

## **CERTIFICATE OF ANALYSIS**

| Work Order              | : WN2010801        | 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               | :                  | Telephone               | : +61 2 4014 2500                                       |
| Project                 | :                  | Date Samples Received   | : 02-Dec-2020 10:40                                     |
| Order number            | : 19588            | Date Analysis Commenced | : 01-Dec-2020   |
| C-O-C number            | :                  | Issue Date              | : 08-Dec-2020 14:50                                     |
| Sampler                 | :                  |                         | Iac-MRA NATA  |
| Site                    | :                  |                         |   |
| Quote number            | : WN Blanket Quote |                         | Accreditation No. 825                                   |
| 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, 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    | Position                | Accreditation Category         |
|----------------|-------------------------|--------------------------------|
| Gregory Towers | Technical Officer       | Chemistry, Newcastle West, NSW |
| Katie Draper   | Quality Coordinator     | Chemistry, Newcastle West, NSW |
| Neil Martin    | Team Leader - Chemistry | Chemistry, 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.

 $\sim$  = Indicates an estimated value.

EP021: Oil and Grease LOR has been raised due to insufficient sample volume provided for standard analysis. 1L is required for standard analysis.

## **Analytical Results**

| Sub-Matrix: WATER<br>(Matrix: WATER)  |             |      | Sample ID         | Effluent      | <br> | <br> |
|---------------------------------------|-------------|------|-------------------|---------------|------|------|
| Sampling date / time                  |             |      | 01-Dec-2020 13:15 | <br>          | <br> |      |
| Compound                              | CAS Number  | LOR  | Unit              | WN2010801-001 | <br> | <br> |
|                                       |             |      |                   | Result        | <br> | <br> |
| EA005: pH                             |             |      |                   |               |      |      |
| pH Value                              |             | 0.01 | pH Unit           | 7.41          | <br> | <br> |
| EA025: Total Suspended Solids dried a | t 104 ± 2°C |      |                   |               |      |      |
| Suspended Solids (SS)                 |             | 1    | mg/L              | 5             | <br> | <br> |
| EK062A: Total Nitrogen as N           |             |      |                   |               |      |      |
| Total Nitrogen as N                   |             | 0.1  | mg/L              | 10.6          | <br> | <br> |
| EK067A: Total Phosphorus as P         |             |      |                   |               |      |      |
| Total Phosphorus as P                 |             | 0.05 | mg/L              | 8.68          | <br> | <br> |
| EP021: Total Oil and Grease           |             |      |                   |               |      |      |
| Total Oil and Grease                  |             | 2    | mg/L              | <4            | <br> | <br> |
| EP030.WN: Biochemical Oxygen Demar    | nd (BOD)    |      |                   |               |      |      |
| Biochemical Oxygen Demand             |             | 2    | mg/L              | 40            | <br> | <br> |