



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



Analytical Report 272026

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Issued By : Sydney Water Laboratory Services

Delivery Address: Sydney Water Corporation
51 Hermitage Rd
West Ryde NSW 2114
Telephone: (02) 9800 6935
Email: analyticalservices@sydneywater.com.au

Attention: Victor Papierniak-Wojtowicz
Customer: Cobar Shire Council
Customer ID: ZCSC

Address: PO Box 223, Cobar NSW 2835
Telephone: 6836 5800
Email: victor.papierniak@cobar.nsw.gov.au

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Sydney Water Approved Signatory

Dwijal Dave, Clean & Waste Water Analyst

Ricardo Quintana, Clean & Waste Water Analyst

Xin Ren, Microbiology Analyst

Rong Feng, Clean & Waste Water Analyst

Linda Gao, Metals Analyst

Greta Haddad, Nutrients Laboratory Supervisor

Jeya Gajendran, Clean & Waste Water Analyst

Adam Mtashar, Metals 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.

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	L22074172	1	19/09/2022	20/09/2022	01/10/2022	COBAR STP (WASTEWATER)
PT 2 TURKEYS	L22074173	1	19/09/2022	20/09/2022	01/10/2022	COBAR STP (WASTEWATER)
SPITTER BOX 1	L22074174	1	19/09/2022	20/09/2022	05/10/2022	COBAR STP (WASTEWATER)
SPITTER BOX 2	L22074175	1	19/09/2022	20/09/2022	30/09/2022	COBAR STP (WASTEWATER)
INLET	L22074176	1	19/09/2022	20/09/2022	05/10/2022	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

Client Sample ID		PT 1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX 2	INLET			
Sampled Date		19/09/2022 07:50:00 AM	19/09/2022 07:50:00 AM	19/09/2022 07:40:00 AM	19/09/2022 07:45:00 AM	19/09/2022 07:35:00 AM			
Sample Number		L22074172	L22074173	L22074174	L22074175	L22074176			
CHEMISTRY									
WC12 : Conductivity & Salinity									
Salinity	ppt	-	0.4	-	-	0.5			
Date of Performance	DD/MM/YY		21/09/22			21/09/22			
WC12MET : Conductivity									
Conductivity (mS/m)	mS/m	71.5	71.3	-	-	-			
Date of Performance	DD/MM/YY	21/09/22	21/09/22						
WC17NS : Biochemical oxygen demand									
BOD5	mg/L	6	12	120	38	140			
Date of Performance	DD/MM/YY	22/09/22	22/09/22	22/09/22	22/09/22	22/09/22			
WC26NS500 : Oil & Grease									
Oil & Grease	mg/L	<5	<5	-	-	-			
Date of Performance	DD/MM/YY	23/09/22	23/09/22						
WC44NS : Total, Fixed & Volatile Suspended Solids									

"-" = Not required or refer to Laboratory comment

Client Sample ID	PT 1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX 2	INLET			
Sampled Date	19/09/2022 07:50:00 AM	19/09/2022 07:50:00 AM	19/09/2022 07:40:00 AM	19/09/2022 07:45:00 AM	19/09/2022 07:35:00 AM			
Sample Number	L22074172	L22074173	L22074174	L22074175	L22074176			

CHEMISTRY

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

Total Suspended Solids	mg/L	15	4	-	-	-		
Date of Performance	DD/MM/YY	23/09/22	23/09/22					

WC65NS : Cyanide Spot Test

Spot test cyanide	N/A	Negative	Negative	Negative	Negative	Negative		
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METALS

TM01TM : Mercury by CV-AFS

Dilution Factor*	N/A	-	-	3	-	3		
Total Mercury	mg/L	-	-	0.00004	-	0.00010		
Date of Performance	DD/MM/YY			04/10/22		04/10/22		

TM66SDT : Single digestion for Metals

Total Digestion	DONE	Done	Done	Done	Done	Done		
Date of Performance	DD/MM/YY	26/09/22	26/09/22	26/09/22	26/09/22	26/09/22		

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

"-" = Not required or refer to Laboratory comment

Client Sample ID	PT 1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX 2	INLET			
Sampled Date	19/09/2022 07:50:00 AM	19/09/2022 07:50:00 AM	19/09/2022 07:40:00 AM	19/09/2022 07:45:00 AM	19/09/2022 07:35:00 AM			
Sample Number	L22074172	L22074173	L22074174	L22074175	L22074176			

METALS

TM66TW : Metals by ICP-MS.

Total Mercury	mg/L	<0.0003	<0.0003	-	<0.0003	-		
Date of Performance	DD/MM/YY	26/09/22	26/09/22		26/09/22			

TM70SAR : Metals by Inductively Coupled Plasma Atomic Emission Spectrometry

SAR*	RATIO	-	3.3	-	-	3.0		
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TM70SDT : Single digestion for Metals

Total Digestion	DONE	Done	Done	Done	Done	Done		
Date of Performance	DD/MM/YY	23/09/22	23/09/22	23/09/22	23/09/22	23/09/22		

TM70TW : Metals by ICPAES.

Total Aluminium	mg/L	0.58	0.40	2.23	1.98	2.47		
Total Antimony	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02		
Total Arsenic	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02		
Total Barium	mg/L	0.022	0.018	0.065	0.051	0.097		

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Client Sample ID		PT 1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX 2	INLET			
Sampled Date		19/09/2022 07:50:00 AM	19/09/2022 07:50:00 AM	19/09/2022 07:40:00 AM	19/09/2022 07:45:00 AM	19/09/2022 07:35:00 AM			
Sample Number		L22074172	L22074173	L22074174	L22074175	L22074176			
METALS									
TM70TW : Metals by ICPAES.(Continued)									
Total Beryllium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002			
Total Boron	mg/L	0.11	0.12	0.12	0.12	0.15			
Total Cadmium	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005			
Total Calcium	mg/L	-	28.9	-	-	39.8			
Total Magnesium	mg/L	-	10.2	-	-	16.2			
Total Sodium	mg/L	-	82.1	-	-	87.5			
Date of Performance	DD/MM/YY	23/09/22	23/09/22	23/09/22	23/09/22	23/09/22			
MICRO									
MI01 : Faecal Coliform and/or E. coli									
E.coli	CFU/100mL	-	5600	-	-	-			
Faecal Coliform	CFU/100mL	-	5600	-	-	-			
Date of Performance	D/M/Y H:M		21/09/22 14:13						

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Client Sample ID		PT 1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX 2	INLET			
Sampled Date		19/09/2022 07:50:00 AM	19/09/2022 07:50:00 AM	19/09/2022 07:40:00 AM	19/09/2022 07:45:00 AM	19/09/2022 07:35:00 AM			
Sample Number		L22074172	L22074173	L22074174	L22074175	L22074176			
NUTRIENTS									
NU102 : Total Nitrogen & Total Phosphorus									
Total Nitrogen	mg/L	16.2	15.3	-	-	-			
Total Phosphorus	mg/L	4.74	4.86	-	-	-			
Date of Performance	DD/MM/YY	23/09/22	23/09/22						

COMMENTS

<u>Sample ID</u>	<u>Comment Level</u>	<u>Method</u>	<u>Test</u>	<u>Comment</u>
L22074173	Method	MI01	-	Result confirmed. Sample processed outside of holding time, result may be affected.
	<u>Analysis</u>	<u>Analysis Requirements</u>		
	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	5600	4300	Accepted
MI01 [Membrane Filtration]Faecal Coliform						
<1 CFU/100mL	<1	Accepted	Accepted	5600	4300	Accepted

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	0.96 <i>0.88 - 1.12 mg/L</i>	102 % Recovery <i>80 - 120 % Recovery</i>	0.38	0.37	B <i>0 - 0 %</i>
NU102 Total Phosphorus						
<0.002 mg/L	<0.002	0.051 <i>0.045 - 0.055 mg/L</i>	85 % Recovery <i>80 - 120 % Recovery</i>	0.004	0.004	B <i>0 - 0 %</i>
TM01TM Total Mercury						
<0.00001 mg/L	<0.00001	0.0006 <i>0.0004 - 0.0006 mg/L</i>	104 % Recovery <i>80 - 120 % Recovery</i>	0.00001	0.00001	B <i>0 - 0 %</i>
TM66TW Total Mercury						
<0.0003 mg/L	<0.0003	0.0046 <i>0.004 - 0.006 mg/L</i>	88 % Recovery <i>80 - 120 % Recovery</i>	<0.0003	<0.0003	B <i>0 - 0 %</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 Aluminium						
<0.01 mg/L	<0.01	10.5 8.2 - 11.8 mg/L	98 % Recovery 80 - 120 % Recovery	0.59	0.59	0.00 % 0 - 20 %
TM70TW Total Antimony						
<0.02 mg/L	<0.02	1.94 1.65 - 2.35 mg/L	98 % Recovery 80 - 120 % Recovery	<0.02	<0.02	B 0 - 0 %
TM70TW Total Arsenic						
<0.02 mg/L	<0.02	1.88 1.65 - 2.35 mg/L	96 % Recovery 80 - 120 % Recovery	<0.02	<0.02	B 0 - 0 %
TM70TW Total Barium						
<0.002 mg/L	<0.002	2.06 1.6 - 2.4 mg/L	99 % Recovery 80 - 120 % Recovery	0.008	0.008	B 0 - 0 %
TM70TW Total Beryllium						
<0.002 mg/L	<0.002	2.06 1.6 - 2.4 mg/L	97 % Recovery 80 - 120 % Recovery	<0.002	<0.002	B 0 - 0 %
TM70TW Total Boron						
<0.01 mg/L	<0.01	2.02 1.65 - 2.35 mg/L	99 % Recovery 80 - 120 % Recovery	0.11	0.11	0.00 % 0 - 50 %
TM70TW Total Cadmium						
<0.005 mg/L	<0.005	1.97 1.65 - 2.35 mg/L	96 % Recovery 80 - 120 % Recovery	<0.005	<0.005	B 0 - 0 %

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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 Calcium						
<0.01 mg/L	<0.01	51.1 <i>40.0 - 60.0 mg/L</i>	98 % Recovery <i>80 - 120 % Recovery</i>	37.9	37.9	0.00 % <i>0 - 20 %</i>
TM70TW Total Magnesium						
<0.02 mg/L	<0.02	51.9 <i>40.0 - 60.0 mg/L</i>	99 % Recovery <i>80 - 120 % Recovery</i>	18.4	18.4	0.00 % <i>0 - 20 %</i>
TM70TW Total Sodium						
<0.05 mg/L	<0.05	55.6 <i>40.0 - 60.0 mg/L</i>	81 % Recovery <i>80 - 120 % Recovery</i>	146	146	0.00 % <i>0 - 20 %</i>
WC12MET Conductivity (mS/m)						
<0.1 mS/m	F	140.6 <i>139.3 - 143.3 mS/m</i>	E	71.5	71.5	0.00 % <i>0 - 20 %</i>
WC12 Salinity						
<0.1 ppt	F	0.7 <i>0.6 - 0.8 ppt</i>	E	0.5	0.5	B <i>0 - 0 %</i>
WC17NS BOD5						
<2 mg/L	<2	180 <i>139 - 257 mg/L</i>	E	350	330	5.88 % <i>0 - 20 %</i>
WC26NS500 Oil & Grease						
<5 mg/L	<5	89 <i>85.1 - 101.5 mg/L</i>	E			

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LOQ	Blank	Control <i>Acceptance Criteria</i>	Spike <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	RPD <i>Acceptance Criteria</i>
WC44NS Total Suspended Solids						
<2 mg/L	<2	50 42.5 - 57.5 mg/L	E	640	620	3.17 % 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

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

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

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

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

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

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

DUPLICATE Total Cadmium 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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