

CERTIFICATE OF ANALYSIS

Work Order : WN2212401

Client OBERON COUNCIL

Contact : Water Oberon

Address : 137-139 OBERON STREET

OBERON NSW, AUSTRALIA 2787

Telephone

Project : OBERON WASTE WATER

Order number : 12450

C-O-C number

Sampler Andrew Krol

Site

Quote number : WN Blanket Quote

No. of samples received : 4 No. of samples analysed : 4 Page : 1 of 3

> Laboratory : ALS Water - Newcastle

Contact : Andrea Swan

Address · 5/585 Maitland Road Newcastle West NSW Australia 2304

Telephone : +61 2 4014 2500

Date Samples Received : 05-Oct-2022 09:00 **Date Analysis Commenced** : 05-Oct-2022

Issue Date : 12-Oct-2022 13:26



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 Accreditation Category Allan Brown Laboratory Technician Chemistry, Newcastle West, NSW **Technical Assistant** Microbiology, Newcastle West, NSW Andrea Hropot **Gregory Towers Technical Officer** Chemistry, Newcastle West, NSW Ruby Buller Laboratory Technician Chemistry, Newcastle West, NSW

Position

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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.
- Sample 004. Thermotolerant coliform result is estimated due to the high number of non-target colonies present. Result may be underestimated.

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Analytical Results

Sampling date / time O4-Oct-2022 09:15 O4-Oct-2022 09:30 O4-Oct-2022 09:30 O4-Oct-2022 09:30 O4-Oct-2022 19:00 O4-Oct-2022 09:30 O4-Oct-2022 19:00 O	Sub-Matrix: WATER (Matrix: WATER)			Sample ID	ExPond Works Discharge EMP1	Up-Stream EMP3	Down-Stream EMP4	ExPond Works Discharge EMP1		
Result R	Sampling date / time				04-Oct-2022 09:15	04-Oct-2022 09:00	04-Oct-2022 09:30	04-Oct-2022 13:00		
EA005: pH pH Value	Compound	CAS Number	LOR	Unit	WN2212401-001	WN2212401-002	WN2212401-003	WN2212401-004		
## PH Value					Result	Result	Result	Result		
EA025: Total Suspended Solids dried at 104 ± 2°C Suspended Solids (SS)										
Suspended Solids (SS) 5 mg/L <5	pH Value		0.01	pH Unit	8.34	7.48	7.41			
EK055A: Ammonia as N Ammonia as N 7664-41-7 0.05 mg/L 0.07 mg/L 0.07 mg/L 0.07 mg/L 0.08 mg/L 0.09 mg/	EA025: Total Suspended Solids dried at 104 ± 2°C									
Ammonia as N 7664-41-7 0.05 mg/L 0.38	Suspended Solids (SS)		5	mg/L	<5					
EK059A: Nitrite and Nitrate as N (NOx) Nitrite + Nitrate as N	EK055A: Ammonia as N									
Nitrite + Nitrate as N 0.05 mg/L 5.04 0.19 0.25	Ammonia as N	7664-41-7	0.05	mg/L	0.38					
EK061A: Total Kjeldahl Nitrogen as N 0.2 mg/L 1.7 0.5 0.5	EK059A: Nitrite and Nitrate as N (NOx)									
Total Kjeldahl Nitrogen as N 0.2 mg/L 1.7 0.5 0.5	Nitrite + Nitrate as N		0.05	mg/L	5.04	0.19	0.25			
EK062A: Total Nitrogen as N 0.1 mg/L 6.8 0.7 0.7	EK061A: Total Kjeldahl Nitrogen as N									
Total Nitrogen as N 0.1 mg/L 6.8 0.7 0.7	Total Kjeldahl Nitrogen as N		0.2	mg/L	1.7	0.5	0.5			
EK067A: Total Phosphorus as P Total Phosphorus as P 0.05 mg/L 0.38 <0.05 <0.05 EP008.WN: Chlorophyll a and Pheophytin a Chlorophyll a 1.0 μg/L 1.2	EK062A: Total Nitrogen as N									
Total Phosphorus as P 0.05 mg/L 0.38 <0.05 <0.05 EP008.WN: Chlorophyll a and Pheophytin a Chlorophyll a 1.0 μg/L 1.2 EP021: Total Oil and Grease	Total Nitrogen as N		0.1	mg/L	6.8	0.7	0.7			
Total Phosphorus as P 0.05 mg/L 0.38 <0.05 <0.05 EP008.WN: Chlorophyll a and Pheophytin a Chlorophyll a 1.0 μg/L 1.2 EP021: Total Oil and Grease	EK067A: Total Phosphorus as P									
Chlorophyll a 1.0 μg/L 1.2 EP021: Total Oil and Grease			0.05	mg/L	0.38	<0.05	<0.05			
Chlorophyll a 1.0 μg/L 1.2 EP021: Total Oil and Grease	EP008.WN: Chlorophyll a and Pheophytin	а								
			1.0	μg/L	1.2					
	EP021: Total Oil and Grease									
			2	mg/L	<2					
EP030.WN: Biochemical Oxygen Demand (BOD)	EP030.WN: Biochemical Oxygen Demand	(BOD)								
Biochemical Oxygen Demand 2 mg/L 2			2	mg/L	2					
MW006.WN: Thermotolerant Coliforms & E.coli (MF)										
Faecal Coliforms 1 CFU/100mL ~-57		· · · /	1	CFU/100mL				~57		