

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



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Analytical Report 273104

Issue Date: 26/10/2022

Issued By: Sydney Water Laboratory Services

Attention: Victor Papierniak-Wojtowicz

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Sydney Water Approved Signatory

Jeya Gajendran, Clean & Waste Water Analyst 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</u> Sample ID	Sample Number	Sampling Procedure	<u>Date</u> Sampled	<u>Date</u> <u>Received</u>	<u>Date</u> <u>Authorised</u>	<u>Description</u>
PT 1 POLISHER	L22081684	1	17/10/2022	18/10/2022	24/10/2022	COBAR STP (WASTEWATER)
PT 2 TURKEYS	L22081685	1	17/10/2022	18/10/2022	25/10/2022	COBAR STP (WASTEWATER)
SPITTER BOX 1	L22081686	1	17/10/2022	18/10/2022	24/10/2022	COBAR STP (WASTEWATER)
SPITTER BOX 2	L22081687	1	17/10/2022	18/10/2022	24/10/2022	COBAR STP (WASTEWATER)
INLET	L22081688	1	17/10/2022	18/10/2022	24/10/2022	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 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX	INLET			
Sampled Date		17/10/2022 07:30:00 AM							
Sample Number		L22081684	L22081685	L22081686	L22081687	L22081688			
CHEMISTRY									
WC12MET : Conductivity									
Conductivity (mS/m)	mS/m	71.5	68.4	-	-	-			
Date of Performance	DD/MM/YY	19/10/22	19/10/22						
WC17NS : Biochemical oxyge	WC17NS : Biochemical oxygen demand								
BOD5	mg/L	9	11	130	49	100			
Date of Performance	DD/MM/YY	19/10/22	19/10/22	19/10/22	19/10/22	19/10/22			
WC26NS250 : Oil & Grease									
Oil & Grease	mg/L	<10	<10	-	-	-			
Date of Performance	DD/MM/YY	19/10/22	19/10/22						
WC44NS : Total, Fixed & Vola	atile Suspende	d Solids							
Total Suspended Solids	mg/L	34	12	-	-	-			
Date of Performance	DD/MM/YY	21/10/22	21/10/22						
MICRO									
II II - NI-4									

[&]quot;-" = Not required or refer to Laboratory comment



							1		
Client Sample ID		PT 1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX 2	INLET			
Sampled Date		17/10/2022 07:30:00 AM							
Sample Number		L22081684	L22081685	L22081686	L22081687	L22081688			
MICRO	•				,				
MI01 : Faecal Coliform and/or	E. coli								
E.coli	CFU/100mL	-	~19	-	-	-			
Faecal Coliform	CFU/100mL	-	~24	-	-	1			
Date of Performance	D/M/Y H:M		18/10/22 16:13						
NUTRIENTS	NUTRIENTS								
NU102 : Total Nitrogen & Total	l Phosphorus								
Total Nitrogen	mg/L	14.3	11.1	-	-	-			
Total Phosphorus	mg/L	3.86	3.70	-	-	-			
Date of Performance	DD/MM/YY	19/10/22	19/10/22						

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

COMMENTS

Sample IDComment LevelMethodTestCommentL22081685MethodMI01-Result confirmed. Sample processed outside of holding time, result may be affected.

Analysis Requirements

[&]quot;-" = Not required or refer to Laboratory comment



MI01

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

[&]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	LOQ Blank		Negative Control	Duplicate1 Duplicate2		Precision		
			Acceptance Criteria	Acceptance Criteria			Acceptance Criteria		
MI01	[Membrane Filtration]	E.coli							
	<1 CFU/100mL	<1	Accepted	Accepted	~19	~18	Not Calculated		
MI01	MI01 [Membrane Filtration]Faecal Coliform								
	<1 CFU/100mL	<1	Accepted	Accepted	~24	~22	Not Calculated		

LOQ	Blank	Control	Spike	Duplicate1	Duplicate2	RPD
		Acceptance Criteria	Acceptance Criteria			Acceptance Criteria
NU102 Total Nitrogen						
<0.05 mg/L	<0.05	0.95	103 % Recovery	0.32	0.33	В
		0.88 - 1.12 mg/L	80 - 120 % Recovery			0 - 0 %
NU102 Total Phosphorus						
<0.002 mg/L	<0.002	0.050	94 % Recovery	0.021	0.021	0.00 %
		0.045 - 0.055 mg/L	80 - 120 % Recovery			0 - 50 %
WC12MET Conductivity (mS/	m)					
<0.1 mS/m	F	141.4	E	68.4	68.5	0.15 %
		139.3 - 143.3 mS/m				0 - 20 %
WC17NS BOD5						
<2 mg/L	<2	180	E	100	89	11.64 %
		139 - 257 mg/L				0 - 20 %



LOQ	Blank	Control	Spike	Duplicate1 Duplicate2		RPD		
		Acceptance Criteria	Acceptance Criteria			Acceptance Criteria		
WC26NS250 Oil & Grease								
<10 mg/L	<10	100	100 E		27	В		
		85.1 - 101.5 mg/L				0 - 0 %		
WC44NS Total Suspended Sc	WC44NS Total Suspended Solids							
<2 mg/L	<2	55	E	320	320	0.00 %		
		42.5 - 57.5 mg/L				0 - 20 %		

Extra Note:

F: Blank is not applicable for this analyte

E: Spike is not applicable for this analyte

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