



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



## Analytical Report 300236

**Issue Date:** 01/03/2024  
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### **Sydney Water Approved Signatory**

|   |   |                                     |
|---|---|-------------------------------------|
| Dwijal Dave, Clean & Waste Water Analyst      | Jeya Gajendran, Clean & Waste Water Laboratory Supervisor | Jouliet Ashak, Microbiology 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<br/>Sample ID</u> | <u>Sample<br/>Number</u> | <u>Sampling<br/>Procedure</u> | <u>Date<br/>Sampled</u> | <u>Date<br/>Received</u> | <u>Date<br/>Authorised</u> | <u>Description</u> |
|-----------------------------|--------------------------|-------------------------------|-------------------------|--------------------------|----------------------------|--------------------|
| PT1 (POLISHER)              | L24017403                | 1                             | 13/02/2024              | 14/02/2024               | 29/02/2024                 | COBAR STP (WW)     |
| PT2 (TURKEYS)               | L24017404                | 1                             | 13/02/2024              | 14/02/2024               | 29/02/2024                 | COBAR STP (WW)     |
| SPITTER BOX 1               | L24017405                | 1                             | 13/02/2024              | 14/02/2024               | 22/02/2024                 | COBAR STP (WW)     |
| SPITTER BOX 2               | L24017406                | 1                             | 13/02/2024              | 14/02/2024               | 22/02/2024                 | COBAR STP (WW)     |
| S INLET                     | L24017407                | 1                             | 13/02/2024              | 14/02/2024               | 22/02/2024                 | COBAR STP (WW)     |

**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**

|  |          |                           |                           |                           |                           |                           |  |  |  |
|--|----------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|--|--|
| <b>Client Sample ID</b>                                      |          | PT1 (POLISHER)            | PT2 (TURKEYS)             | SPITTER BOX 1             | SPITTER BOX 2             | S INLET                   |  |  |  |
| <b>Sampled Date</b>  |          | 13/02/2024<br>08:00:00 AM | 13/02/2024<br>08:00:00 AM | 13/02/2024<br>08:00:00 AM | 13/02/2024<br>08:00:00 AM | 13/02/2024<br>08:00:00 AM |  |  |  |
| <b>Sample Number</b>   |          | L24017403                 | L24017404                 | L24017405                 | L24017406                 | L24017407                 |  |  |  |
| <b>CHEMISTRY</b>   |          |                           |                           |                           |                           |                           |  |  |  |
| <b>WC12MET : Conductivity</b>                                |          |                           |                           |                           |                           |                           |  |  |  |
| Conductivity (mS/m)  | mS/m     | 106.4                     | 107.3                     | -                         | -                         | -                         |  |  |  |
| Date of Performance  | DD/MM/YY | 16/02/24                  | 16/02/24                  |                           |                           |                           |  |  |  |
| <b>WC17NS : Biochemical oxygen demand</b>                    |          |                           |                           |                           |                           |                           |  |  |  |
| BOD5   | mg/L     | 3                         | 2                         | 95                        | 20                        | 36                        |  |  |  |
| Date of Performance  | DD/MM/YY | 16/02/24                  | 16/02/24                  | 16/02/24                  | 16/02/24                  | 16/02/24                  |  |  |  |
| <b>WC26NS500 : Oil &amp; Grease</b>                          |          |                           |                           |                           |                           |                           |  |  |  |
| Oil & Grease   | mg/L     | <5                        | <5                        | -                         | -                         | -                         |  |  |  |
| Date of Performance  | DD/MM/YY | 15/02/24                  | 19/02/24                  |                           |                           |                           |  |  |  |
| <b>WC44NS : Total, Fixed &amp; Volatile Suspended Solids</b> |          |                           |                           |                           |                           |                           |  |  |  |
| Total Suspended Solids                                       | mg/L     | 10                        | 9                         | -                         | -                         | -                         |  |  |  |
| Date of Performance  | DD/MM/YY | 19/02/24                  | 19/02/24                  |                           |                           |                           |  |  |  |

"-" = Not required or refer to Laboratory comment

| Client Sample ID                          |           | PT1 (POLISHER)            | PT2 (TURKEYS)             | SPITTER BOX 1             | SPITTER BOX 2             | S INLET                   |  |  |  |
|---|-----------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|--|--|
| Sampled Date                              |           | 13/02/2024<br>08:00:00 AM | 13/02/2024<br>08:00:00 AM | 13/02/2024<br>08:00:00 AM | 13/02/2024<br>08:00:00 AM | 13/02/2024<br>08:00:00 AM |  |  |  |
| Sample Number                             |           | L24017403                 | L24017404                 | L24017405                 | L24017406                 | L24017407                 |  |  |  |
| <b>MICRO</b>                              |           |                           |                           |                           |                           |                           |  |  |  |
| MI01 : Faecal Coliform and/or E. coli     |           |                           |                           |                           |                           |                           |  |  |  |
| E.coli                                    | CFU/100mL | -                         | ~730                      | -                         | -                         | -                         |  |  |  |
| Faecal Coliform                           | CFU/100mL | -                         | ~820                      | -                         | -                         | -                         |  |  |  |
| Date of Performance                       | D/M/Y H:M |                           | 14/02/24 16:56            |                           |                           |                           |  |  |  |
| <b>NUTRIENTS</b>                          |           |                           |                           |                           |                           |                           |  |  |  |
| NU102 : Total Nitrogen & Total Phosphorus |           |                           |                           |                           |                           |                           |  |  |  |
| Total Nitrogen                            | mg/L      | 2.71                      | 2.01                      | -                         | -                         | -                         |  |  |  |
| Total Phosphorus                          | mg/L      | 1.83                      | 0.600                     | -                         | -                         | -                         |  |  |  |
| Date of Performance                       | DD/MM/YY  | 15/02/24                  | 15/02/24                  |                           |                           |                           |  |  |  |

(~): Counts of target colonies are outside the optimal precision range.

#### COMMENTS

| Sample ID | Comment Level | Method | Test | Comment   |
|-----------|---------------|--------|------|---|
| L24017404 | Method        | MI01   | -    | Result confirmed. Sample processed outside of holding time, result may be affected. |
| L24017403 | Method        | WC17NS | -    | Sample processed outside of holding time.   |
| L24017404 | Method        | WC17NS | -    | Sample processed outside of holding time.   |

"-" = Not required or refer to Laboratory comment

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|           |        |        |   |   |
|-----------|--------|--------|---|---|
| L24017406 | Method | WC17NS | - | Sample processed outside of holding time. |
| L24017407 | Method | WC17NS | - | Sample processed outside of holding time. |

**Analysis**

MI01

**Analysis Requirements**

Faecal Coliforms and/or E.Coli: all results are presumptive unless indicated otherwise.

**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 | Positive Control<br><i>Acceptance Criteria</i> | Negative Control<br><i>Acceptance Criteria</i> | Duplicate1 | Duplicate2 | Precision<br><i>Acceptance Criteria</i> |
|--|-------|--|--|------------|------------|---|
| <b>MI01 [Membrane Filtration]E.coli</b>          |       |  |  |            |            |   |
| <1 CFU/100mL                                     | <1    | Accepted                                       | Accepted                                       | ~730       | ~690       | Not Calculated                          |
| <b>MI01 [Membrane Filtration]Faecal Coliform</b> |       |  |  |            |            |   |
| <1 CFU/100mL                                     | <1    | Accepted                                       | Accepted                                       | ~820       | ~780       | Not Calculated                          |

| LOQ                                | Blank  | Control<br><i>Acceptance Criteria</i> | Spike<br><i>Acceptance Criteria</i>             | Duplicate1 | Duplicate2 | RPD<br><i>Acceptance Criteria</i> |
|------------------------------------|--------|---------------------------------------|---|------------|------------|-----------------------------------|
| <b>NU102 Total Nitrogen</b>        |        |                                       |   |            |            |                                   |
| <0.05 mg/L                         | <0.05  | 0.98<br><i>0.88 - 1.12 mg/L</i>       | 94 % Recovery<br><i>80.0 - 120.0 % Recovery</i> | 0.65       | 0.62       | 4.72 %<br><i>0.0 - 50.0 %</i>     |
| <b>NU102 Total Phosphorus</b>      |        |                                       |   |            |            |                                   |
| <0.002 mg/L                        | <0.002 | 0.049<br><i>0.045 - 0.055 mg/L</i>    | 98 % Recovery<br><i>80.0 - 120.0 % Recovery</i> | 0.028      | 0.028      | 0.00 %<br><i>0.0 - 50.0 %</i>     |
| <b>WC12MET Conductivity (mS/m)</b> |        |                                       |   |            |            |                                   |
| <0.1 mS/m                          | F      | 141.1<br><i>139.3 - 143.3 mS/m</i>    | E   |            |            |                                   |

| LOQ                                  | Blank | Control<br><i>Acceptance Criteria</i> | Spike<br><i>Acceptance Criteria</i> | Duplicate1 | Duplicate2 | RPD<br><i>Acceptance Criteria</i> |
|--------------------------------------|-------|---------------------------------------|-------------------------------------|------------|------------|-----------------------------------|
| <b>WC17NS BOD5</b>                   |       |                                       |                                     |            |            |                                   |
| <2 mg/L                              | <2    | 210<br>139.0 - 257.0 mg/L             | E                                   | <2         | <2         | B<br>0.0 - 0.0 %                  |
| <b>WC26NS500 Oil &amp; Grease</b>    |       |                                       |                                     |            |            |                                   |
| <5 mg/L                              | <5    | 100<br>85.1 - 101.5 mg/L              | E                                   | 47         | 48         | B<br>0.0 - 0.0 %                  |
| <b>WC44NS Total Suspended Solids</b> |       |                                       |                                     |            |            |                                   |
| <2 mg/L                              | <2    | 52<br>42.5 - 57.5 mg/L                | E                                   | 4600       | 3800       | 19.05 %<br>0.0 - 20.0 %           |

Extra Note:

F: Blank is not applicable for this analyte

E: Spike is not applicable for this analyte

DUPLICATE BOD5 B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ

DUPLICATE Oil & Grease B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ