

CERTIFICATE OF ANALYSIS

Work Order : **WN2104260**
Client : **OBERON COUNCIL**
Contact : Water Oberon
Address : 137-139 OBERON STREET
 OBERON NSW,AUSTRALIA 2787

Telephone : ----
Project : OBERON WASTE WATER
Order number : 13356
C-O-C number : ----
Sampler : Andrew Krol, Luke Renshow
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 : 13-Apr-2021 09:15
Date Analysis Commenced : 13-Apr-2021
Issue Date : 20-Apr-2021 09:00



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, 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.

| <i>Signatories</i> | <i>Position</i> | <i>Accreditation Category</i> |
|--------------------|--------------------------|-----------------------------------|
| Neil Martin | Team Leader - Chemistry | Chemistry, Newcastle West, NSW |
| Suzanne Meldrum | Senior Technical Officer | Microbiology, Newcastle West, NSW |



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 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) | | | | Sample ID | ExPond Works Discharge EMP6 | Up-Stream EMP3 | Down-Stream EMP4 | ExPond Works Discharge EMP6 | ---- |
|---|------------|------|-----------|-------------------|-----------------------------|-------------------|-------------------|-----------------------------|------|
| Sampling date / time | | | | 12-Apr-2021 09:15 | 12-Apr-2021 09:00 | 12-Apr-2021 09:30 | 12-Apr-2021 10:30 | ---- | ---- |
| Compound | CAS Number | LOR | Unit | WN2104260-001 | WN2104260-002 | WN2104260-003 | WN2104260-004 | ----- | ---- |
| | | | | Result | Result | Result | Result | ---- | ---- |
| EA005: pH | | | | | | | | | |
| pH Value | ---- | 0.01 | pH Unit | 7.19 | 6.91 | 6.98 | ---- | ---- | ---- |
| EA025: Total Suspended Solids dried at 104 ± 2°C | | | | | | | | | |
| Suspended Solids (SS) | ---- | 5 | mg/L | 6 | ---- | ---- | ---- | ---- | ---- |
| EK055A: Ammonia as N | | | | | | | | | |
| Ammonia as N | 7664-41-7 | 0.05 | mg/L | 4.38 | ---- | ---- | ---- | ---- | ---- |
| EK059A: Nitrite and Nitrate as N (NOx) | | | | | | | | | |
| Nitrite + Nitrate as N | ---- | 0.05 | mg/L | 13.3 | 0.09 | 2.30 | ---- | ---- | ---- |
| EK061A: Total Kjeldahl Nitrogen as N | | | | | | | | | |
| Total Kjeldahl Nitrogen as N | ---- | 0.2 | mg/L | 6.1 | 0.3 | 0.9 | ---- | ---- | ---- |
| EK062A: Total Nitrogen as N | | | | | | | | | |
| Total Nitrogen as N | ---- | 0.1 | mg/L | 19.4 | 0.4 | 3.2 | ---- | ---- | ---- |
| EK067A: Total Phosphorus as P | | | | | | | | | |
| Total Phosphorus as P | ---- | 0.05 | mg/L | 0.33 | <0.05 | 0.08 | ---- | ---- | ---- |
| EP008.WN: Chlorophyll a and Pheophytin a | | | | | | | | | |
| Chlorophyll a | ---- | 1.0 | µg/L | 4.5 | ---- | ---- | ---- | ---- | ---- |
| 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 | 3 | ---- | ---- | ---- | ---- | ---- |
| MW006.WN: Thermotolerant Coliforms & E.coli (MF) | | | | | | | | | |
| Faecal Coliforms | ---- | 1 | CFU/100mL | ---- | ---- | ---- | 2000 | ---- | ---- |