



**AQWEST**

**DOH REPORT**

**MOU - DRINKING WATER QUALITY**

**REPORTING PERIOD 01 JANUARY 2015 TO 31 MARCH 2015**

**APRIL 2015**

REPORT TEMPLATE VERSION: 2.0.1

## 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

## Assumptions and Explanations

Where a result is returned as  $\leq$  or  $<$  value e.g.  $<0.1$  the result has been interpreted as technical 0 (zero).

\*Note: Aqwest's Water Quality Database contains the un-interpreted result

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  
**Telephone:** +61 8 9780 9500  
**Facsimile:** +61 8 9780 9509  
**Company Email:** [aqwest@aqwest.com.au](mailto:aqwest@aqwest.com.au)  
**Chief Executive Officer:** Brad Bevis  
**CEO E-Mail:** [brad.bevis@aqwest.com.au](mailto:brad.bevis@aqwest.com.au)  
**DOH Liaison Officer:** Gary Hallsworth  
**DOH Liaison Officer Email:** [gary.hallsworth@aqwest.com.au](mailto: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 January 2015 to 31 March 2015.

**Table 1: Aqwest Performance Summary Table**

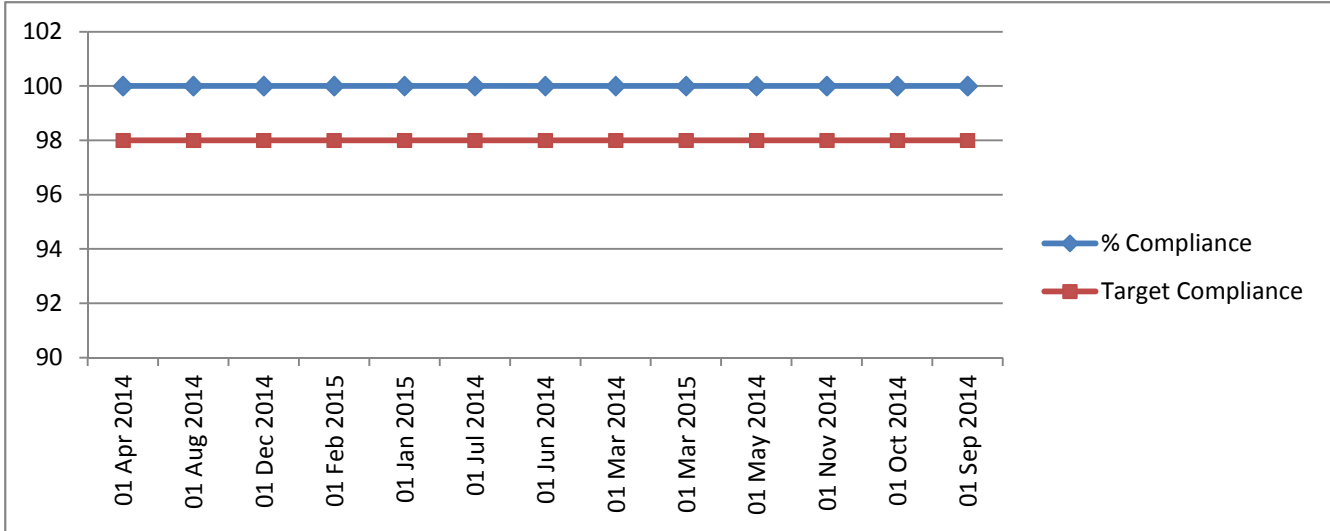
<b>Compliance From 01 January 2015 to 31 March 2015</b>				
	<b>Number of Water Quality Zones</b>	<b>Number of Compliant Water Quality Zones</b>	<b>% of Compliant Samples</b>	<b>% Compliance over 12 Month Rolling Period</b>
<b><i>Microbiological Quality</i></b>				
Escherichia coli	7	7	100.00	100.00
Naegleria	7	7	100.00	100.00
<b><i>Chemical Quality</i></b>				
Health Related	7	7	100.00	100.00
Non-Health Related	7	6	99.86	98.38

## 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.**

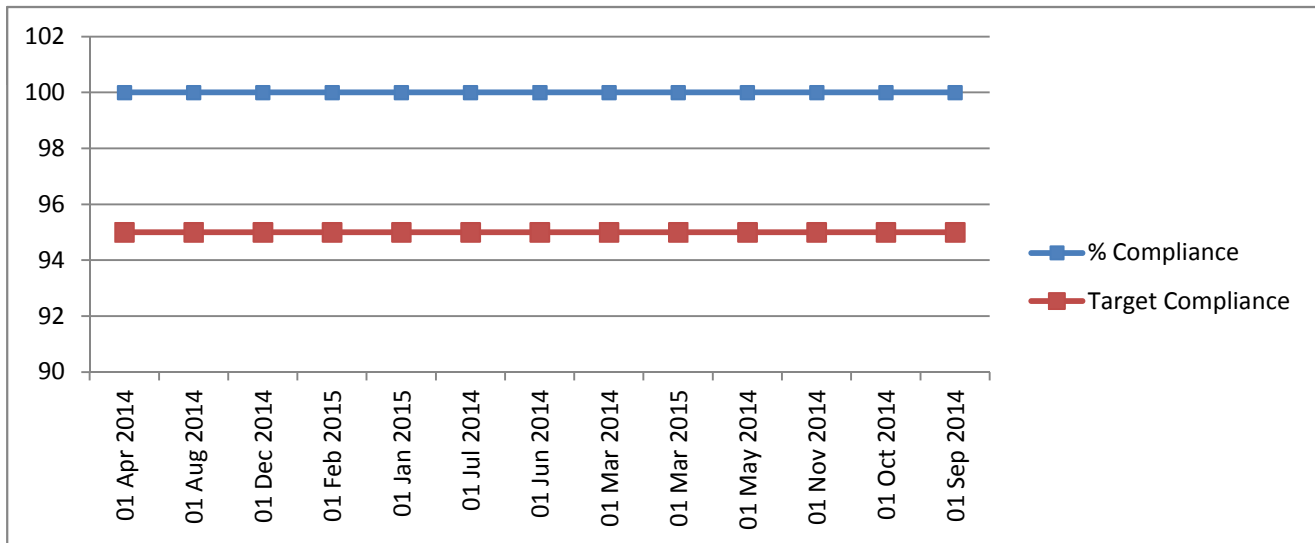


Table 2 lists those sample locations where non-compliant microbiological results were detected, and the remedial actions taken to rectify these non-compliances. An unpopulated table indicates that for the period of analysis, all results were compliant with the 2004 ADWG.

**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 2: Non-Compliant Microbiological 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
4/02/2015	Hastie WTP	Chloride	270	mg/L	250	WTP only used during high demand periods. Chloride and TDS sampling to increase during these periods
		TDS	580	mg/L	500	

### **3 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.

**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.**

	<b>Number of Samples Planned to be taken</b>	<b>Number of samples actually taken</b>	<b>% of planned samples taken</b>
<b>Microbiological</b>	161	161	100.0%
<b>Physical Chemical</b>	236	235	99.6%

## **7 Drinking Water Summary**

Table 7 shows the summary by characteristic, showing the statistics of results and compliance of the number of samples actually taken

<b>Sample Date</b>	<b>Location</b>	<b>Schedule</b>	<b>Reason</b>
4-Apr-15	Tech 1 Bore	WBSAQ	Bore not in use
<b>Total</b>	1		