

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



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Analytical Report 250745

Issue Date: 10/09/2021

Issued By: Sydney Water Laboratory Services

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Sydney Water Approved Signatory

Dwijal Dave, Clean & Waste Water Analyst

Jeya Gajendran, Clean & Waste Water Analyst

Lin Guo, Metals Analyst

Melissa Wilding, 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	<u>Sample</u> <u>Number</u>	Sampling Procedure	<u>Date</u> <u>Sampled</u>	<u>Date</u> <u>Received</u>	<u>Date</u> <u>Authorised</u>	<u>Description</u>
POLISHER	L21077252	1	30/08/2021	01/09/2021	09/09/2021	(WASTE WATER)
TURKEYS NEST	L21077253	1	30/08/2021	01/09/2021	09/09/2021	(WASTE WATER)
INLET	L21077254	1	30/08/2021	01/09/2021	07/09/2021	(WASTE WATER)
SPLITTER BOX 1	L21077255	1	30/08/2021	01/09/2021	07/09/2021	(WASTE WATER)
SPLITTER BOX 2	L21077256	1	30/08/2021	01/09/2021	07/09/2021	(WASTE WATER)

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

Sampled Date 30/08/2021 3											
08:15:00 AM 09:30:00 AM 08:00:00 AM 08:10:00 AM	Client Sample ID		POLISHER	TURKEYS NEST	INLET	SPLITTER BOX					
CHEMISTRY	Sampled Date										
MC12 : Conductivity & Salinity	Sample Number		L21077252	L21077253	L21077254	L21077255	L21077256				
Salinity ppt - 0.4 0.4 -	CHEMISTRY	CHEMISTRY									
Date of Performance DD/MM/YY D1/09/21 D1/09/21	WC12 : Conductivity & Salin	nity									
Conductivity (mS/m) mS/m 76.2 73.3 - - -	Salinity	ppt	-	0.4	0.4	-	-				
Conductivity (mS/m) mS/m 76.2 73.3	Date of Performance	DD/MM/YY		01/09/21	01/09/21						
Date of Performance DD/MM/YY D1/09/21 D1/09/21	WC12MET : Conductivity										
BOD5 mg/L 3 8 84 220 29	Conductivity (mS/m)	mS/m	76.2	73.3	-	-	-				
BOD5 mg/L 3 8 84 220 29 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Date of Performance	DD/MM/YY	01/09/21	01/09/21							
Date of Performance DD/MM/YY 02/09/21 02/09/21 02/09/21 02/09/21 02/09/21 WC26NS500 : Oil & Grease Oil & Grease mg/L <5	WC17NS : Biochemical oxy	gen demand									
WC26NS500 : Oil & Grease Oil & Grease mg/L <5	BOD5	mg/L	3	8	84	220	29				
Oil & Grease mg/L <5 <5 -	Date of Performance	DD/MM/YY	02/09/21	02/09/21	02/09/21	02/09/21	02/09/21				
Date of Performance DD/MM/YY 02/09/21 02/09/21	WC26NS500 : Oil & Grease	;									
Date of Performance DD/MM/YY 02/09/21 02/09/21	0.100			ي	<u> </u>				1	1	
	Oil & Grease	mg/L	<5	<5	-	-	-				
WC44NS : Total, Fixed & Volatile Suspended Solids	Date of Performance	DD/MM/YY	02/09/21	02/09/21							
	WC44NS : Total, Fixed & Vo	olatile Suspended	d Solids								

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



Client Sample ID		POLISHER	TURKEYS NEST	INLET	SPLITTER BOX	SPLITTER BOX 2		
Sampled Date		30/08/2021 08:15:00 AM	30/08/2021 09:30:00 AM	30/08/2021 09:30:00 AM	30/08/2021 08:00:00 AM	30/08/2021 08:10:00 AM		
Sample Number		L21077252	L21077253	L21077254	L21077255	L21077256		
CHEMISTRY								
WC44NS : Total, Fixed & Vola	atile Suspended	d Solids(Continued)						
Total Suspended Solids	mg/L	6	11	-	-	-		
Date of Performance	DD/MM/YY	03/09/21	03/09/21					
METALS	•				•			
TM70SAR : Metals by Induction	vely Coupled P	lasma Atomic Emiss	sion Spectrometry					
SAR*	RATIO	-	2.8	2.5	-	-		
TM70SDT : Single digestion f	or Metals							
Total Digestion	DONE	-	Done	Done	-	-		
Date of Performance	DD/MM/YY		02/09/21	02/09/21				
TM70TW : Metals by ICPAES								
Total Calcium	mg/L	-	30.9	18.6	-	-		
Total Magnesium	mg/L	-	13.6	7.63	-	-		
Total Sodium	mg/L	-	73.3	51.3	-	-		

^{*} Indicates NATA accreditation does not cover the performance of this service

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



					1		1	
Client Sample ID		POLISHER	TURKEYS NEST	INLET	SPLITTER BOX 1	SPLITTER BOX 2		
Sampled Date		30/08/2021 08:15:00 AM	30/08/2021 09:30:00 AM	30/08/2021 09:30:00 AM	30/08/2021 08:00:00 AM	30/08/2021 08:10:00 AM		
Sample Number		L21077252	L21077253	L21077254	L21077255	L21077256		
METALS		-						
Date of Performance	DD/MM/YY		02/09/21	02/09/21				
MICRO								
MI01 : Faecal Coliforms and/o	or E. coli by Me	mbrane Filtration						
E.coli	CFU/100mL	-	11	-	-	-		
Faecal Coliform	CFU/100mL	-	11	-	-	1		
Date of Performance	D/M/Y H:M		01/09/21 17:42					
NUTRIENTS	•		_	_			•	
NU102 : Total Nitrogen & Total	l Phosphorus							
Total Nitrogen	mg/L	8.65	6.47	-	-	-		
Total Phosphorus	mg/L	2.23	1.97	-	-	-		
Date of Performance	DD/MM/YY	02/09/21	02/09/21					

COMMENTS

Sample IDComment LevelMethodTestCommentL21077253MethodMI01-Result confirmed. Sample processed outside of holding time, result may be affected.

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<u>Analysis</u>	Analysis Requirements
MI01	Faecal Coliforms and/or E.Coli: all results are presumptive unless indicated otherwise.
WC12	Conductivity measured @ 25 degrees Celsius
MI01	Faecal Coliforms and/or E.Coli: all results are presumptive unless indicated otherwise.

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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

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	LOQ	Blank	Positive Control	Negative Control	Duplicate1 Duplicate2		Precision			
			Acceptance Criteria	Acceptance Criteria			Acceptance Criteria			
MI01	ll01 [Membrane Filtration]E.coli									
	<1 CFU/100mL	<1	Accepted	Accepted	11	10	Accepted			
MI01	MI01 [Membrane Filtration]Faecal Coliform									
	<1 CFU/100mL	<1	Accepted	Accepted	11	10	Accepted			

LOQ	Blank	Control	Spike	Duplicate1	Duplicate2	RPD
		Acceptance Criteria	Acceptance Criteria			Acceptance Criteria
NU102 Total Nitrogen						
<0.05 mg/L	<0.05	0.93	81 % Recovery	0.94	0.92	2.15 %
		0.88 - 1.12 mg/L	80 - 120 % Recovery			0 - 50 %
NU102 Total Phosphorus						
<0.002 mg/L	<0.002	0.051	98 % Recovery	0.002	0.002	В
		0.045 - 0.055 mg/L	80 - 120 % Recovery			0 - 0 %
TM70TW Total Calcium						
<0.01 mg/L	<0.01	46.4	92 % Recovery	0.12	0.12	0.00 %
		40.0 - 60.0 mg/L	80 - 120 % Recovery			0 - 50 %
TM70TW Total Magnesium						
<0.02 mg/L	<0.02	45.2	90 % Recovery	0.30	0.30	0.00 %
		40.0 - 60.0 mg/L	80 - 120 % Recovery			0 - 50 %

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LOQ	Blank	Control	Spike	Duplicate1	Duplicate2	RPD
LOQ	DIdIIK			Duplicate	Duplicatez	
		Acceptance Criteria	Acceptance Criteria			Acceptance Criteria
TM70TW Total Sodium						
<0.05 mg/L	<0.05	48.1	92 % Recovery	38.6	38.6	0.00 %
		40.0 - 60.0 mg/L	80 - 120 % Recovery			0 - 20 %
WC12MET Conductivity (mS	5/m)					
<0.1 mS/m	F	140.3	E			
		139.3 - 143.3 mS/m				
WC12 Salinity						
<0.1 ppt	F	0.7	E	1.2	1.2	0.00 %
		0.6 - 0.8 ppt				0 - 50 %
WC17NS BOD5						
<2 mg/L	<2	180	E	220	180	20.00 %
		139 - 257 mg/L				0 - 20 %
WC26NS500 Oil & Grease						
<5 mg/L	<5	89	E	<5	<5	В
		85.1 - 101.5 mg/L				0 - 0 %
WC44NS Total Suspended S	olids					
<2 mg/L	<2	49	E	190	180	5.41 %
		42.5 - 57.5 mg/L				0 - 20 %

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

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