



CERTIFICATE OF ANALYSIS

Work Order : WN1907735
Client : OBERON COUNCIL
Contact : Water Oberon
Address : 137-139 OBERON STREET
OBERON NSW,AUSTRALIA 2787
Telephone : ---
Project : OBERON WASTE WATER
Order number : 4015
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 : 09-Oct-2019 09:10
Date Analysis Commenced : 09-Oct-2019
Issue Date : 16-Oct-2019 10:18



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

Ankit Joshi
Gregory Towers
Neil Martin
Suzanne Meldrum

Inorganic Chemist
Technical Officer
Team Leader - Chemistry
Senior Technical Officer

Sydney Inorganics, Smithfield, NSW
Chemistry, Newcastle West, NSW
Chemistry, Newcastle West, NSW
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

∅ = ALS is not NATA accredited for these tests.

~ = Indicates an estimated value.

- EK055A- Ammonia conducted by ALS Sydney, NATA accreditation no. 825, site no 10911.
- EK055A- Ammonia as N, NT-11.WN- TN+TP conducted by ALS Sydney, NATA accreditation no. 825, site no 10911.
- Thermotolerant coliform result is estimated due to the high number of non-target colonies present. Result may be underestimated.



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				08-Oct-2019 09:30	08-Oct-2019 09:45	08-Oct-2019 00:00	08-Oct-2019 11:30	----
Compound	CAS Number	LOR	Unit	WN1907735-001	WN1907735-002	WN1907735-003	WN1907735-004	-----
				Result	Result	Result	Result	----
EA005: pH								
pH Value		0.01	pH Unit	7.34	7.08	7.13		----
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)		1	mg/L	12				----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	1.66				----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N		0.01	mg/L	0.63	0.06	0.38		----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N		0.1	mg/L	2.8	0.5	0.5		----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
Total Nitrogen as N		0.1	mg/L	3.4	0.6	0.9		----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P		0.01	mg/L	0.27	0.03	0.07		----
EP008.WN: Chlorophyll a and Pheophytin								
Chlorophyll a		1.0	µg/L	5.4				----
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	5				----
MW006.WN: Thermotolerant Coliforms & E.coli (MF)								
Faecal Coliforms		1	CFU/100mL				<9	----