Analytical Report 222795



Issue Date: 1/05/2020

Issued By: Sydney Water Laboratory

Services

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Sydney Water Approved Signatory

Jeya Gajendran, Clean & Waste Water Analyst Greta Haddad, Nutrients Laboratory Supervisor Melissa Wilding, Microbiology Analyst



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.

Corporate Accreditation No 63

Accredited for compliance with ISO/IEC 17025 - Testing



SAMPLE SUMMARY

<u>Client</u> Sample ID	<u>Sample</u> <u>Number</u>	Sampling Procedure	<u>Date</u> Sampled	<u>Date</u> <u>Received</u>	<u>Date</u> <u>Authorised</u>	<u>Description</u>
Point 1	L20034424	1	21/04/2020	22/04/2020	30/04/2020	Polisher
Point 2	L20034425	1	21/04/2020	22/04/2020	30/04/2020	Turkeys
Inlet	L20034477	1	21/04/2020	22/04/2020	30/04/2020	
Inlet 1	L20034478	1	21/04/2020	22/04/2020	30/04/2020	
Inlet 2	L20034479	1	21/04/2020	22/04/2020	30/04/2020	

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

		l I			I			
Client Sample ID		Point 1	Point 2	Inlet	Inlet 1	Inlet 2		
Sampled Date		21/04/2020 07:30:00 AM	21/04/2020 07:30:00 AM	21/04/2020 08:00:00 AM	21/04/2020 08:00:00 AM	21/04/2020 08:00:00 AM		
Sample Number		L20034424	L20034425	L20034477	L20034478	L20034479		
CHEMISTRY							•	
WC12MET : Conductivity								
	1						Т	т
Conductivity (mS/m)	mS/m	142.7	166.4	-	-	-		
Date of Performance	DD/MM/YY	22/04/20	22/04/20					
WC17NS : Biological oxygen	demand							
BOD5	mg/L	7	5	140	380	6		
Date of Performance	DD/MM/YY	23/04/20	23/04/20	23/04/20	23/04/20	23/04/20		
WC26NS500 : Grease								
							1	
Oil & Grease	mg/L	<5	<5	-	-	-		
Date of Performance	DD/MM/YY	24/04/20	27/04/20					
WC44NS : Determination of T	otal, Fixed & V	olatile Suspended S	olids					
		ſ					ı	ı
Total Suspended Solids	mg/L	32	21	-	-	-		
Date of Performance	DD/MM/YY	23/04/20	23/04/20					
MICRO	-						•	•

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



Client Sample ID		Point 1	Point 2	Inlet	Inlet 1	Inlet 2		
Sampled Date		21/04/2020 07:30:00 AM	21/04/2020 07:30:00 AM	21/04/2020 08:00:00 AM	21/04/2020 08:00:00 AM	21/04/2020 08:00:00 AM		
Sample Number		L20034424	L20034425	L20034477	L20034478	L20034479		
MICRO								
MI01MUG : Faecal Coliform ar	nd/or E. coli							
E.coli	CFU/100mL	-	4	-	-	-		
Faecal Coliform	CFU/100mL	-	11	-	-	-		
Date of Performance	D/M/Y H:M		22/04/20 16:01					
NUTRIENTS								
NU102 : Nitrogen & Phosphoru	IS							
Total Nitrogen	mg/L	2.66	3.18	-	-	-		
Total Phosphorus	mg/L	0.382	0.362	-	-	-		
Date of Performance	DD/MM/YY	23/04/20	23/04/20					

COMMENTS

Sample ID Comment Level Method Test Comment

L20034425 Method MI01MUG - Result confirmed. Sample analysed outside recommended holding time of 24Hrs.

<u>Analysis Requirements</u>

MI01MUG 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 Blank	Positive Control	Negative Control	Duplicate1 Duplicate2		Precision				
	Acceptance Criteria	Acceptance Criteria			Acceptance Criteria				
MI01MUG [Membrane Filtration]E.coli									
<1 CFU/100mL <1	Accepted	Accepted	4	3	Not Calculated				
MI01MUG [Membrane Filtration]Faecal Coliform									
<1 CFU/100mL <1	Accepted	Accepted	11	8	Not Calculated				

LOQ	Blank	Control	Spike	Duplicate1	Duplicate2	RPD
		Acceptance Criteria	Acceptance Criteria			Acceptance Criteria
NU102 Total Nitrogen						
<0.05 mg/L	<0.05	0.92	89 % Recovery	0.49	0.48	В
		0.88 - 1.12 mg/L	80 - 120 % Recovery			0 - 0 %
NU102 Total Phosphorus						
<0.002 mg/L	<0.002	0.050	85 % Recovery	0.018	0.015	В
		0.045 - 0.055 mg/L	80 - 120 % Recovery			0 - 0 %
WC12MET Conductivity (mS/	m)					
<0.1 mS/m	F	141.8	E	114.6	114.7	0.87e-1 %
		139.3 - 143.3 mS/m				0 - 20 %
WC17NS BOD5						
<2 mg/L	<2	190	E	310	340	9.23 %
		139 - 257 mg/L				0 - 20 %



LOQ	Blank	Control	Control Spike		Duplicate2	RPD
		Acceptance Criteria Acceptance Criteria				Acceptance Criteria
WC26NS500 Oil & Grease						
<5 mg/L	<5 mg/L <5		E			
		85.1 - 101.5 mg/L				
WC44NS Total Suspended So	lids					
<2 mg/L	<2	55	E	1200	1200	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 Total Phosphorus B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ