

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



Delivery Address: Sydney Water Corporation

51 Hermitage Rd West Ryde NSW 2114

Telephone: (02) 9800 6935

Email: analyticalservices@sydneywater.com.au

Analytical Report 268449

Issue Date: 02/08/2022

Issued By: Sydney Water Laboratory Services

Attention: Victor Papierniak-Wojtowicz

Customer: Cobar Shire Council

Customer ID: ZCSC

Greta Haddad, Nutrients Laboratory Supervisor

Address: PO Box 223, Cobar NSW 2835

Telephone: 6836 5800

Email:

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Sydney Water Approved Signatory

Jeya Gajendran, Clean & Waste Water Analyst Linda Gao, Metals Analyst

Kathryn Gamble, Microbiology Analyst

victor.papierniak@cobar.nsw.gov.au

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>
PT 1 POLISHER	L22057574	1	20/07/2022	21/07/2022	01/08/2022	COBAR STP (WASTEWATER)
PT 2 TURKEYS	L22057575	1	20/07/2022	21/07/2022	01/08/2022	COBAR STP (WASTEWATER)
SPITTER BOX 1	L22057576	1	20/07/2022	21/07/2022	29/07/2022	COBAR STP (WASTEWATER)
SPITTER BOX 2	L22057577	1	20/07/2022	21/07/2022	29/07/2022	COBAR STP (WASTEWATER)
INLET	L22057578	1	20/07/2022	21/07/2022	29/07/2022	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		20/07/2022 07:35:00 AM	20/07/2022 08:06:00 AM	20/07/2022 07:30:00 AM	20/07/2022 07:30:00 AM	20/07/2022 07:10:00 AM			
Sample Number		L22057574	L22057575	L22057576	L22057577	L22057578			
CHEMISTRY									
WC12 : Conductivity & Salinity	1								
Salinity	ppt	-	0.4	-	-	0.4			
Date of Performance	DD/MM/YY		22/07/22			22/07/22			
WC12MET : Conductivity	WC12MET : Conductivity								
Conductivity (mS/m)	mS/m	74.8	71.1	-	-	-			
Date of Performance	DD/MM/YY	21/07/22	21/07/22						
WC17NS : Biochemical oxyger	n demand								
BOD5	mg/L	5	2	160	14	160			
Date of Performance	DD/MM/YY	22/07/22	22/07/22	22/07/22	22/07/22	22/07/22			
WC26NS500 : Oil & Grease									
Oil & Grease	mg/L	<5	<5	-	-	-			
Date of Performance	DD/MM/YY	25/07/22	22/07/22						
WC44NS : Total, Fixed & Volat	tile Suspended	d Solids							

[&]quot;-" = 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		20/07/2022 07:35:00 AM	20/07/2022 08:06:00 AM	20/07/2022 07:30:00 AM	20/07/2022 07:30:00 AM	20/07/2022 07:10:00 AM		
Sample Number		L22057574	L22057575	L22057576	L22057577	L22057578		
CHEMISTRY								
WC44NS : Total, Fixed & Vola	atile Suspende	d Solids(Continued)						
Total Suspended Solids	mg/L	6	10	-	-	-		
Date of Performance	DD/MM/YY	26/07/22	26/07/22					
METALS				•	•	•		
TM70SAR : Metals by Inducti	vely Coupled F	Plasma Atomic Emiss	ion Spectrometry					
SAR*	RATIO	-	3.5	-	-	3.3		
TM70SDT : Single digestion f	or Metals							
Total Digestion	DONE	-	Done	-	-	Done		
Date of Performance	DD/MM/YY		22/07/22			28/07/22		
TM70TW : Metals by ICPAES).							
Total Calcium	mg/L	-	29.4	-	-	21.0		
Total Magnesium	mg/L	-	10.5	-	-	7.52		
Total Sodium	mg/L	-	86.1	-	-	68.4		
	1							

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

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



							1	
Client Sample ID		PT 1 POLISHER	PT 2 TURKEYS	SPITTER BOX 1	SPITTER BOX 2	INLET		
Sampled Date		20/07/2022 07:35:00 AM	20/07/2022 08:06:00 AM	20/07/2022 07:30:00 AM	20/07/2022 07:30:00 AM	20/07/2022 07:10:00 AM		
Sample Number		L22057574	L22057575	L22057576	L22057577	L22057578		
METALS								•
Date of Performance	DD/MM/YY		22/07/22			28/07/22		
MICRO								
MI01MUG : Faecal Coliforn	ns and/or E. coli b	y Membrane Filtration	on					
E.coli	CFU/100mL	-	24	-	-	-		
Faecal Coliform	CFU/100mL	-	24	-	-	-		
Date of Performance	D/M/Y H:M		21/07/22 15:15					
NUTRIENTS								
NU102 : Total Nitrogen & To	otal Phosphorus							
Total Nitrogen	mg/L	18.5	13.0	-	-	-		
Total Phosphorus	mg/L	5.64	4.92	-	-	-		
Date of Performance	DD/MM/YY	22/07/22	22/07/22					

COMMENTS

Sample IDComment LevelMethodTestCommentL22057575MethodMI01MUG-Result confirmed.

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AnalysisAnalysis RequirementsMI01MUGFaecal Coliforms and/or E.Coli: all results are presumptive unless indicated otherwise.WC12Conductivity measured @ 25 degrees CelsiusMI01MUGFaecal 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			
MI01MUG [Membrane Filtration]E.coli									
<1 CFU/100mL <	1	Accepted	Accepted	24	22	Accepted			
MI01MUG [Membrane Filtration]Faecal Coliform									
<1 CFU/100mL <	1	Accepted	Accepted	24	22	Accepted			

LOQ	Blank	Control	Control Spike D		Duplicate2	RPD
		Acceptance Criteria	Acceptance Criteria			Acceptance Criteria
NU102 Total Nitrogen						
<0.05 mg/L	<0.05	0.96	104 % Recovery	0.32	0.34	В
		0.88 - 1.12 mg/L	80 - 120 % Recovery			0 - 0 %
NU102 Total Phosphorus						
<0.002 mg/L	<0.002	0.049	85 % Recovery	0.003	0.004	В
		0.045 - 0.055 mg/L	80 - 120 % Recovery			0 - 0 %
TM70TW Total Calcium						
<0.01 mg/L	<0.01	52.4	99 % Recovery	29.4	29.4	0.00 %
		40.0 - 60.0 mg/L	80 - 120 % Recovery			0 - 20 %
TM70TW Total Magnesium						
<0.02 mg/L	<0.02	52.3	101 % Recovery	10.5	10.6	0.95 %
		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	55.0	97 % Recovery	86.1	86.4	0.35 %
		40.0 - 60.0 mg/L	80 - 120 % Recovery			0 - 20 %
WC12MET Conductivity (m	S/m)					
<0.1 mS/m	F	140.9	E	490.5	490.9	0.82e-1 %
		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	200	E	280	280	0.00 %
		139 - 257 mg/L				0 - 20 %
WC26NS500 Oil & Grease		·				
<5 mg/L	<5	88	E	38	33	В
		85.1 - 101.5 mg/L				0 - 0 %
WC44NS Total Suspended	Solids	•	•	•		
<2 mg/L	<2	52	E	360	350	2.82 %
		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

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

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