

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



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Analytical Report 303305

Issue Date: 19/04/2024

Issued By: Sydney Water Laboratory Services

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Supervisor

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Sydney Water Approved Signatory

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Jouliet Ashak, Microbiology 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> <u>Sampled</u>	<u>Date</u> <u>Received</u>	<u>Date</u> <u>Authorised</u>	<u>Description</u>
PT1 (POLISHER)	L24034290	1	09/04/2024	09/04/2024	18/04/2024	COBAR STP (WW)
PT2 (TURKEY)	L24034291	1	09/04/2024	09/04/2024	18/04/2024	COBAR STP (WW)
SPITTER BOX 1	L24034292	1	09/04/2024	09/04/2024	17/04/2024	COBAR STP (WW)
SPITTER BOX 2	L24034293	1	09/04/2024	09/04/2024	17/04/2024	COBAR STP (WW)
S INLET	L24034294	1	09/04/2024	09/04/2024	17/04/2024	COBAR STP (WW)

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 (POLISHE	PT2 (TURKEY)	SPITTER BOX 1	SPITTER BOX 2	S INLET			
		R)							
Sampled Date		09/04/2024	09/04/2024	09/04/2024	09/04/2024	09/04/2024			
		07:50:00 AM	08:15:00 AM	07:50:00 AM	07:53:00 AM	07:47:00 AM			
Sample Number		L24034290	L24034291	L24034292	L24034293	L24034294			
CHEMISTRY									
WC12MET : Conductivity									
									Г
Conductivity (mS/m)	mS/m	99.7	106.1	-	-	-			
Date of Performance	DD/MM/YY	10/04/24	10/04/24						
WC17NS : Biochemical oxyger	n demand								
BOD5	mg/L	<2	<2	59	10	64			
Date of Performance	DD/MM/YY	11/04/24	11/04/24	11/04/24	11/04/24	11/04/24			
WC26NS500 : Oil & Grease									
Oil & Grease	mg/L	<5	<5		-	-			
Date of Performance	DD/MM/YY	16/04/24	16/04/24						
WC44NS : Total, Fixed & Volat	WC44NS : Total, Fixed & Volatile Suspended Solids								
Total Suspended Solids	mg/L	4	6	-	-	-			
Date of Performance	DD/MM/YY	15/04/24	15/04/24						

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



Client Sample ID		PT1 (POLISHE	PT2 (TURKEY)	SPITTER BOX 1	SPITTER BOX 2	S INLET		
Sampled Date		R) 09/04/2024 07:50:00 AM	09/04/2024 08:15:00 AM	09/04/2024 07:50:00 AM	09/04/2024 07:53:00 AM	09/04/2024 07:47:00 AM		
Sample Number		L24034290	L24034291	L24034292	L24034293	L24034294		
MICRO								
MI01 : Faecal Coliform and/or	E. coli							
E.coli	CFU/100mL	-	~16	-	-	-		
Faecal Coliform	CFU/100mL	-	~26	-	-	-		
Date of Performance	D/M/Y H:M		09/04/24 15:18					
NUTRIENTS								
NU102 : Total Nitrogen & Total	Phosphorus							
Total Nitrogen	mg/L	2.04	1.69	-	-	-		
Total Phosphorus	mg/L	3.32	1.50	-	-	-		
Date of Performance	DD/MM/YY	10/04/24	10/04/24					

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

COMMENTS

Sample ID
L24034291Comment Level
MethodMethod
MI01Test
-Comment
Result confirmed.

Analysis Requirements

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

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MI01

Faecal Coliforms and/or E.Coli: all results are presumptive unless indicated otherwise.

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



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



	LOQ	Blank	Positive Control	Negative Control	Duplicate1 [Duplicate2	Precision	
			Acceptance Criteria	Acceptance Criteria			Acceptance Criteria	
MI01	1 [Membrane Filtration]E.coli							
	<1 CFU/100mL	<1	Accepted	Accepted	~16	14	Accepted	
MI01	MI01 [Membrane Filtration]Faecal Coliform							
	<1 CFU/100mL	<1	Accepted	Accepted	~26	24	Accepted	

LOQ	Blank	Control	Spike	Duplicate1	Duplicate2	RPD			
		Acceptance Criteria	Acceptance Criteria			Acceptance Criteria			
NU102 Total Nitrogen	NU102 Total Nitrogen								
<0.05 mg/L	<0.05	0.93	106 % Recovery	1.01	1.01	0.00 %			
		0.88 - 1.12 mg/L	80.0 - 120.0 % Recovery		,	0.0 - 20.0 %			
NU102 Total Phosphorus	NU102 Total Phosphorus								
<0.002 mg/L	<0.002	0.050	94 % Recovery	0.085	0.082	3.59 %			
		0.045 - 0.055 mg/L	80.0 - 120.0 % Recovery			0.0 - 20.0 %			
WC12MET Conductivity (mS/	WC12MET Conductivity (mS/m)								
<0.1 mS/m	F	141.2	E	106.1	106.1	0.00 %			
		139.3 - 143.3 mS/m				0.0 - 20.0 %			



LOQ	Blank	Control	Spike	Duplicate1	Duplicate2	RPD		
		Acceptance Criteria	Acceptance Criteria			Acceptance Criteria		
WC17NS BOD5								
<2 mg/L	<2	200	E	64	66	3.08 %		
		139.0 - 257.0 mg/L				0.0 - 20.0 %		
WC26NS500 Oil & Grease	WC26NS500 Oil & Grease							
<5 mg/L	<5	97	E					
		85.1 - 101.5 mg/L						
WC44NS Total Suspended S	WC44NS Total Suspended Solids							
<2 mg/L	<2	52	E	410	420	2.41 %		
		42.5 - 57.5 mg/L				0.0 - 20.0 %		

Extra Note:

F: Blank is not applicable for this analyte

E: Spike is not applicable for this analyte