

CERTIFICATE OF ANALYSIS

Work Order	: WN1701397	Page	: 1 of 2			
Client		Laboratory	: ALS Water - Newcastle			
Contact	:	Contact	: Andrea Swan			
Address	: 59 Binnia Street	Address	: 5/585 Maitland Road Newcastle West NSW Australia 2304			
	COOLAH NSW 2843					
Telephone	: +61 02 6849 2000	Telephone	: +61 2 4014 2500			
Project	: Coonabarabran Sewage Plant Final Effluent	Date Samples Received	: 05-Apr-2017 09:30	SWIIII.		
Order number	: 5174	Date Analysis Commenced	05-Apr-2017			
C-O-C number	:	Issue Date	: 11-Apr-2017 09:56			
Sampler	:			Hac-MRA NATA		
Site	:					
Quote number	: WN Blanket Quote					
No. of samples received	: 1			Accreditation No. 825		
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
Andrea Swan	Manager	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 no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component.

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)	Client sample ID		Effluent						
Client sampling date / time			04-Apr-2017 13:15						
Compound	CAS Number	LOR	Unit	WN1701397-001					
				Result					
EA005: pH									
pH Value		0.01	pH Unit	7.42					
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)		1	mg/L	4					
EK062A: Total Nitrogen as N									
Total Nitrogen as N		0.1	mg/L	11.3					
EK067A: Total Phosphorus as P									
Total Phosphorus as P		0.05	mg/L	2.00					
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	14					