planned Sampling Summary

Table 6 shows the number of samples that were planned for the reporting period, and the number of accessible samples already taken.

Table 6: Planned sampling regime and actual assessable samples taken.

	Number of Samples Planned to be taken	Number of samples actually taken	% of planned samples taken
Microbiological	161	160	99.4%
Physical Chemical	302	299	99.0%

Table 7: Location and reason for missed samples

Date	Location	Schedule	Reason
12/10/2015	Skewes South Bore	WBSAA	Bore removed due to bore hole issues
21/10/2015	Skewes South Bore	WBSAB	Bore removed due to bore hole issues
27/10/2015	Skewes South Bore	WBSAQ	Bore removed due to bore hole issues
23/11/2015	Withers Crescent	WTSMW	Mains offline for emergency works.
Total	4		