



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



Analytical Report 298434

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Sydney Water Approved Signatory

Dwijal Dave, Clean & Waste Water Analyst	Melissa Wilding, Microbiology Analyst	Greta Haddad, Nutrients Laboratory Supervisor
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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 Sample ID</u>	<u>Sample Number</u>	<u>Sampling Procedure</u>	<u>Date Sampled</u>	<u>Date Received</u>	<u>Date Authorised</u>	<u>Description</u>
PT 1 (POLISHER)	L24007049	1	16/01/2024	17/01/2024	29/01/2024	COBAR STP (WW)
PT 2 (TURKEYS)	L24007050	1	16/01/2024	17/01/2024	29/01/2024	COBAR STP (WW)
SPITTER BOX 1	L24007051	1	16/01/2024	17/01/2024	31/01/2024	COBAR STP (WW)
SPITTER BOX 2	L24007052	1	16/01/2024	17/01/2024	25/01/2024	COBAR STP (WW)
S INLET	L24007053	1	16/01/2024	17/01/2024	25/01/2024	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

Client Sample ID		PT 1 (POLISHER)	PT 2 (TURKEYS)	SPITTER BOX 1	SPITTER BOX 2	S INLET			
Sampled Date		16/01/2024 08:00:00 AM	16/01/2024 08:00:00 AM	16/01/2024 08:00:00 AM	16/01/2024 08:00:00 AM	16/01/2024 08:00:00 AM			
Sample Number		L24007049	L24007050	L24007051	L24007052	L24007053			
CHEMISTRY									
WC12MET : Conductivity									
Conductivity (mS/m)	mS/m	102.3	108.9	-	-	-			
Date of Performance	DD/MM/YY	18/01/24	18/01/24						
WC17NS : Biochemical oxygen demand									
BOD5	mg/L	10	6	68	26	66			
Date of Performance	DD/MM/YY	19/01/24	19/01/24	19/01/24	19/01/24	19/01/24			
WC26NS500 : Oil & Grease									
Oil & Grease	mg/L	<5	<5	-	-	-			
Date of Performance	DD/MM/YY	18/01/24	18/01/24						
WC44NS : Total, Fixed & Volatile Suspended Solids									
Total Suspended Solids	mg/L	58	33	-	-	-			
Date of Performance	DD/MM/YY	18/01/24	18/01/24						

"-" = Not required or refer to Laboratory comment

Client Sample ID		PT 1 (POLISHER)	PT 2 (TURKEYS)	SPITTER BOX 1	SPITTER BOX 2	S INLET			
Sampled Date		16/01/2024 08:00:00 AM	16/01/2024 08:00:00 AM	16/01/2024 08:00:00 AM	16/01/2024 08:00:00 AM	16/01/2024 08:00:00 AM			
Sample Number		L24007049	L24007050	L24007051	L24007052	L24007053			
MICRO									
MI01 : Faecal Coliform and/or E. coli									
E.coli	CFU/100mL	-	~4	-	-	-			
Faecal Coliform	CFU/100mL	-	~4	-	-	-			
Date of Performance	D/M/Y H:M		17/01/24 15:27						
NUTRIENTS									
NU102 : Total Nitrogen & Total Phosphorus									
Total Nitrogen	mg/L	3.64	2.70	-	-	-			
Total Phosphorus	mg/L	1.17	0.640	-	-	-			
Date of Performance	DD/MM/YY	19/01/24	19/01/24						

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

COMMENTS

Sample ID	Comment Level	Method	Test	Comment
L24007050	Method	MI01	-	Result confirmed. Sample processed outside of holding time, result may be affected.
L24007049	Method	WC17NS	-	Sample processed outside of holding time.
L24007050	Method	WC17NS	-	Sample processed outside of holding time.

"-" = Not required or refer to Laboratory comment

L24007051	Method	WC17NS	-	Sample processed outside of holding time.
L24007052	Method	WC17NS	-	Sample processed outside of holding time.
L24007053	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 <i>Acceptance Criteria</i>	Negative Control <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	Precision <i>Acceptance Criteria</i>
MI01 [Membrane Filtration]E.coli						
<1 CFU/100mL	<1	Accepted	Accepted	~4	~1	Not Calculated
MI01 [Membrane Filtration]Faecal Coliform						
<1 CFU/100mL	<1	Accepted	Accepted	~4	~1	Not Calculated

LOQ	Blank	Control <i>Acceptance Criteria</i>	Spike <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	RPD <i>Acceptance Criteria</i>
NU102 Total Nitrogen						
<0.05 mg/L	<0.05	0.94 <i>0.88 - 1.12 mg/L</i>	91 % Recovery <i>80.0 - 120.0 % Recovery</i>	0.29	0.30	B <i>0.0 - 0.0 %</i>
NU102 Total Phosphorus						
<0.002 mg/L	<0.002	0.050 <i>0.045 - 0.055 mg/L</i>	94 % Recovery <i>80.0 - 120.0 % Recovery</i>	0.006	0.007	B <i>0.0 - 0.0 %</i>
WC12MET Conductivity (mS/m)						
<0.1 mS/m	F	140.7 <i>139.3 - 143.3 mS/m</i>	E	108.9	109.0	0.92e-1 % <i>0.0 - 20.0 %</i>

LOQ	Blank	Control <i>Acceptance Criteria</i>	Spike <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	RPD <i>Acceptance Criteria</i>
WC17NS BOD5						
<2 mg/L	<2	220 139.0 - 257.0 mg/L	E	720	730	1.38 % 0.0 - 20.0 %
WC26NS500 Oil & Grease						
<5 mg/L	<5	87 85.1 - 101.5 mg/L	E			
WC44NS Total Suspended Solids						
<2 mg/L	<2	48 42.5 - 57.5 mg/L	E	280	300	6.90 % 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