

# Water Regulator Monthly Compliance Report – January 2025

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# **Executive Summary**

This report has been developed in order to satisfy the condition of Department of Local Government, Water and Volunteers compliance reporting of the operational and verification monitoring detailed in Woorabinda's Drinking Water Quality Management Plan (DWQMP) 2024 V7.7.

Compliance reports must be carried out in accordance with the Water Supply Regulation Compliance Notice, dated 19<sup>th</sup> December 2024.

- 1. From 2 January 2025 to 31 December 2024, implement the operational and verification monitoring programs details in Councils approved DWQMP and give the regulator a summary of water quality data acquired during each calendar month, within 5 business days after the end of the month, in which data was acquired.
- 2. Immediately notify the regulator when the equipment necessary to undertake continuous online monitoring of turbidity at the outlet of the sand filters and continuous monitoring of chlorine at the outlet of the Water Treatment Plant in reinstated. When the relevant monitoring equipment is again operational, set the appropriate alert and critical limits and include corresponding correction actions in Council's DWQMP, to enable a timely response to potential in treated water quality.

Currently there is no online monitoring for critical parameters such as turbidity, pH or chlorine residuals. Manual grab samples are used instead relying on workforce capacity and capability to communicate and apply collaboration tools that ensures consistency.

With limited turbidity monitoring for sand or carbon filters, with failed common turbidity meter limiting detection of specific filter issues will require the DWQMP to be reviewed on a monthly basis to account for corrective actions to meet reporting requirements.

This Compliance Report for the month of January 2025 summarises organisational impediments, process improvements, proposed amendments to the DWQMP and statistical data to deal with all contraventions relating to the Water Supply (Safety and Reliability) Act 2008.

## Introduction

## Operational and Verification Monitoring

Woorabinda Aboriginal Shire Council has a Water and Wastewater Maintenance agreement with an external Contractor that provides:

- TeamViewer remote access account
- Electrical remote support
- SCADA rectification and minor code amendments
- Stand-in Water and Wastewater management

A position was created to centralise all the regulatory reporting requirements and expedite corrective actions to meet Qld Drinking Water Regulations. The Water/Wastewater Operators are responsible for the monitoring and initial corrective action with the Essential Services Technical Officer.

## Water Treatment Plant Information Summary

Woorabinda Water Tr	reatment Plant
Location	Water Shed.
	Lat -24.12358700, Long 149.46593900
Treatment Processes	pH adjustment, Potassium Permanganate dosing, Flocculation & Settling, Sand Filtration, Activated Carbon Filtration, Chlorine Disinfection
Capacity	Up to 15L/s. If plant cannot maintain water quality, operators adjust the chemical dosing
Current Loading	Pumps operate at 10L/s. Hours of operations are 24/7. Hours of operation by operator are 44 hours per week.
Duty/standby arrangements	All pumps have duty/stand-by arrangement.
Alarms	Acid and hypochlorite dosing chases set points in SCADA. Ultrion and potassium permanganate uses flow-paced dosing.
Chemicals	Hydrochloric acid, Ultrion & potassium permanganate dosed in raw water.
	Sodium hypochlorite dosed in treated water.
	Chemicals able to be delivered as required year-round and are stored in the WTP shed.
Disinfection	Water is always disinfected with Sodium Hypochlorite.
Operation	Plant operates automatically and can be monitored by computer. Operators are present between the hours of 7:30am-4:30pm Monday to Thursday and 4hours Friday 7:30am – 11:30am, and one hour per day Saturday and Sunday.
	Plant is shut-off automatically when the clear water reservoir is full.
	Filter back wash is based on time and water level and can be triggered manually, backwashed water goes directly to sludge lagoons.
	The Operators are present 7 days/week. Computer system to notify operator (by mobile phone) is in the process of being implemented into the SCADA system. Not yet set up for WASC.

# Compliance Status Summary

# **Monitoring Sites**

Operational and verification monitoring is undertaken in accordance with the following Schedule.

Туре	Sample Reference	Sample Location
Treated	WTP Out	Outlet of WTP
Treated	Reservoir / Sample Point 1	Monitor Unit Front Shed, Water Treatment Plant Woorabinda
Treated	Sample Point 2	Tap - Sink Staff Room, Woorabinda Hospital Munns Rd Woorabinda
Treated	Sample Point 3	Tap - Woorabinda State Primary School / Hall, Carbine Street Woorabinda
Treated	Sample Point 4	Tap – External tap 66 Munns Drive Woorabinda
Raw	Sample Point 5	Tap - Raw Water Pipe, Water Treatment Plant Woorabinda

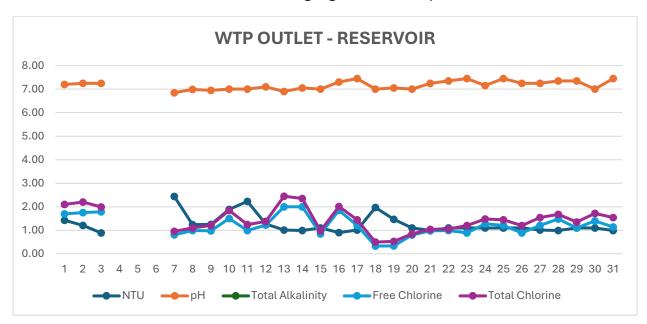
# Monitoring Parameters & Limits

Process step / location	Parameter	Target limit	Action if target limit is not met	Alert or Critical limit	Action if alert or critical limit is exceeded
Raw water	Turbidity	N/A	N/A	N/A	N/A
	рН	6.0 - 8.5		>8.0	Check acid dosing, chemicals & pumps
Settled water	Turbidity	<5	Operator to check dosing rates	>5 NTU	Plant shut down, check dosing rates Complete as per examples
	рН	6.0 – 8.5	Check acid dosing	<6.0 >8.5	Check acid dosing
Post-filtration (combined filtrate)	Turbidity	<0.2 NTU	Refer to CCP procedure	>0.5 NTU (after 15 minutes)	Refer to CCP procedure
Carbon filter product	Turbidity	<0.2 NTU	WTP Operator is responsible for making adjustments to the WTP	1.0 NTU	WTP Operator checks the dosing and full operation of the plant.
	рН	7.0 – 8.0	WTP Operator is responsible for making adjustments to the WTP	<6.5 or >8.0	WTP Operator checks the dosing and full operation of the plant.
WTP Out (prior to Reservoir)	Free chlorine	1.5 – 3.0 mg/L	WTP Operator is responsible for making adjustments to the WTP	<1.5 or >5.0 mg/L	WTP Operator checks the dosing and full operation of the plant.
Reservoir (water supply to town)	Free chlorine	1.0 – 2.0 mg/L	Refer to CCP procedure	<0.5 or >4.0 mg/L	Refer to CCP procedure

### January 2025 Analysis

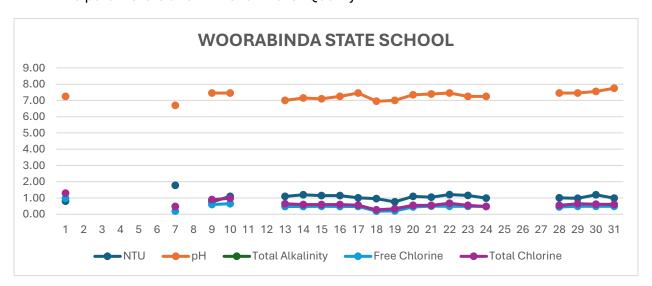
#### WTP Reservoir

On the 22<sup>nd</sup> December 2024 a Boil Water Alert was issued and remained in place through January. The Water Operators have been communicating with the Water Regulator and Queensland Health to resolve issues to the health of the water. The water quality remained within the parameters <5 at the end of January. Monitoring arrangements and correction actions were undertaken and highlighted in this report.



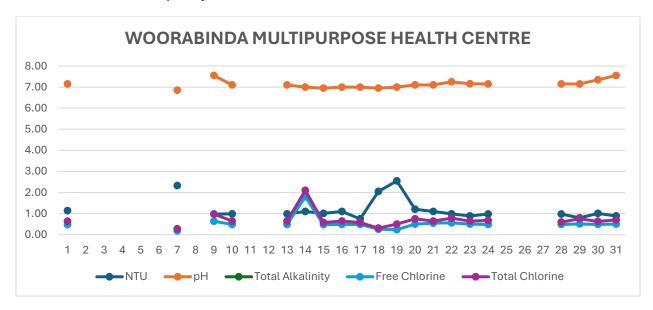
#### **Woorabinda State School**

January is school vacation period, though water testing was inconsistent the results are within the parameters and limits for Water Quality.



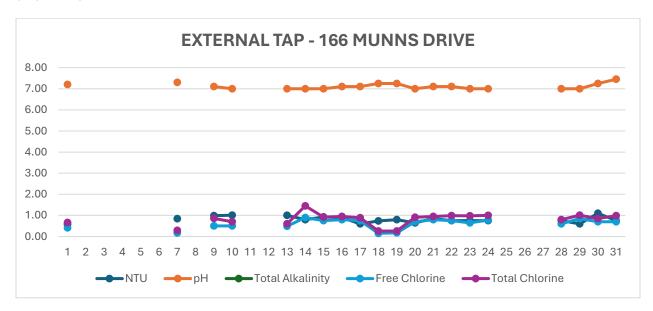
#### Woorabinda Multipurpose Health Centre

As the Boil Water Alert has been in place for six (6) weeks the Multipurpose Health Centre has been operating self-managed tanks. The spike in turbidity levels may have been as a result of town water resting in the pipes that were tested over a weekend. Currently there are no online monitoring of critical parameters such turbidity, pH or chlorine residuals and coincides with water quality at the Reservoir outlet.



#### 166 Munns Drive - External Tap

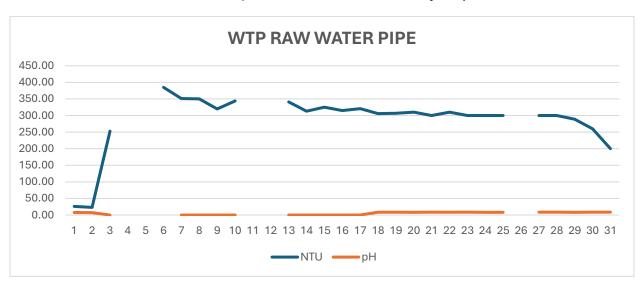
Water testing inconsistency within the month of January results were within parameters and limits.



#### WTP Raw Water Pipe

The pre-treatment of water dosing system lacks proper set-up, such as calibration cylinders for drop tests and accurate adjustments based on real-time monitoring. Hydrochloric acid dosing is automated, and its placement post-coagulant dosing reduces its effectiveness in pH stabilization for coagulation.

The turbidity on the 1<sup>st</sup> and 2<sup>nd</sup> was coming in clean and operators found it hard to treat, followed by the flooding of the Dawson River which saw the turbidity spike, but due to the failing plant infrastructure, the performance of the filtration saw the Council struggle to meet the limits set out in the DWQMP for the month of January for plant filtration.



## Reporting and Corrective Actions

#### **December**

Sunday 22<sup>nd</sup> – Drinkingwater reporting hotline, discolouration in the water. Reporting event closed on 20<sup>th</sup> January 2025

Sunday 22<sup>nd</sup> - Public Notice Boil Water

Tuesday 24th – Water Supply Regulation, December water quality events:-

- 1. CAS-150-24-11568 (water security event) reported 13/12/24
- 2. DWI-150-24-1184 (network turbidity event) reported 22/12/24
- 3. DWI-150-24-11691 (filtered water turbidity event) reported 24/12/24 closed

#### January

Wednesday 1st – Backwash Sand Filters

**Tuesday 7**<sup>th</sup> – Backwash Sand Filters, drain and clean both settler tanks, jar tests, poly dosing to 20ml/L, Backwash Carbon Filters x2. Change flow rate to 15ml/L from 10L/s, change floc stirrer speed to 10% from 80%, zero change to turbidity from floc to settler tank output.

**Wednesday 8**<sup>th</sup> – Update Water Regulator on Turbidity issue informed the operator did not complete test sheets from the 4-6 January 2025

**Thursday 16th** – Water test results emailed to Water Regulator

Saturday 18th – Backwash Sand Filters, Drain Secondary Tanks

**Sunday 19**<sup>th</sup> – Backwash Sand Filters, Backwash Carbon Filters, Change Poly 21% from 23.5, change flow rate to 13%.

## Conclusion

The lack of consistency in taking and testing water samples over the January period was a result of a breakdown in communication as staff returned from the Christmas Closure. Though staff routines achieved a level of discipline during weekdays, handover of tasks on weekend shift to backfilling Operators will require improvement.

All microbiology testing for the month of January were a 'Pass'.

## **DWQMP Improvement**

- 1. Staff directive to ensure that samples including reticulation samples are to be collected every day.
- Daily testing sheets to be collected and recording on the Water Monitoring Monthly Register
- 3. Mobile Testing Kits to be identified and provided to Operators to complete water testing at the sites.
- 4. Water Operators assigned vehicles to be modified to secure resources for the purpose of testing and recording samples of water at site locations.
- 5. Create a Contractors Register and determine a maintenance schedule.

## **DWQMP** Amendments

- 1. Operational and Verification Monitoring, Section 4, page 46:
  - a. External water treatment contractor visits monthly to be change to 'as per maintenance schedule by Subject Matter Experts (SMEs) and Contractors.
  - b. Reference is given to 6.2 of which there is no section.
- 2. Monitoring Sites error in address should read 'Tap External Tap <u>166</u> Munns Drive and not 66 Munns drive.

# **Appendice**

- 1. Quality Water Monitoring Monthly Register
- 2. Inaccurate recording Daily Water Test Sheet example

# 1. Monthly Register Water Monitoring Results

TestTime	TestDate	Sites	NTU	рН	Total Alkalinity	Free Chlorine	Total Chlorine
11:30am	1/1/25	Raw Water	26.00	7.65			
11:30am	1/1/25	Settler Tanks	19.80	6.90			
11:30am	1/1/25	Sand Filters	6.28	6.95			
11:30am	1/1/25	Carbon Filters	1.31	7.10			
11:30am	1/1/25	Plant Output	0.98	7.25		3.10	3.40
11:30am	1/1/25	Reservoir	1.43	7.20		1.70	2.10
11:30am	1/1/25	166 Munns Drive	0.57	7.20		0.41	0.66
11:30am	1/1/25	Hospital	1.14	7.15	1	0.48	0.64
11:30am	1/1/25	School	0.80	7.25		0.98	1.30
11:30am	1/1/25	Water Info					
	1/2/25	Raw Water	23.00	7.25			
	1/2/25	Settler Tanks	17.50	7.05	1		
	1/2/25	Sand Filters	7.90	7.05			
	1/2/25	Carbon Filters	1.25	7.15	1		
	1/2/25	Plant Output	0.99	7.20		3.20	3.40
	1/2/25	Reservoir	1.21	7.25	ı	1.75	2.20
	1/2/25	166 Munns Drive					
	1/2/25	Hospital					
	1/2/25	School					
	1/2/25	Water Info					
	1/3/24	Raw Water	253.00	>>			
	1/3/24	Settler Tanks	8.50	7.55			
	1/3/24	Sand Filters	0.51	7.45			
	1/3/24	Carbon Filters	0.50	7.00			
	1/3/24	Plant Output	0.99	7.00		3.60	4.01
	1/3/24	Reservoir	0.89	7.25		1.79	1.99
	1/3/24	166 Munns Drive					

	1/3/24	•		
	1/3/24	School		
	1/3/24	Water Info		
	1/4/25	Raw Water		
	1/4/25	Settler Tanks		
	1/4/25	Sand Filters		
	1/4/25	Carbon Filters		
	1/4/25	Plant Output		
	1/4/25	Reservoir		
	1/4/25	166 Munns Drive		
	1/4/25	Hospital		
	1/4/25	School		
	1/4/25	Water Info		
6:14am	1/5/25	Raw Water		
6:14am	1/5/25	Settler Tanks		
6:14am	1/5/25	Sand Filters		
6:14am	1/5/25	Carbon Filters		
6:14am	1/5/25	Plant Output		
6:14am	1/5/25	Reservoir		
6:14am	1/5/25	166 Munns Drive		
6:14am	1/5/25	Hospital		
6:14am	1/5/25	School		
6:14am	1/5/25	Water Info		
7:11am	1/6/25	Raw Water	385.00	
7:11am	1/6/25	Settler Tanks		
7:11am	1/6/25	Sand Filters		
7:11am	1/6/25	Carbon Filters		
7:11am	1/6/25	Plant Output		
7:11am	1/6/25	Reservoir		
7:11am	1/6/25	166 Munns Drive		

7:11am	1/6/25	Hospital						
7:11am	1/6/25	School						
7:11am	1/6/25	Water Info						
4:00pm	1/7/25	Raw Water	351.00	>>				
4:00pm	1/7/25	Settler Tanks	12.80		6.85			
4:00pm	1/7/25	Sand Filters	0.69		6.95			
4:00pm	1/7/25	Carbon Filters	0.81		7.00			
4:00pm	1/7/25	Plant Output	1.15		7.05		2.90	3.00
4:00pm	1/7/25	Reservoir	2.44		6.85		0.81	0.96
4:00pm	1/7/25	166 Munns Drive	0.84		7.30		0.17	0.29
4:00pm	1/7/25	Hospital	2.33		6.85		0.18	0.28
4:00pm	1/7/25	School	1.78		6.70		0.19	0.48
4:00pm	1/7/25	Water Info						
7:28am	1/8/25	Raw Water	350.00	>>				
7:28am 7:28am	1/8/25 1/8/25	Raw Water Settler Tanks	350.00 11.90	>>	6.98			
				>>	6.98 7.00			
7:28am	1/8/25	Settler Tanks	11.90	>>				
7:28am 7:28am	1/8/25 1/8/25	Settler Tanks Sand Filters	11.90 0.65	>>	7.00		3.00	3.45
7:28am 7:28am 7:28am	1/8/25 1/8/25 1/8/25	Settler Tanks Sand Filters Carbon Filters	11.90 0.65 0.75	>>	7.00 7.15		3.00 0.99	3.45 1.10
7:28am 7:28am 7:28am 7:28am	1/8/25 1/8/25 1/8/25 1/8/25	Settler Tanks Sand Filters Carbon Filters Plant Output	11.90 0.65 0.75 1.10	>>	7.00 7.15 7.25			
7:28am 7:28am 7:28am 7:28am 7:28am	1/8/25 1/8/25 1/8/25 1/8/25 1/8/25	Settler Tanks Sand Filters Carbon Filters Plant Output Reservoir	11.90 0.65 0.75 1.10	>>	7.00 7.15 7.25			
7:28am 7:28am 7:28am 7:28am 7:28am 7:28am	1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25	Settler Tanks Sand Filters Carbon Filters Plant Output Reservoir 166 Munns Drive	11.90 0.65 0.75 1.10	>>	7.00 7.15 7.25			
7:28am 7:28am 7:28am 7:28am 7:28am 7:28am 7:28am	1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25	Settler Tanks Sand Filters Carbon Filters Plant Output Reservoir 166 Munns Drive Hospital	11.90 0.65 0.75 1.10	>>	7.00 7.15 7.25			
7:28am 7:28am 7:28am 7:28am 7:28am 7:28am 7:28am 7:28am	1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25	Settler Tanks Sand Filters Carbon Filters Plant Output Reservoir 166 Munns Drive Hospital School	11.90 0.65 0.75 1.10	>>	7.00 7.15 7.25			
7:28am 7:28am 7:28am 7:28am 7:28am 7:28am 7:28am 7:28am	1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25	Settler Tanks Sand Filters Carbon Filters Plant Output Reservoir 166 Munns Drive Hospital School Water Info	11.90 0.65 0.75 1.10 1.24		7.00 7.15 7.25			
7:28am 7:28am 7:28am 7:28am 7:28am 7:28am 7:28am 7:28am	1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/9/25	Settler Tanks Sand Filters Carbon Filters Plant Output Reservoir 166 Munns Drive Hospital School Water Info Raw Water	11.90 0.65 0.75 1.10 1.24		7.00 7.15 7.25 6.99			
7:28am 7:28am 7:28am 7:28am 7:28am 7:28am 7:28am 7:28am	1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/9/25	Settler Tanks Sand Filters Carbon Filters Plant Output Reservoir 166 Munns Drive Hospital School Water Info Raw Water Settler Tanks	11.90 0.65 0.75 1.10 1.24 320.00 7.78		7.00 7.15 7.25 6.99			
7:28am 7:28am 7:28am 7:28am 7:28am 7:28am 7:28am 7:28am	1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/8/25 1/9/25 1/9/25	Settler Tanks Sand Filters Carbon Filters Plant Output Reservoir 166 Munns Drive Hospital School Water Info Raw Water Settler Tanks Sand Filters	11.90 0.65 0.75 1.10 1.24 320.00 7.78 0.77		7.00 7.15 7.25 6.99 7.05 6.95			

	1/9/25	Reservoir	1.25	6.95	0.98	1.21
	1/9/25	166 Munns Drive	0.99	7.10	0.50	0.86
	1/9/25	Hospital	0.98	7.55	0.64	0.98
	1/9/25	School	0.76	7.45	0.60	0.90
	1/9/25	Water Info				
6:42am	1/10/25	Raw Water	344.00	>>		
6:42am	1/10/25	Settler Tanks	9.85	7.00		
6:42am	1/10/25	Sand Filters	1.65	7.00		
6:42am	1/10/25	Carbon Filters	1.15	6.95		
6:42am	1/10/25	Plant Output	1.10	7.20	3.80	4.20
6:42am	1/10/25	Reservoir	1.89	7.00	1.50	1.85
6:42am	1/10/25	166 Munns Drive	1.01	7.00	0.50	0.70
6:42am	1/10/25	Hospital	0.99	7.10	0.49	0.65
6:42am	1/10/25	School	1.10	7.45	0.65	0.98
6:42am	1/10/25	Water Info				
	1/11/25	Raw Water				
	1/11/25	Settler Tanks	9.31	7.10		
	1/11/25	Sand Filters	0.84	7.00		
	1/11/25	Carbon Filters	0.69	7.10		
	1/11/25	Plant Output	0.94	7.25	4.40	4.80
	1/11/25	Reservoir	2.23	7.00	0.99	1.24
	1/11/25	166 Munns Drive				
	1/11/25	Hospital				
	1/11/25	School				
	1/11/25	Water Info				
	1/12/25	Raw Water				
	1/12/25	Settler Tanks	7.02	6.90		
	1/12/25	Sand Filters	0.98	6.90		
	1/12/25	Carbon Filters	0.78	7.10		
	1/12/25	Plant Output	0.87	7.15	2.70	3.20

	1/12/25	Reservoir	1.27	7.10	1.22	
	1/12/25	166 Munns Drive				
	1/12/25	Hospital				
	1/12/25	School				
	1/12/25	Water Info				
	13/1/2025	Raw Water	341.00	>>		
	13/1/2025	Settler Tanks	7.61	6.98		
	13/1/2025	Sand Filters	0.60	6.98		
	13/1/2025	Carbon Filters	0.60	7.00		
	13/1/2025	Plant Output	0.82	7.00	4.20	
	13/1/2025	Reservoir	1.01	6.90	2.00	
	13/1/2025	166 Munns Drive	1.00	7.00	0.49	
	13/1/2025	Hospital	0.99	7.10	0.49	
	13/1/2025	School	1.10	7.00	0.48	
	13/1/2025	Water Info				
7:04am	14/1/2025	Raw Water	313.00	>>		
':04am	14/1/2025	Settler Tanks	7.00	7.10		
7:04am	14/1/2025	Sand Filters	0.65	7.15		
7:04am	14/1/2025	Carbon Filters	0.70	7.00		
7:04am	14/1/2025	Plant Output	0.75	7.00	4.00	
7:04am	14/1/2025	Reservoir	0.99	7.05	2.00	
7:04am	14/1/2025	166 Munns Drive	0.80	7.00	0.90	
7:04am	14/1/2025	Hospital	1.10	7.00	1.80	
7:04am	14/1/2025	School	1.20	7.15	0.48	
7:04am	14/1/2025	Water Info				
7:03am	15/1/2025	Raw Water	325.00	>>		
7:03am	15/1/2025	Settler Tanks	8.08	6.99		
7:03am	15/1/2025	Sand Filters	0.60	7.10		
7:03am	15/1/2025	Carbon Filters	0.80	7.00		
7:03am	15/1/2025	Plant Output	0.85	6.99	3.50	

7:03am	15/1/2025	Reservoir	1.10	7.00	0.85	0.98
7:03am	15/1/2025	166 Munns Drive	0.93	7.00	0.75	0.92
7:03am	15/1/2025	Hospital	1.01	6.95	0.48	0.58
7:03am	15/1/2025	School	1.15	7.10	0.49	0.60
6:58am	15/1/2025	Water Info				
6:58am	16/1/2025	Raw Water	315.00	>>		
6:58am	16/1/2025	Settler Tanks	7.86	7.15		
6:58am	16/1/2025	Sand Filters	0.70	7.10		
6:58am	16/1/2025	Carbon Filters	0.75	7.25		
6:58am	16/1/2025	Plant Output	1.00	7.35	3.40	3.80
6:58am	16/1/2025	Reservoir	0.90	7.30	1.85	2.01
6:58am	16/1/2025	166 Munns Drive	0.90	7.10	0.80	0.95
6:58am	16/1/2025	Hospital	1.10	7.00	0.49	0.65
6:58am	16/1/2025	School	1.15	7.25	0.48	0.60
6:58am	16/1/2025	Water Info				
6:38am	17/1/2025	Raw Water	321.00	>>		
6:38am	17/1/2025	Settler Tanks	8.19	7.06		
6:38am	17/1/2025	Sand Filters	0.79	7.15		
6:38am	17/1/2025	Carbon Filters	0.60	7.10		
6:38am	17/1/2025	Plant Output	0.58	7.00	3.81	4.01
6:38am	17/1/2025	Reservoir	1.01	7.45	1.21	1.45
6:38am	17/1/2025	166 Munns Drive	0.60	7.10	0.75	0.89
6:38am	17/1/2025	Hospital	0.75	7.00	0.49	0.58
6:38am	17/1/2025	School	1.01	7.45	0.48	0.56
6:38am	17/1/2025	Water Info				
9:00am	18/1/2025	Raw Water	306.00	8.50		
9:00am	18/1/2025	Settler Tanks	9.21	6.90		
9:00am	18/1/2025	Sand Filters	0.70	7.00		
9:00am	18/1/2025	Carbon Filters	0.86	7.10		
9:00am	18/1/2025	Plant Output	0.86	7.25	1.70	2.30

9:00am	18/1/2025	Reservoir	1.97	7.00	0.33	0.50
9:00am	18/1/2025	166 Munns Drive	0.74	7.25	0.15	0.26
9:00am	18/1/2025	Hospital	2.05	6.95	0.26	0.31
9:00am	18/1/2025	School	0.96	6.95	0.19	0.27
9:00am	18/1/2025	Water Info				
11:30am	19/1/2025	Raw Water	307.00	8.50		
11:30am	19/1/2025	Settler Tanks	8.63	7.05		
11:30am	19/1/2025	Sand Filters	0.68	7.05		
11:30am	19/1/2025	Carbon Filters	0.76	7.15		
11:30am	19/1/2025	Plant Output	0.93	7.25	2.20	2.70
11:30am	19/1/2025	Reservoir	1.47	7.05	0.34	0.53
11:30am	19/1/2025	166 Munns Drive	0.80	7.25	0.18	0.26
11:30am	19/1/2025	Hospital	2.55	7.00	0.24	0.50
11:30am	19/1/2025	School	0.76	7.00	0.20	0.34
11:30am	19/1/2025	Water Info				
7:03am	20/1/2025	Raw Water	310.00	8.25		
7:03am	20/1/2025	Settler Tanks	10.10	7.15		
7:03am	20/1/2025	Sand Filters	0.68	7.10		
7:03am	20/1/2025	Carbon Filters	0.60	7.25		
7:03am	20/1/2025	Plant Output	0.75	0.35	1.89	2.20
7:03am	20/1/2025	Reservoir	1.10	7.00	0.80	0.85
7:03am	20/1/2025	166 Munns Drive	0.65	7.00	0.70	0.91
7:03am	20/1/2025	Hospital	1.21	7.10	0.50	0.75
7:03am	20/1/2025	School	1.10	7.35	0.45	0.55
7:03am	20/1/2025	Water Info				
	21/1/2025	Raw Water	300.00	8.40		
	21/1/2025	Settler Tanks	6.65	7.20		
	21/1/2025	Sand Filters	0.82	7.10		
	21/1/2025	Carbon Filters	0.85	7.15		
	21/1/2025	Plant Output	0.98	7.25	3.30	3.90

	21/1/2025	Reservoir	1.00	7.25	0.98	1.04
	21/1/2025	166 Munns Drive	0.85	7.10	0.80	0.95
	21/1/2025	Hospital	1.10	7.10	0.55	0.65
	21/1/2025	School	1.05	7.40	0.50	0.55
	21/1/2025	Water Info				
7:35am	22/1/2025	Raw Water	310.00	8.50		
7:35am	22/1/2025	Settler Tanks	6.60	7.21		
7:35am	22/1/2025	Sand Filters	0.78	7.15		
7:35am	22/1/2025	Carbon Filters	0.76	7.10		
7:35am	22/1/2025	Plant Output	0.97	7.25	3.55	3.89
7:35am	22/1/2025	Reservoir	1.10	7.35	0.99	1.05
7:35am	22/1/2025	166 Munns Drive	0.75	7.10	0.75	0.99
7:35am	22/1/2025	Hospital	0.99	7.25	0.56	0.78
7:35am	22/1/2025	School	1.21	7.45	0.49	0.68
7:35am	22/1/2025	Water Info				
7:06am	23/1/2025	Raw Water	300.00	8.45		
7:06am	23/1/2025	Settler Tanks	8.10	7.15		
7:06am	23/1/2025	Sand Filters	0.89	7.15		
7:06am	23/1/2025	Carbon Filters	0.70	7.25		
7:06am	23/1/2025	Plant Output	0.89	7.35	3.01	3.25
7:06am	23/1/2025	Reservoir	1.10	7.45	0.89	1.20
7:06am	23/1/2025	166 Munns Drive	0.75	7.00	0.65	0.98
7:06am	23/1/2025	Hospital	0.89	7.16	0.50	0.65
7:06am	23/1/2025	School	1.16	7.25	0.49	0.55
7:06am	23/1/2025	Water Info				
7:06am	24/1/2025	Raw Water	300.00	8.35		
7:06am	24/1/2025	Settler Tanks	8.37	6.99		
7:06am	24/1/2025	Sand Filters	0.70	6.98		
7:06am	24/1/2025	Carbon Filters	0.60	7.00		
7:06am	24/1/2025	Plant Output	0.80	7.00	2.80	3.30

7:06am	24/1/2025	Reservoir	1.10	7.15	1.28	1.48
7:06am	24/1/2025	166 Munns Drive	0.75	7.00	0.78	1.00
7:06am	24/1/2025	Hospital	0.98	7.15	0.49	0.68
7:06am	24/1/2025	School	0.99	7.25	0.48	0.48
7:06am	24/1/2025	Water Info				
6:58am	25/1/2025	Raw Water	300.00	8.35		
6:58am	25/1/2025	Settler Tanks	7.10	7.15		
6:58am	25/1/2025	Sand Filters	0.67	7.10		
6:58am	25/1/2025	Carbon Filters	0.70	7.25		
6:58am	25/1/2025	Plant Output	0.95	7.35	3.20	3.80
6:58am	25/1/2025	Reservoir	1.10	7.45	1.21	1.45
6:58am	25/1/2025	166 Munns Drive				
6:58am	25/1/2025	Hospital				
6:58am	25/1/2025	School				
6:58am	25/1/2025	Water Info				
7:56am	26/1/2025	Raw Water				
7:56am	26/1/2025	Settler Tanks	7.50	6.90		
7:56am	26/1/2025	Sand Filters	0.70	6.98		
7:56am	26/1/2025	Carbon Filters	0.69	7.00		
7:56am	26/1/2025	Plant Output	0.80	7.10	3.25	3.65
7:56am	26/1/2025	Reservoir	1.10	7.25	0.89	1.20
7:56am	26/1/2025	166 Munns Drive				
7:56am	26/1/2025	Hospital				
7:56am	26/1/2025	School				
7:56am	26/1/2025	Water Info				
6:59am	27/1/2025	Raw Water	300.00	8.40		
6:59am	27/1/2025	Settler Tanks	7.10	6.99		
6:59am	27/1/2025	Sand Filters	0.65	6.98		
6:59am	27/1/2025	Carbon Filters	0.70	7.15		
6:59am	27/1/2025	Plant Output	0.85	7.10	3.80	4.10

6:59am	27/1/2025	Reservoir	1.01	7.25	1.21	1.54
6:59am	27/1/2025	166 Munns Drive				
6:59am	27/1/2025	Hospital				
6:59am	27/1/2025	School				
6:59am	27/1/2025	Water Info				
6:58am	28/1/2025	Raw Water	300.00	8.45		
6:58am	28/1/2025	Settler Tanks	6.10	7.10		
6:58am	28/1/2025	Sand Filters	0.70	7.15		
6:58am	28/1/2025	Carbon Filters	0.60	7.25		
6:58am	28/1/2025	Plant Output	0.85	7.25	3.80	4.01
6:58am	28/1/2025	Reservoir	0.99	7.35	1.48	1.68
6:58am	28/1/2025	166 Munns Drive	0.75	7.00	0.60	0.80
6:58am	28/1/2025	Hospital	0.98	7.15	0.49	0.60
6:58am	28/1/2025	School	1.01	7.45	0.45	0.55
6:58am	28/1/2025	Water Info				
6:57am	29/1/2025	Raw Water	289.00	8.35		
6:57am	29/1/2025	Settler Tanks	9.35	7.15		
6:57am	29/1/2025	Sand Filters	0.80	7.10		
6:57am	29/1/2025	Carbon Filters	0.60	7.25		
6:57am	29/1/2025	Plant Output	0.85	7.25	3.98	4.35
6:57am	29/1/2025	Reservoir	1.10	7.35	1.10	1.35
6:57am	29/1/2025	166 Munns Drive	0.60	7.00	0.85	1.01
6:57am	29/1/2025	Hospital	0.80	7.15	0.51	0.75
6:57am	29/1/2025	School	0.98	7.45	0.49	0.65
6:57am	29/1/2025	Water Info				
7:14 am	30/1/2025	Raw Water	260.00	8.40		
7:14 am	30/1/2025	Settler Tanks	7.10	7.10		
7:14 am	30/1/2025	Sand Filters	0.90	7.15		
7:14 am	30/1/2025	Carbon Filters	0.60	7.00		
7:14 am	30/1/2025	Plant Output	0.71	7.50	4.80	5.10

7:14 am	30/1/2025	Reservoir	1.10	7.00	1.40	1.72
7:14 am	30/1/2025	166 Munns Drive	1.10	7.25	0.70	0.85
7:14 am	30/1/2025	Hospital	1.01	7.35	0.49	0.63
7:14 am	30/1/2025	School	1.20	7.55	0.49	0.62
7:14 am	30/1/2025	Water Info				
6:21am	31/1/2025	Raw Water	200.00	8.45		
6:21am	31/1/2025	Settler Tanks	10.60	7.00		
6:21am	31/1/2025	Sand Filters	0.70	7.00		
6:21am	31/1/2025	Carbon Filters	0.61	7.15		
6:21am	31/1/2025	Plant Output	0.89	7.25	6.00 >>	
6:21am	31/1/2025	Reservoir	0.99	7.45	1.14	1.54
6:21am	31/1/2025	166 Munns Drive	0.75	7.45	0.70	0.99
6:21am	31/1/2025	Hospital	0.89	7.55	0.50	0.70
6:21am	31/1/2025	School	0.99	7.75	0.49	0.61

## 2. Inaccurate Reporting Example

# **Woorabinda Aboriginal Shire Council**

## **Daily Water Tests**

Day	5	Month	1	Year	2025	Source	Raw water	Supernatant	Reservoir inlet	Reservoir	Bore	Creek
Sample Time	6.14	Morning	-	Bainfall		Meter Today				547868.66		
Sample Time	-	Afternoon				Meter today				-		
Name						Used						
	TEST READII					NGS				SC	REEN READIN	G
MORNING	Turbidity NTU 1	pH pH Units <8.5	Total Alkalinity Mg/L <100	Free Chlorine Mg/L 5	Total Chlorine Mg/L <5.0	Total Aluminium Mg/L <0.1	Total Iron Mg/L <0.1	True Colour <5	Manganese Mg/L <0.02	Turbidity NTU	pH pH Units	Free Chlorine Mg/L
Raw Water												
Settled Water			, I	1						10-17-17-11		
Sand Filter			High							Double Pil		
Combined			1110	1								
Carbon Filter			NIU							Para de la constante de la con		175
Plant Output			1							100 1-10 8		
Reservoir												
	TEST READI					NGS			SCREEN READING			
AFTERNOON	Turbidity NTU 1	pH pH Units <8.5	Total Alkalinity Mg/L <100	Free Chlorine Mg/L 5	Total Chlorine Mg/L <5.0	Total Aluminium Mg/L <0.1	Total Iron Mg/L <0.1	True Colour <5	Manganese Mg/L <0.02	Turbidity NTU	pH pH Units	Free Chlorine Mg/L
Raw Water											1000	
Settled Water												
Sand Filter												8.015
Combined												
Carbon Filter				1								
Plant Output												
Reservoir												
	Today		Yesterday		Total	Chlorine Res	Today		Yesterday		Total	
	Today		Yesterday		Total	Chlorine WTP R	Today		Yesterday		Total	
	Today		Yesterday		Total	Chlorine WTP	Today		Yesterday		Total	

# COMMENTS: