



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



## Analytical Report 278031

**Issue Date:** 25/01/2023  
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### **Sydney Water Approved Signatory**

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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>     |
|-----------------------------|--------------------------|-------------------------------|-------------------------|--------------------------|----------------------------|------------------------|
| POINT 1 POLISHER            | L23006057                | 1                             | 16/01/2023              | 17/01/2023               | 24/01/2023                 | COBAR STP (WASTEWATER) |
| POINT 2 TURKEYS             | L23006058                | 1                             | 16/01/2023              | 17/01/2023               | 24/01/2023                 | COBAR STP (WASTEWATER) |
| SPITTER BOX 1               | L23006059                | 1                             | 16/01/2023              | 17/01/2023               | 24/01/2023                 | COBAR STP (WASTEWATER) |
| SPITTER BOX 2               | L23006060                | 1                             | 16/01/2023              | 17/01/2023               | 24/01/2023                 | COBAR STP (WASTEWATER) |
| INLET                       | L23006061                | 1                             | 16/01/2023              | 17/01/2023               | 24/01/2023                 | 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**

|  |          |                           |                           |                           |                           |                           |  |  |  |
|--|----------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|--|--|
| <b>Client Sample ID</b>                                      |          | POINT 1<br>POLISHER       | POINT 2<br>TURKEYS        | SPITTER BOX 1             | SPITTER BOX 2             | INLET                     |  |  |  |
| <b>Sampled Date</b>  |          | 16/01/2023<br>07:35:00 AM | 16/01/2023<br>08:00:00 AM | 16/01/2023<br>07:22:00 AM | 16/01/2023<br>07:20:00 AM | 16/01/2023<br>07:25:00 AM |  |  |  |
| <b>Sample Number</b>   |          | L23006057                 | L23006058                 | L23006059                 | L23006060                 | L23006061                 |  |  |  |
| <b>CHEMISTRY</b>   |          |                           |                           |                           |                           |                           |  |  |  |
| <b>WC12MET : Conductivity</b>                                |          |                           |                           |                           |                           |                           |  |  |  |
| Conductivity (mS/m)  | mS/m     | 151.6                     | 146.0                     | -                         | -                         | -                         |  |  |  |
| Date of Performance  | DD/MM/YY | 18/01/23                  | 18/01/23                  |                           |                           |                           |  |  |  |
| <b>WC17NS : Biochemical oxygen demand</b>                    |          |                           |                           |                           |                           |                           |  |  |  |
| BOD5   | mg/L     | 4                         | <2                        | 76                        | 15                        | 110                       |  |  |  |
| Date of Performance  | DD/MM/YY | 18/01/23                  | 18/01/23                  | 18/01/23                  | 18/01/23                  | 18/01/23                  |  |  |  |
| <b>WC26NS500 : Oil &amp; Grease</b>                          |          |                           |                           |                           |                           |                           |  |  |  |
| Oil & Grease   | mg/L     | <5                        | <5                        | -                         | -                         | -                         |  |  |  |
| Date of Performance  | DD/MM/YY | 19/01/23                  | 19/01/23                  |                           |                           |                           |  |  |  |
| <b>WC44NS : Total, Fixed &amp; Volatile Suspended Solids</b> |          |                           |                           |                           |                           |                           |  |  |  |
| Total Suspended Solids                                       | mg/L     | 32                        | 4                         | -                         | -                         | -                         |  |  |  |
| Date of Performance  | DD/MM/YY | 18/01/23                  | 18/01/23                  |                           |                           |                           |  |  |  |

"-" = Not required or refer to Laboratory comment

|   |           |                           |                           |                           |                           |                           |  |  |  |
|---|-----------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|--|--|
| <b>Client Sample ID</b>                   |           | POINT 1<br>POLISHER       | POINT 2<br>TURKEYS        | SPITTER BOX 1             | SPITTER BOX 2             | INLET                     |  |  |  |
| <b>Sampled Date</b>                       |           | 16/01/2023<br>07:35:00 AM | 16/01/2023<br>08:00:00 AM | 16/01/2023<br>07:22:00 AM | 16/01/2023<br>07:20:00 AM | 16/01/2023<br>07:25:00 AM |  |  |  |
| <b>Sample Number</b>                      |           | L23006057                 | L23006058                 | L23006059                 | L23006060                 | L23006061                 |  |  |  |
| <b>MICRO</b>                              |           |                           |                           |                           |                           |                           |  |  |  |
| MI01 : Faecal Coliform and/or E. coli     |           |                           |                           |                           |                           |                           |  |  |  |
| E.coli                                    | CFU/100mL | -                         | ~28                       | -                         | -                         | -                         |  |  |  |
| Faecal Coliform                           | CFU/100mL | -                         | ~410                      | -                         | -                         | -                         |  |  |  |
| Date of Performance                       | D/M/Y H:M |                           | 17/01/23 15:30            |                           |                           |                           |  |  |  |
| <b>NUTRIENTS</b>                          |           |                           |                           |                           |                           |                           |  |  |  |
| NU102 : Total Nitrogen & Total Phosphorus |           |                           |                           |                           |                           |                           |  |  |  |
| Total Nitrogen                            | mg/L      | 2.30                      | 2.34                      | -                         | -                         | -                         |  |  |  |
| Total Phosphorus                          | mg/L      | 0.720                     | 1.32                      | -                         | -                         | -                         |  |  |  |
| Date of Performance                       | DD/MM/YY  | 19/01/23                  | 19/01/23                  |                           |                           |                           |  |  |  |

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

**COMMENTS**

| <u>Sample ID</u> | <u>Comment Level</u> | <u>Method</u> | <u>Test</u> | <u>Comment</u>  |
|------------------|----------------------|---------------|-------------|---|
| L23006058        | Method               | MI01          | -           | Result confirmed. Sample processed outside of holding time, result may be affected. |

**Analysis**                      **Analysis Requirements**

"-" = Not required or refer to Laboratory comment

MI01      Faecal Coliforms and/or E.Coli: all results are presumptive unless indicated otherwise.

"-" = 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 | 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                                       | ~28        | ~28        | Not Calculated                          |
| <b>MI01 [Membrane Filtration]Faecal Coliform</b> |       |  |  |            |            |   |
| <1 CFU/100mL                                     | <1    | Accepted                                       | Accepted                                       | ~410       | ~400       | 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  | <b>0.95</b><br><i>0.88 - 1.12 mg/L</i>    | <b>107 % Recovery</b><br><i>80.0 - 120.0 % Recovery</i> | <b>0.44</b>  | <b>0.46</b>  | <b>B</b><br><i>0.0 - 0.0 %</i>    |
| <b>NU102 Total Phosphorus</b>      |        |   |   |              |              |                                   |
| <0.002 mg/L                        | <0.002 | <b>0.049</b><br><i>0.045 - 0.055 mg/L</i> | <b>89 % Recovery</b><br><i>80.0 - 120.0 % Recovery</i>  | <b>0.012</b> | <b>0.011</b> | <b>B</b><br><i>0.0 - 0.0 %</i>    |
| <b>WC12MET Conductivity (mS/m)</b> |        |   |   |              |              |                                   |
| <0.1 mS/m                          | F      | <b>140.7</b><br><i>139.3 - 143.3 mS/m</i> | E   |              |              |                                   |
| <b>WC17NS BOD5</b>                 |        |   |   |              |              |                                   |
| <2 mg/L                            | <2     | <b>180</b><br><i>139.0 - 257.0 mg/L</i>   | E   | <b>15</b>    | <b>16</b>    | <b>B</b><br><i>0.0 - 0.0 %</i>    |

| LOQ                                  | Blank | Control<br><i>Acceptance Criteria</i> | Spike<br><i>Acceptance Criteria</i> | Duplicate1 | Duplicate2 | RPD<br><i>Acceptance Criteria</i> |
|--------------------------------------|-------|---------------------------------------|-------------------------------------|------------|------------|-----------------------------------|
| <b>WC26NS500 Oil &amp; Grease</b>    |       |                                       |                                     |            |            |                                   |
| <5 mg/L                              | <5    | 95<br>85.1 - 101.5 mg/L               | E                                   | 34         | 35         | B<br>0.0 - 0.0 %                  |
| <b>WC44NS Total Suspended Solids</b> |       |                                       |                                     |            |            |                                   |
| <2 mg/L                              | <2    | 50<br>42.5 - 57.5 mg/L                | E                                   | 790        | 810        | 2.50 %<br>0.0 - 20.0 %            |

Extra Note:

F: Blank is not applicable for this analyte

E: Spike is not applicable for this analyte

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

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