

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



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Analytical Report 253302

Issue Date: 02/11/2021

Issued By: Sydney Water Laboratory Services

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Sydney Water Approved Signatory

Dwijal Dave, Clean & Waste Water Analyst
Lin Guo, Metals Analyst

Xin Ren, Microbiology Analyst

Ricardo Quintana, Clean & Waste Water 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>
PT1 POLISHER	L21088373	1	21/10/2021	22/10/2021	01/11/2021	COBAR STP (WASTE WATER)
PT 2 TURKEYS	L21088374	1	21/10/2021	22/10/2021	01/11/2021	COBAR STP (WASTE WATER)
SPITTER BOX 1	L21088375	1	21/10/2021	22/10/2021	29/10/2021	COBAR STP (WASTE WATER)
SPITTER BOX 2	L21088376	1	21/10/2021	22/10/2021	29/10/2021	COBAR STP (WASTE WATER)
S INLET	L21088377	1	21/10/2021	22/10/2021	30/10/2021	COBAR STP (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

Client Sample ID		PT1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX 2	S INLET			
Sampled Date		21/10/2021 11:00:00 AM							
Sample Number		L21088373	L21088374	L21088375	L21088376	L21088377			
CHEMISTRY	CHEMISTRY								
WC12 : Conductivity & Salinity	1								
	r			1				T	
Salinity	ppt	-	0.4	-	-	0.6			
Date of Performance	DD/MM/YY		22/10/21			22/10/21			
WC12MET : Conductivity									
Conductivity (mS/m)	mS/m	86.2	84.1	-	-	-			
Date of Performance	DD/MM/YY	22/10/21	22/10/21						
WC17NS : Biochemical oxyge	n demand								
BOD5	mg/L	9	10	170	30	130			
Date of Performance	DD/MM/YY	23/10/21	23/10/21	23/10/21	23/10/21	23/10/21			
WC26NS250 : Oil & Grease									
Oil & Grease	mg/L	<10	<10	-	-	-			
Date of Performance	DD/MM/YY	25/10/21	25/10/21						
WC44NS : Total, Fixed & Vola	tile Suspende	d Solids							

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



Client Sample ID		PT1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX	S INLET		
Sampled Date		21/10/2021 11:00:00 AM						
Sample Number		L21088373	L21088374	L21088375	L21088376	L21088377		
CHEMISTRY								
WC44NS : Total, Fixed & Vola	atile Suspende	d Solids(Continued)						
Total Suspended Solids	mg/L	23	7	-	-	-		
Date of Performance	DD/MM/YY	26/10/21	26/10/21					
METALS				•				
TM70SAR : Metals by Inducti	vely Coupled F	Plasma Atomic Emiss	ion Spectrometry					
SAR*	RATIO	-	3.1	-	-	3.0		
TM70SDT : Single digestion f	or Metals							
Total Digestion	DONE	-	Done	-	-	Done		
Date of Performance	DD/MM/YY		25/10/21			25/10/21		
TM70TW : Metals by ICPAES).							
Total Calcium	mg/L	-	34.0	-	-	25.6		
Total Magnesium	mg/L	-	17.0	-	-	10.8		
Total Sodium	mg/L	-	88.0	-	-	70.8		
	1							

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

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



					T			
Client Sample ID		PT1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX 2	S INLET		
Sampled Date		21/10/2021 11:00:00 AM						
Sample Number		L21088373	L21088374	L21088375	L21088376	L21088377		
METALS								
Date of Performance	DD/MM/YY		25/10/21			25/10/21		
MICRO								
MI01 : Faecal Coliform and	l/or E. coli							
E.coli	CFU/100mL	-	2	-	-	-		
Faecal Coliform	CFU/100mL	-	5	-	-	-		
Date of Performance	D/M/Y H:M		22/10/21 12:26					
NUTRIENTS								
NU102 : Total Nitrogen & To	otal Phosphorus							
Total Nitrogen	mg/L	9.89	7.02	-	-	-		
Total Phosphorus	mg/L	2.69	2.37	-	-	-		
Date of Performance	DD/MM/YY	26/10/21	26/10/21					

COMMENTS

Sample IDComment LevelMethodTestCommentL21088374MethodMI01-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	[Membrane Filtration]E	.coli								
	<1 CFU/100mL	<1	Accepted	Accepted	2	1	Not Calculated			
MI01	MI01 [Membrane Filtration]Faecal Coliform									
	<1 CFU/100mL	<1	Accepted	Accepted	5	3	Not Calculated			

LOQ	Blank	Control	Spike	Duplicate1	Duplicate2	RPD
		Acceptance Criteria	Acceptance Criteria			Acceptance Criteria
NU102 Total Nitrogen						
<0.05 mg/L	<0.05	0.97	99 % Recovery	0.36	0.35	В
		0.88 - 1.12 mg/L	80 - 120 % Recovery			0 - 0 %
NU102 Total Phosphorus						
<0.002 mg/L	<0.002	0.051	98 % Recovery	0.006	0.006	В
		0.045 - 0.055 mg/L	80 - 120 % Recovery			0 - 0 %
TM70TW Total Calcium						
<0.01 mg/L	<0.01	46.7	92 % Recovery	34.0	34.5	1.46 %
		40.0 - 60.0 mg/L	80 - 120 % Recovery			0 - 20 %
TM70TW Total Magnesium						
<0.02 mg/L	<0.02	48.8	97 % Recovery	17.0	17.2	1.17 %
		40.0 - 60.0 mg/L	80 - 120 % Recovery			0 - 20 %

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LOQ	Blank	Control	Spike	Duplicate1	Duplicate2	RPD
		Acceptance Criteria	Acceptance Criteria			Acceptance Criteria
TM70TW Total Sodium						
<0.05 mg/L	<0.05	45.8	86 % Recovery	88.0	89.1	1.24 %
		40.0 - 60.0 mg/L	80 - 120 % Recovery			0 - 20 %
WC12MET Conductivity (ms	S/m)			•		
<0.1 mS/m	F	140.7	E	13.6	13.6	0.00 %
		139.3 - 143.3 mS/m				0 - 20 %
WC12 Salinity				•		
<0.1 ppt	F	0.7	E	0.4	0.4	В
		0.6 - 0.8 ppt				0 - 0 %
WC17NS BOD5				•		
<2 mg/L	<2	170	E	170	170	0.00 %
		139 - 257 mg/L				0 - 20 %
WC26NS250 Oil & Grease						
<10 mg/L	<10	91	E			
		85.1 - 101.5 mg/L				
WC44NS Total Suspended S	Solids	•				
<2 mg/L	<2	53	E	3000	3000	0.00 %
		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 Salinity B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ

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