ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **WN1904510**	Page	: 1 of 3
Client	: **OBERON COUNCIL**	Laboratory	: ALS Water - Newcastle
Contact	: Lou Grozdanouski	Contact	: Andrea Swan
Address	: 137-139 OBERON STREET OBERON NSW,AUSTRALIA 2787	Address	: 5/585 Maitland Road Newcastle West NSW Australia 2304
Telephone	: ----	Telephone	: +61 2 4014 2500
Project	: OBERON WASTE WATER	Date Samples Received	: 02-Jul-2019 09:00
Order number	: 8891	Date Analysis Commenced	: 02-Jul-2019
C-O-C number	: ----	Issue Date	: 08-Jul-2019 16:55
Sampler	: ----		
Site	: ----		
Quote number	: WN Blanket Quote		
No. of samples received	: 4		
No. of samples analysed	: 4		

ilac-MRA NATA

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. 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*
Neil Martin	Team Leader - Chemistry	Chemistry, Newcastle West, NSW
Suzanne Meldrum	Technical Officer	Microbiology, 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)				Client sample ID	ExPond Works Discharge EMP1	Up-Stream EMP3	Down-Stream EMP4	ExPond Works Discharge EMP1	----
				Client sampling date / time	01-Jul-2019 10:00	01-Jul-2019 10:15	01-Jul-2019 10:30	01-Jul-2019 13:00	----
Compound	CAS Number	LOR	Unit		WN1904510-001	WN1904510-002	WN1904510-003	WN1904510-004	----
					Result	Result	Result	Result	----
EA005: pH									
pH Value	----	0.01	pH Unit		7.15	7.18	7.18	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	1	mg/L		16	----	----	----	----
EK055A: Ammonia as N									
Ammonia as N	7664-41-7	0.05	mg/L		0.98	----	----	----	----
EK059A: Nitrite and Nitrate as N (NOx)									
Nitrite + Nitrate as N	----	0.05	mg/L		4.40	0.18	0.80	----	----
EK061A: Total Kjeldahl Nitrogen as N									
Total Kjeldahl Nitrogen as N	----	0.2	mg/L		3.0	0.3	0.4	----	----
EK062A: Total Nitrogen as N									
Total Nitrogen as N	----	0.1	mg/L		7.4	0.5	1.2	----	----
EK067A: Total Phosphorus as P									
Total Phosphorus as P	----	0.05	mg/L		0.41	0.08	0.09	----	----
EP008.WN: Chlorophyll a and Pheophytin a									
Chlorophyll a	----	1.0	µg/L		323	----	----	----	----
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		15	----	----	----	----
MW006.WN: Thermotolerant Coliforms & E.coli (MF)									
Faecal Coliforms	----	1	CFU/100mL		----	----	----	<9	----