CERTIFICATE OF ANALYSIS

Work Order	: **EW2500798**	Page	: 1 of 4
Client	: **WINGECARRIBEE SHIRE COUNCIL**	Laboratory	: Environmental Division NSW South Coast
Contact	: Resource	Contact	: Aneta Prosaroski
Address	: PO BOX 141 MOSSVALE NSW AUSTRALIA	Address	: 1/19 Ralph Black Dr, North Wollongong 2500 NSW Australia
Telephone	: ----	Telephone	: +61 2 4225 3125
Project	: Welby Quarterly Surface Water	Date Samples Received	: 14-Feb-2025 16:05
Order number	: 00268671	Date Analysis Commenced	: 14-Feb-2025
C-O-C number	: ----	Issue Date	: 24-Feb-2025 17:44
Sampler	: Michael Santos		
Site	: ----		
Quote number	: EW24WINSHI0001		
No. of samples received	: 8		
No. of samples analysed	: 8		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Robert DaLio	Sampler	Laboratory - Wollongong, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP030: BOD LCS Low Recovery <170 mg/L: LCS recovery below recommended APHA limits of the certified +/-30.5 mg/L; BOD results may bias low.
- pH performed by ALS Wollongong via in-house method EA005FD and EN67 PK.
- Electrical conductivity performed by ALS Wollongong via in-house method EA010FD and EN67 PK.
- ORP (Oxidation Reduction Potential) performed by ALS Wollongong via in-house method EA075FD and EN67 PK.
- Sampling completed by ALS Wollongong in accordance with in-house sampling method EN/67.6 Rivers and Streams.
- Dissolved oxygen (DO) performed by ALS Wollongong via in-house method EP025FD and EN67 PK.
- All field analysis performed by ALS Wollongong were completed at the time of sampling.
- Sampling completed by ALS Wollongong in accordance with in-house sampling method EN/67.4 Lakes and Reservoirs

Analytical Results

Sub-Matrix: **WATER**
(Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Sample ID	Point 10 WELMSW-01	Point 11 WELMSW-02	Point 12 DAM 1	Point 13 DAM 2	Point 14 DAM 3
				Sampling date / time	14-Feb-2025 09:54	14-Feb-2025 09:35	14-Feb-2025 10:55	14-Feb-2025 10:30	14-Feb-2025 10:19
					EW2500798-001	EW2500798-002	EW2500798-003	EW2500798-004	EW2500798-005
					Result	Result	Result	Result	Result
EA005FD: Field pH									
pH	----	0.1	pH Unit		**7.8**	**7.4**	**8.0**	**7.8**	**7.6**
EA010FD: Field Conductivity									
Electrical Conductivity (Non Compensated)	----	1	µS/cm		**442**	**416**	**550**	**170**	**1530**
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	<5	**20**	<5	<5
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L		**0.08**	**0.09**	**0.10**	<0.01	**0.07**
EP025FD: Field Dissolved Oxygen									
Dissolved Oxygen	----	0.01	mg/L		**8.05**	**8.22**	**3.88**	**7.13**	**2.21**
EP030: Biochemical Oxygen Demand (BOD)									
Biochemical Oxygen Demand	----	2	mg/L		<2	<2	<2	<2	<2

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	Point 15 DAM 4	Point 16 DAM 5	Point 17 DAM 6	----	----
			Sampling date / time	14-Feb-2025 10:11	14-Feb-2025 10:08	14-Feb-2025 11:08	----	----
Compound	CAS Number	LOR	Unit	EW2500798-006	EW2500798-007	EW2500798-008	--------	--------
				Result	Result	Result	----	----
EA005FD: Field pH								
pH	----	0.1	pH Unit	**----**	**----**	**7.9**	**----**	**----**
EA010FD: Field Conductivity								
Electrical Conductivity (Non Compensated)	----	1	µS/cm	**----**	**----**	**1100**	**----**	**----**
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	**----**	**----**	**26**	**----**	**----**
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	**----**	**----**	**0.58**	**----**	**----**
EN67 PK: Field Tests								
Field Observations	----	0.01	--	**DRY**	**NO ACCESS**	**----**	**----**	**----**
EP025FD: Field Dissolved Oxygen								
Dissolved Oxygen	----	0.01	mg/L	**----**	**----**	**4.42**	**----**	**----**
EP030: Biochemical Oxygen Demand (BOD)								
Biochemical Oxygen Demand	----	2	mg/L	**----**	**----**	**3**	**----**	**----**

Inter-Laboratory Testing

Analysis conducted by ALS Sydney, NATA accreditation no. 825, site no. 10911 (Chemistry / Biology).

(WATER) EP030: Biochemical Oxygen Demand (BOD)

(WATER) EK055G: Ammonia as N by Discrete Analyser

(WATER) EA025: Total Suspended Solids dried at 104 ± 2°C