



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



Analytical Report 255655

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Sydney Water Approved Signatory

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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>
PT1 (POLISHER)	L21107059	1	02/12/2021	03/12/2021	13/12/2021	COBAR STP (WASTE WATER)
PT2 (TURKEYS)	L21107060	1	02/12/2021	03/12/2021	13/12/2021	COBAR STP (WASTE WATER)
SPITTER BOX 1	L21107061	1	02/12/2021	03/12/2021	09/12/2021	COBAR STP (WASTE WATER)
SPITTER BOX 2	L21107062	1	02/12/2021	03/12/2021	09/12/2021	COBAR STP (WASTE WATER)
S INLET	L21107063	1	02/12/2021	03/12/2021	13/12/2021	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)	PT2 (TURKEYS)	SPITTER BOX 1	SPITTER BOX 2	S INLET			
Sampled Date		02/12/2021 08:00:00 AM	02/12/2021 08:00:00 AM	02/12/2021 08:00:00 AM	02/12/2021 08:00:00 AM	02/12/2021 08:00:00 AM			
Sample Number		L21107059	L21107060	L21107061	L21107062	L21107063			
CHEMISTRY									
WC12 : Conductivity & Salinity									
Salinity	ppt	-	0.4	-	-	0.4			
Date of Performance	DD/MM/YY		03/12/21			03/12/21			
WC12MET : Conductivity									
Conductivity (mS/m)	mS/m	81.6	77.0	-	-	-			
Date of Performance	DD/MM/YY	03/12/21	03/12/21						
WC17NS : Biochemical oxygen demand									
BOD5	mg/L	14	5	200	57	140			
Date of Performance	DD/MM/YY	04/12/21	04/12/21	04/12/21	04/12/21	04/12/21			
WC26NS500 : Oil & Grease									
Oil & Grease	mg/L	<5	<5	-	-	-			
Date of Performance	DD/MM/YY	06/12/21	06/12/21						
WC44NS : Total, Fixed & Volatile Suspended Solids									

"-" = Not required or refer to Laboratory comment

Client Sample ID	PT1 (POLISHER)	PT2 (TURKEYS)	SPITTER BOX 1	SPITTER BOX 2	S INLET			
Sampled Date	02/12/2021 08:00:00 AM	02/12/2021 08:00:00 AM	02/12/2021 08:00:00 AM	02/12/2021 08:00:00 AM	02/12/2021 08:00:00 AM			
Sample Number	L21107059	L21107060	L21107061	L21107062	L21107063			

CHEMISTRY

WC44NS : Total, Fixed & Volatile Suspended Solids(Continued)

Total Suspended Solids	mg/L	34	5	-	-	-		
Date of Performance	DD/MM/YY	06/12/21	06/12/21					

METALS

TM70SAR : Metals by Inductively Coupled Plasma Atomic Emission Spectrometry

SAR*	RATIO	-	3.6	-	-	3.0		
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TM70SDT : Single digestion for Metals

Total Digestion	DONE	-	Done	-	-	Done		
Date of Performance	DD/MM/YY		06/12/21			06/12/21		

TM70TW : Metals by ICPAES.

Total Calcium	mg/L	-	24.6	-	-	19.2		
Total Magnesium	mg/L	-	12.5	-	-	7.10		
Total Sodium	mg/L	-	86.9	-	-	61.5		

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

"-" = Not required or refer to Laboratory comment

Client Sample ID		PT1 (POLISHER)	PT2 (TURKEYS)	SPITTER BOX 1	SPITTER BOX 2	S INLET			
Sampled Date		02/12/2021 08:00:00 AM	02/12/2021 08:00:00 AM	02/12/2021 08:00:00 AM	02/12/2021 08:00:00 AM	02/12/2021 08:00:00 AM			
Sample Number		L21107059	L21107060	L21107061	L21107062	L21107063			
METALS									
Date of Performance	DD/MM/YY		06/12/21			06/12/21			
MICRO									
MI01 : Faecal Coliform and/or E. coli									
E.coli	CFU/100mL	-	~810	-	-	-			
Date of Performance	D/M/Y H:M		03/12/21 10:51						
NUTRIENTS									
NU102 : Total Nitrogen & Total Phosphorus									
Total Nitrogen	mg/L	4.33	5.09	-	-	-			
Total Phosphorus	mg/L	1.48	2.39	-	-	-			
Date of Performance	DD/MM/YY	06/12/21	06/12/21						

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

COMMENTS

<u>Sample ID</u>	<u>Comment Level</u>	<u>Method</u>	<u>Test</u>	<u>Comment</u>
L21107060	Method	MI01	-	Result confirmed. Sample processed outside of holding time, result may be affected.

Analysis Analysis Requirements

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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 <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	~810	~680	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	0.93 <i>0.88 - 1.12 mg/L</i>	99 % Recovery <i>80 - 120 % Recovery</i>	0.34	0.33	B <i>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 - 120 % Recovery</i>	0.002	0.003	B <i>0 - 0 %</i>
TM70TW Total Calcium						
<0.01 mg/L	<0.01	46.1 <i>40.0 - 60.0 mg/L</i>	104 % Recovery <i>80 - 120 % Recovery</i>	79.2	80.2	1.25 % <i>0 - 20 %</i>
TM70TW Total Magnesium						
<0.02 mg/L	<0.02	46.3 <i>40.0 - 60.0 mg/L</i>	100 % Recovery <i>80 - 120 % Recovery</i>	53.0	53.8	1.50 % <i>0 - 20 %</i>

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LOQ	Blank	Control <i>Acceptance Criteria</i>	Spike <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	RPD <i>Acceptance Criteria</i>
TM70TW Total Sodium						
<0.05 mg/L	<0.05	45.7 40.0 - 60.0 mg/L	103 % Recovery 80 - 120 % Recovery	91.2	91.9	0.76 % 0 - 20 %
WC12MET Conductivity (mS/m)						
<0.1 mS/m	F	140.2 139.3 - 143.3 mS/m	E	81.6	81.5	0.12 % 0 - 20 %
WC12 Salinity						
<0.1 ppt	F	0.7 0.6 - 0.8 ppt	E	0.4	0.4	B 0 - 0 %
WC17NS BOD5						
<2 mg/L	<2	190 139 - 257 mg/L	E	200	200	0.00 % 0 - 20 %
WC26NS500 Oil & Grease						
<5 mg/L	<5	91 85.1 - 101.5 mg/L	E			
WC44NS Total Suspended Solids						
<2 mg/L	<2	56 42.5 - 57.5 mg/L	E	3	4	B 0 - 0 %

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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

DUPLICATE Total Suspended Solids B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ

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