

CERTIFICATE OF ANALYSIS

Work Order	: WN1906689	Page	: 1 of 2	
Client		Laboratory	: ALS Water - Newcastle	
Contact	: Mr Andrew Milford	Contact	: Andrea Swan	
Address	: 59 Binnia St,	Address	: 5/585 Maitland Road New	castle West NSW Australia 2304
	COOLAH NSW			
Telephone	:	Telephone	: +61 2 4014 2500	
Project	:	Date Samples Received	: 11-Sep-2019 10:05	ANUTU.
Order number	: 19588	Date Analysis Commenced	11-Sep-2019	
C-O-C number	:	Issue Date	17-Sep-2019 08:33	
Sampler	: Andrew Milford			HAC-MRA NATA
Site	:			
Quote number	: WN Blanket Quote			Accreditation No. 825
No. of samples received	: 1			Accredited for compliance with
No. of samples analysed	: 1			ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. 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
Gregory Towers	Technical Officer	Chemistry, Newcastle West, NSW
Neil Martin	Team Leader - Chemistry	Chemistry, Newcastle West, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by 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 Contact 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.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)		Clie	ent sample ID	Effluent					
Client sampling date / time			10-Sep-2019 13:00						
Compound	CAS Number	LOR	Unit	WN1906689-001					
				Result					
EA005: pH									
pH Value		0.01	pH Unit	7.72					
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)		5	mg/L	16					
EK062A: Total Nitrogen as N									
Total Nitrogen as N		0.1	mg/L	32.3					
EK067A: Total Phosphorus as P									
Total Phosphorus as P		0.05	mg/L	6.80					
EP021: Total Oil and Grease									
Total Oil and Grease		2	mg/L	<2					
EP030.WN: Biochemical Oxygen Demand (BOD)									
Biochemical Oxygen Demand		2	mg/L	31					