



AQWEST

REPORT

MOU - DRINKING WATER QUALITY

REPORTING PERIOD 01 JULY 2014 TO 30 SEPTEMBER 2014

OCTOBER 2014

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
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DOH Liaison Officer: Gary Hallsworth
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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 July 2014 to 30 September 2014.

Table 1: Aqwest Performance Summary Table

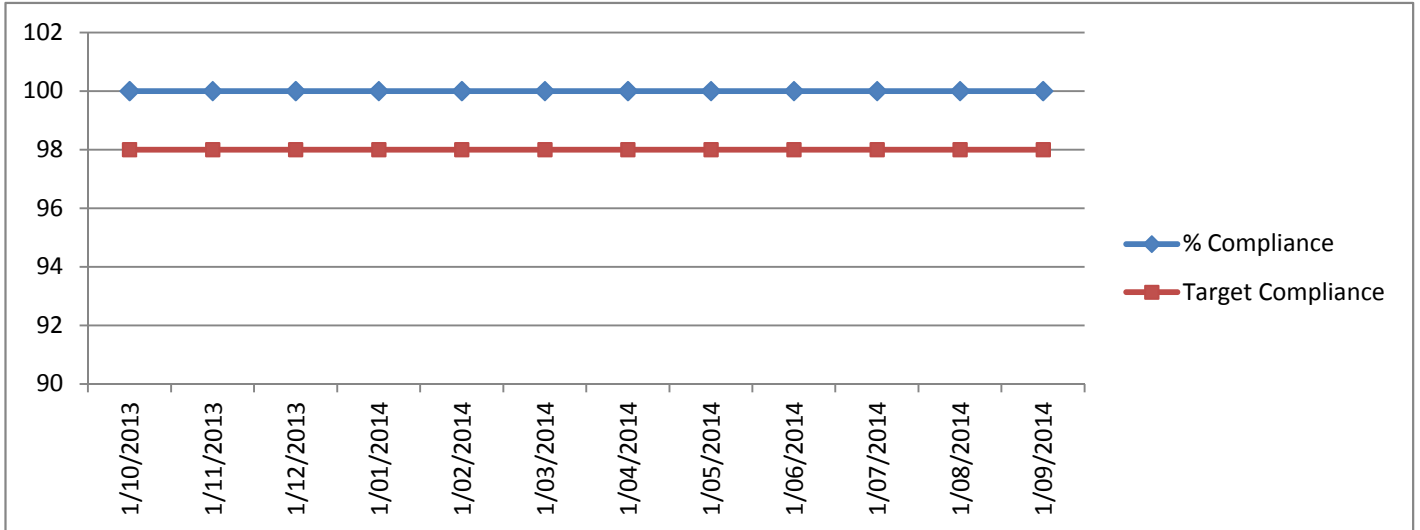
	Compliance From 01 July 2014 to 30 September 2014			% Compliance Samples over 12 Month Rolling Period
	Number of Water Quality Zones	Number of Compliant Water Quality Zones	% of Compliant Samples	
<i>Microbiological Quality</i>				
Escherichia coli	7	7	100.00	100.00
Naegleria	7	7	100.00	100.00
<i>Chemical Quality</i>				
Health Related	7	7	100.00	100.00
Non-Health Related	7	5	97.50	98.37

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.

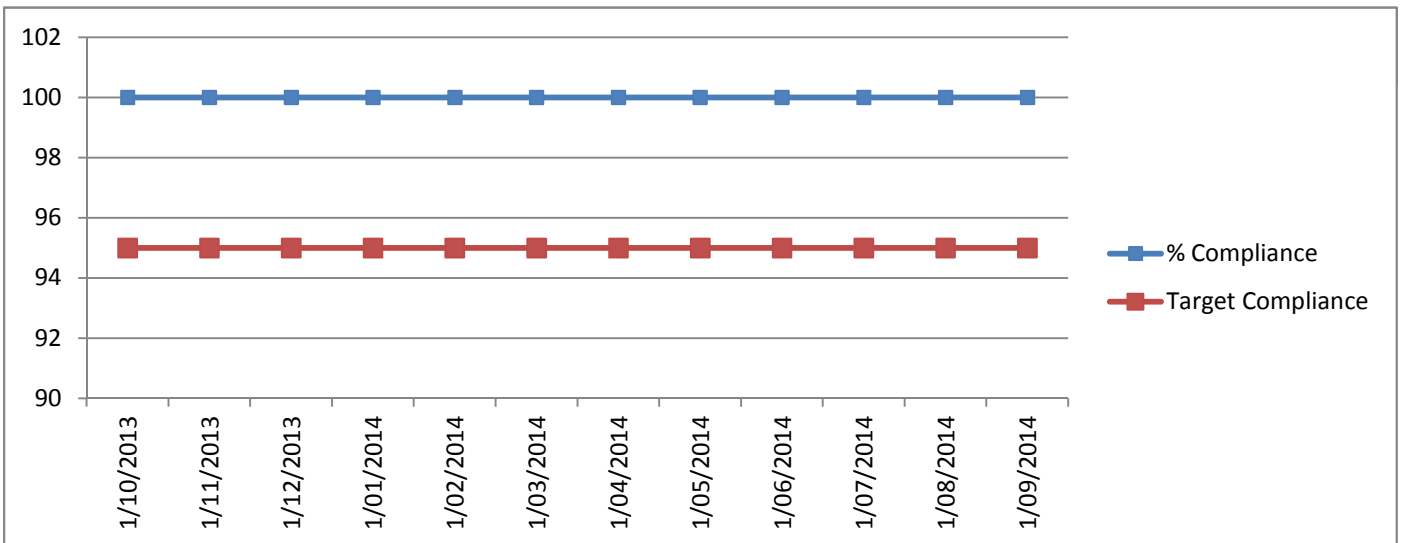


Table 2 lists those sample locations where non-compliant microbiological results were detected, and the remedial actions taken to rectify these non-compliances. An unpopulated table indicates that for the period of analysis, all results were compliant with the 2004 ADWG.

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

Sample Date	Sample Location	Parameter	Result	Units	Guideline	Comments / Action Taken

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	Comments / Action Taken

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	Comments / Action Taken
7/07/2014	Keble Heights	pH	6.4	pH units	6.5-8.5	Sample fed directly from Tech WTP as Tech Reservoir offline. Aeration issue identified with WTP. Now repaired
14/07/2014	Keble Heights	pH	6.4	pH units	6.5-8.5	
21/07/2014	Keble Heights	pH	6.3	pH units	6.5-8.5	
28/07/2014	Keble Heights	pH	6.3	pH units	6.5-8.5	
11/08/2014	Spencer WTP	Chlorine	0.7	mg/L	0.6	For Operational Purposes

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.

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

Sample Date	Sample Location	Parameter	Result	Units	Guideline	Comments / Action Taken

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
Physical Chemical	237	232	97.9%
Microbiological	161	161	100.0%

Table 7: Location and reason of missed samples

Sample Date	Location	Schedule	Reason
14-Aug-14	Hastie WTP	WTSAQ	WTP Offline due to Low system demand
14-Aug-14	Irwin WTP	WTSAQ	WTP Offline due to Low system demand
14-Aug-14	Skewes South Bore	WBSAQ	Sample Error - incorrect sample ID
14-Aug-14	Skewes North Bore	WBSAQ	Sample Error - incorrect sample ID
14-Aug-14	Irwin West Bore	WBSAQ	Transitioning to Monitoring Bore
Total	5		