

# Corporate Accreditation No 63 Accredited for compliance with ISO/IEC 17025 - Testing



**Delivery Address:** Sydney Water Corporation

51 Hermitage Rd West Ryde NSW 2114

**Telephone:** (02) 9800 6935

Email: analyticalservices@sydneywater.com.au

Analytical Report 274880

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**Issued By:** Sydney Water Laboratory Services

Attention: Victor Papierniak-Wojtowicz

Customer: Cobar Shire Council

Customer ID: ZCSC

Address: PO Box 223, Cobar NSW 2835

Telephone:

Email: victor.papierniak@cobar.nsw.gov.au

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#### **CONTENTS**

- 1. Sydney Water Approved Signatory
- 2. Sample Summary
- 3. Analytical results
- 4. Comments
- 5. Laboratory QC results

#### **Sydney Water Approved Signatory**

Dwijal Dave, Clean & Waste Water Analyst Jeya Gajendran, Clean & Waste Water Analyst Greta Haddad, Nutrients Laboratory Supervisor

Where a result is required to meet a compliance limit or specification the associated uncertainty must be considered. Uncertainty estimates are available for all accredited test results.



### **SAMPLE SUMMARY**

| <u>Client</u><br>Sample ID | <u>Sample</u><br><u>Number</u> | Sampling<br>Procedure | <u>Date</u><br><u>Sampled</u> | <u>Date</u><br><u>Received</u> | <u>Date</u><br><u>Authorised</u> | <u>Description</u>     |
|----------------------------|--------------------------------|-----------------------|-------------------------------|--------------------------------|----------------------------------|------------------------|
| PT 1 POLISHER              | L22089369                      | 1                     | 14/11/2022                    | 15/11/2022                     | 22/11/2022                       | COBAR STP (WASTEWATER) |
| PT 2 TURKEYS               | L22089370                      | 1                     | 14/11/2022                    | 15/11/2022                     | 22/11/2022                       | COBAR STP (WASTEWATER) |
| SPITTER BOX 1              | L22089371                      | 1                     | 14/11/2022                    | 15/11/2022                     | 21/11/2022                       | COBAR STP (WASTEWATER) |
| SPITTER BOX 2              | L22089372                      | 1                     | 14/11/2022                    | 15/11/2022                     | 21/11/2022                       | COBAR STP (WASTEWATER) |
| INLET                      | L22089373                      | 1                     | 14/11/2022                    | 15/11/2022                     | 21/11/2022                       | COBAR STP (WASTEWATER) |

### Sampling procedures

- 1 Samples analysed as received.
- 2 Samples collected as per FS procedures SAWI 070, Excluding Oil & Grease which is collected as per clients instructions.
- 3 Samples collected as per FS procedures SAWI 070.
- 4 Results reported as received from WNSW.



## **ANALYTICAL RESULTS**

|   |          |                           |                           |                           |                           |                           |  |  | - |
|---|----------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|--|---|
| Client Sample ID                                  |          | PT 1<br>POLISHER          | PT 2 TURKEYS              | SPITTER BOX 1             | SPITTER BOX 2             | INLET                     |  |  |   |
| Sampled Date                                      |          | 14/11/2022<br>08:00:00 AM |  |  |   |
| Sample Number                                     |          | L22089369                 | L22089370                 | L22089371                 | L22089372                 | L22089373                 |  |  |   |
| CHEMISTRY   |          |                           |                           |                           |                           |                           |  |  |   |
| WC12MET : Conductivity                            |          |                           |                           |                           |                           |                           |  |  |   |
|   |          |                           |                           |                           |                           |                           |  |  |   |
| Conductivity (mS/m)                               | mS/m     | 80.7                      | 80.8                      | -                         | -                         | -                         |  |  |   |
| Date of Performance                               | DD/MM/YY | 16/11/22                  | 16/11/22                  |                           |                           |                           |  |  |   |
| WC17NS : Biochemical oxygen demand                |          |                           |                           |                           |                           |                           |  |  |   |
| BOD5  | mg/L     | 11                        | 4                         | 120                       | 110                       | 29                        |  |  |   |
| Date of Performance                               | DD/MM/YY | 16/11/22                  | 16/11/22                  | 16/11/22                  | 16/11/22                  | 16/11/22                  |  |  |   |
| WC26NS500 : Oil & Grease                          |          |                           |                           |                           |                           |                           |  |  |   |
| 011.0.0   |          | <5                        |                           |                           |                           |                           |  |  | 1 |
| Oil & Grease                                      | mg/L     | <5                        | <5                        | -                         | -                         | -                         |  |  |   |
| Date of Performance                               | DD/MM/YY | 16/11/22                  | 16/11/22                  |                           |                           |                           |  |  |   |
| WC44NS : Total, Fixed & Volatile Suspended Solids |          |                           |                           |                           |                           |                           |  |  |   |
| Total Suspended Solids                            | mg/L     | 32                        | 8                         | -                         | -                         | -                         |  |  |   |
| Date of Performance                               | DD/MM/YY | 17/11/22                  | 17/11/22                  |                           |                           |                           |  |  |   |
| NUTRIENTS   |          |                           |                           |                           |                           |                           |  |  |   |

<sup>&</sup>quot;-" = Not required or refer to Laboratory comment



| Client Sample ID                          |          | PT 1<br>POLISHER          | PT 2 TURKEYS              | SPITTER BOX 1             | SPITTER BOX               | INLET                     |  |  |  |
|---|----------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|--|--|
| Sampled Date                              |          | 14/11/2022<br>08:00:00 AM |  |  |  |
| Sample Number                             |          | L22089369                 | L22089370                 | L22089371                 | L22089372                 | L22089373                 |  |  |  |
| NUTRIENTS                                 |          |                           |                           |                           |                           |                           |  |  |  |
| NU102 : Total Nitrogen & Total Phosphorus |          |                           |                           |                           |                           |                           |  |  |  |
| Total Nitrogen                            | mg/L     | 4.68                      | 4.65                      | -                         | -                         | -1                        |  |  |  |
| Total Phosphorus                          | mg/L     | 2.70                      | 2.66                      | -                         | -                         | -                         |  |  |  |
| Date of Performance                       | DD/MM/YY | 16/11/22                  | 16/11/22                  |                           |                           |                           |  |  |  |

## **COMMENTS**

<sup>&</sup>quot;-" = Not required or refer to Laboratory comment



### **LABORATORY QC RESULTS**

N/A - Not Applicable

PQL - Practical Quantitation Limit

LOQ - Limit of Quantification

RPD - Relative Percent Difference

SPIKE/Positive Control - Addition of a known amount and concentration

Duplicate Precision = Accepted - Result 2 within 95% confidence limits of result 1

Duplicate Precision = Outlier - Result 2 outside 95% confidence limits of result 1

Duplicate Precision = Not calculated - Result is outside test range



| LOQ                      | Blank  | Control             | Spike               | Duplicate1 | Duplicate2 | RPD                 |
|--------------------------|--------|---------------------|---------------------|------------|------------|---------------------|
|                          |        | Acceptance Criteria | Acceptance Criteria |            |            | Acceptance Criteria |
| NU102 Total Nitrogen     |        |                     |                     |            |            |                     |
| <0.05 mg/L               | <0.05  | 1.01                | 103 % Recovery      | 0.29       | 0.27       | В                   |
|                          |        | 0.88 - 1.12 mg/L    | 80 - 120 % Recovery |            |            | 0 - 0 %             |
| NU102 Total Phosphorus   |        |                     |                     |            |            |                     |
| <0.002 mg/L              | <0.002 | 0.047               | 89 % Recovery       | 0.023      | 0.022      | 4.44 %              |
|                          |        | 0.045 - 0.055 mg/L  | 80 - 120 % Recovery |            |            | 0 - 50 %            |
| WC12MET Conductivity (mS | 5/m)   | ·                   |                     |            |            |                     |
| <0.1 mS/m                | F      | 141.0               | E                   | 80.8       | 80.8       | 0.00 %              |
|                          |        | 139.3 - 143.3 mS/m  |                     |            |            | 0 - 20 %            |
| WC17NS BOD5              |        | •                   |                     |            |            |                     |
| <2 mg/L                  | <2     | 180                 | E                   | 29         | 29         | 0.00 %              |
|                          |        | 139 - 257 mg/L      |                     |            |            | 0 - 50 %            |
| WC26NS500 Oil & Grease   |        |                     |                     |            |            |                     |
| <5 mg/L                  | <5     | 94                  | E                   |            |            |                     |
|                          |        | 85.1 - 101.5 mg/L   |                     |            |            |                     |
| WC44NS Total Suspended S | olids  |                     |                     |            |            |                     |
| <2 mg/L                  | <2     | 51                  | E                   | 4          | 4          | В                   |
|                          |        | 42.5 - 57.5 mg/L    |                     |            |            | 0 - 0 %             |



### Extra Note:

F: Blank is not applicable for this analyte

E: Spike is not applicable for this analyte

DUPLICATE Total Nitrogen B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ

DUPLICATE Total Suspended Solids B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ