



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



## Analytical Report 270342

**Issue Date:** 03/09/2022  
**Issued By :** Sydney Water Laboratory Services

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### **Sydney Water Approved Signatory**

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Greta Haddad, Nutrients Laboratory Supervisor

Linda Gao, Metals Analyst

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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>
PT 1 POLISHER	L22066506	1	22/08/2022	23/08/2022	02/09/2022	COBAR STP (WASTEWATER)
PT 2 TURKEYS	L22066507	1	22/08/2022	23/08/2022	02/09/2022	COBAR STP (WASTEWATER)
SPITTER BOX 1	L22066508	1	22/08/2022	23/08/2022	30/08/2022	COBAR STP (WASTEWATER)
SPITTER BOX 2	L22066509	1	22/08/2022	23/08/2022	30/08/2022	COBAR STP (WASTEWATER)
INLET	L22066510	1	22/08/2022	23/08/2022	30/08/2022	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**

<b>Client Sample ID</b>		PT 1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX 2	INLET			
<b>Sampled Date</b>		22/08/2022 08:00:00 AM	22/08/2022 08:00:00 AM	22/08/2022 08:00:00 AM	22/08/2022 08:00:00 AM	22/08/2022 08:00:00 AM			
<b>Sample Number</b>		L22066506	L22066507	L22066508	L22066509	L22066510			
<b>CHEMISTRY</b>									
<b>WC12 : Conductivity &amp; Salinity</b>									
Salinity	ppt	-	0.4	-	-	0.4			
Date of Performance	DD/MM/YY		24/08/22			24/08/22			
<b>WC12MET : Conductivity</b>									
Conductivity (mS/m)	mS/m	77.5	74.9	-	-	-			
Date of Performance	DD/MM/YY	24/08/22	24/08/22						
<b>WC17NS : Biochemical oxygen demand</b>									
BOD5	mg/L	<2	3	180	230	130			
Date of Performance	DD/MM/YY	24/08/22	24/08/22	24/08/22	24/08/22	24/08/22			
<b>WC26NS500 : Oil &amp; Grease</b>									
Oil & Grease	mg/L	<5	<5	-	-	-			
Date of Performance	DD/MM/YY	29/08/22	29/08/22						
<b>WC44NS : Total, Fixed &amp; Volatile Suspended Solids</b>									

"-" = Not required or refer to Laboratory comment

<b>Client Sample ID</b>		PT 1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX 2	INLET			
<b>Sampled Date</b>		22/08/2022 08:00:00 AM	22/08/2022 08:00:00 AM	22/08/2022 08:00:00 AM	22/08/2022 08:00:00 AM	22/08/2022 08:00:00 AM			
<b>Sample Number</b>		L22066506	L22066507	L22066508	L22066509	L22066510			
<b>CHEMISTRY</b>									
WC44NS : Total, Fixed & Volatile Suspended Solids(Continued)									
Total Suspended Solids	mg/L	8	6	-	-	-			
Date of Performance	DD/MM/YY	29/08/22	29/08/22						
<b>METALS</b>									
TM70SAR : Metals by Inductively Coupled Plasma Atomic Emission Spectrometry									
SAR*	RATIO	-	3.5	-	-	3.4			
TM70SDT : Single digestion for Metals									
Total Digestion	DONE	-	Done	-	-	Done			
Date of Performance	DD/MM/YY		26/08/22			26/08/22			
TM70TW : Metals by ICPAES.									
Total Calcium	mg/L	-	27.6	-	-	23.7			
Total Magnesium	mg/L	-	9.95	-	-	10.2			
Total Sodium	mg/L	-	84.4	-	-	78.0			

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

"-" = Not required or refer to Laboratory comment

<b>Client Sample ID</b>		PT 1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX 2	INLET			
<b>Sampled Date</b>		22/08/2022 08:00:00 AM	22/08/2022 08:00:00 AM	22/08/2022 08:00:00 AM	22/08/2022 08:00:00 AM	22/08/2022 08:00:00 AM			
<b>Sample Number</b>		L22066506	L22066507	L22066508	L22066509	L22066510			
<b>METALS</b>									
Date of Performance	DD/MM/YY		26/08/22			26/08/22			
<b>MICRO</b>									
MI01 : Faecal Coliform and/or E. coli									
E.coli	CFU/100mL	-	27	-	-	-			
Faecal Coliform	CFU/100mL	-	27	-	-	-			
Date of Performance	D/M/Y H:M		23/08/22 16:23						
<b>NUTRIENTS</b>									
NU102 : Total Nitrogen & Total Phosphorus									
Total Nitrogen	mg/L	25.2	19.4	-	-	-			
Total Phosphorus	mg/L	5.64	5.08	-	-	-			
Date of Performance	DD/MM/YY	24/08/22	24/08/22						

**COMMENTS**

<u>Sample ID</u>	<u>Comment Level</u>	<u>Method</u>	<u>Test</u>	<u>Comment</u>
L22066507	Method	MI01	-	Result confirmed. Sample processed outside of holding time, result may be affected.

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**Analysis**

**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 <i>Acceptance Criteria</i>	Negative Control <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	Precision <i>Acceptance Criteria</i>
<b>MI01 [Membrane Filtration]E.coli</b>						
<1 CFU/100mL	<1	Accepted	Accepted	27	16	Accepted
<b>MI01 [Membrane Filtration]Faecal Coliform</b>						
<1 CFU/100mL	<1	Accepted	Accepted	27	16	Accepted

LOQ	Blank	Control <i>Acceptance Criteria</i>	Spike <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	RPD <i>Acceptance Criteria</i>
<b>NU102 Total Nitrogen</b>						
<0.05 mg/L	<0.05	0.97 <i>0.88 - 1.12 mg/L</i>	100 % Recovery <i>80 - 120 % Recovery</i>	0.37	0.37	B <i>0 - 0 %</i>
<b>NU102 Total Phosphorus</b>						
<0.002 mg/L	<0.002	0.051 <i>0.045 - 0.055 mg/L</i>	85 % Recovery <i>80 - 120 % Recovery</i>	0.002	0.003	B <i>0 - 0 %</i>
<b>TM70TW Total Calcium</b>						
<0.01 mg/L	<0.01	50.0 <i>40.0 - 60.0 mg/L</i>	95 % Recovery <i>80 - 120 % Recovery</i>	37.7	37.6	0.27 % <i>0 - 20 %</i>
<b>TM70TW Total Magnesium</b>						
<0.02 mg/L	<0.02	50.1 <i>40.0 - 60.0 mg/L</i>	95 % Recovery <i>80 - 120 % Recovery</i>	18.8	18.7	0.53 % <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>
<b>TM70TW Total Sodium</b>						
<0.05 mg/L	<0.05	54.2 40.0 - 60.0 mg/L	86 % Recovery 80 - 120 % Recovery	147	146	0.68 % 0 - 20 %
<b>WC12MET Conductivity (mS/m)</b>						
<0.1 mS/m	F	141.0 139.3 - 143.3 mS/m	E	77.5	77.5	0.00 % 0 - 20 %
<b>WC12 Salinity</b>						
<0.1 ppt	F	0.7 0.6 - 0.8 ppt	E	0.4	0.4	B 0 - 0 %
<b>WC17NS BOD5</b>						
<2 mg/L	<2	190 139 - 257 mg/L	E	130	120	8.00 % 0 - 20 %
<b>WC26NS500 Oil &amp; Grease</b>						
<5 mg/L	<5	88 85.1 - 101.5 mg/L	E			
<b>WC44NS Total Suspended Solids</b>						
<2 mg/L	<2	52 42.5 - 57.5 mg/L	E	250	240	4.08 % 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