

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



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Analytical Report 294940

Issue Date: 27/11/2023

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### **Sydney Water Approved Signatory**

Greta Haddad, Nutrients Laboratory Supervisor

Jeya Gajendran, Clean & Waste Water Analyst Ricardo Quintana, Clean & Waste Water Analyst

Jouliet Ashak, Microbiology 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</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>
POINT1(POLISHER)	L23091375	1	14/11/2023	15/11/2023	23/11/2023	COBAR STP (WW)
POINT2(TURKEYS)	L23091376	1	14/11/2023	15/11/2023	23/11/2023	COBAR STP (WW)
SPITTER BOX 1	L23091377	1	14/11/2023	15/11/2023	27/11/2023	COBAR STP (WW)
SPITTER BOX 2	L23091378	1	14/11/2023	15/11/2023	21/11/2023	COBAR STP (WW)
S INLET	L23091379	1	14/11/2023	15/11/2023	21/11/2023	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		POINT1(POLIS	POINT2(TURKEYS	SPITTER BOX 1	SPITTER BOX 2	S INLET			
Sampled Date		HER) 14/11/2023 07:10:00 AM	) 14/11/2023 07:38:00 AM	14/11/2023 07:05:00 AM	14/11/2023 07:08:00 AM	14/11/2023 07:00:00 AM			
Sample Number		L23091375	L23091376	L23091377	L23091378	L23091379			
CHEMISTRY									
WC12MET : Conductivity									
		T							r
Conductivity (mS/m)	mS/m	121.0	133.0	-	-	-			
Date of Performance	DD/MM/YY	16/11/23	16/11/23						
WC17NS : Biochemical oxyge	n demand								
BOD5	mg/L	3	<2	63	35	130			
Date of Performance	DD/MM/YY	16/11/23	16/11/23	16/11/23	16/11/23	16/11/23			
WC26NS500 : Oil & Grease									
Oil & Grease	mg/L	<5	<5	-	-	-			
Date of Performance	DD/MM/YY	21/11/23	21/11/23						
WC44NS : Total, Fixed & Volat	WC44NS : Total, Fixed & Volatile Suspended Solids								
Total Suspended Solids	mg/L	41	8	-	-	-			
Date of Performance	DD/MM/YY	17/11/23	17/11/23						

<sup>&</sup>quot;-" = Not required or refer to Laboratory comment



Client Sample ID		POINT1(POLIS HER)	POINT2(TURKEYS	SPITTER BOX 1	SPITTER BOX 2	S INLET			
Sampled Date		14/11/2023 07:10:00 AM	14/11/2023 07:38:00 AM	14/11/2023 07:05:00 AM	14/11/2023 07:08:00 AM	14/11/2023 07:00:00 AM			
Sample Number		L23091375	L23091376	L23091377	L23091378	L23091379			
MICRO									
MI01 : Faecal Coliform and/or	E. coli								
E.coli	CFU/100mL	-	<1	-	-	-			
Faecal Coliform	CFU/100mL	-	<1	-	-	-			
Date of Performance	D/M/Y H:M		15/11/23 16:34						
NUTRIENTS	NUTRIENTS								
NU102 : Total Nitrogen & Total	NU102 : Total Nitrogen & Total Phosphorus								
Total Nitrogen	mg/L	1.95	2.43	-	-	-			
Total Phosphorus	mg/L	0.600	0.424	-	-	-			
Date of Performance	DD/MM/YY	17/11/23	17/11/23						

## **COMMENTS**

Sample IDComment LevelMethodTestCommentL23091376MethodMI01-Result confirmed. Sample processed outside of holding time, result may be affected.

Analysis Requirements

MI01 Faecal Coliforms and/or E.Coli: all results are presumptive unless indicated

otherwise.

<sup>&</sup>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	LOQ Blank		Negative Control	Duplicate1 Duplicate2		Precision	
			Acceptance Criteria	Acceptance Criteria			Acceptance Criteria	
MI01	[Membrane Filtration]E.col	I						
	<1 CFU/100mL	<1	Accepted	Accepted	<1	<1	Not Calculated	
MI01	01 [Membrane Filtration]Faecal Coliform							
	<1 CFU/100mL	<1	Accepted	Accepted	<1	<1	Not Calculated	

LOQ	Blank	Control Spike		Duplicate1	Duplicate2	RPD		
		Acceptance Criteria	Acceptance Criteria			Acceptance Criteria		
NU102 Total Nitrogen								
<0.05 mg/L	<0.05	0.99	95 % Recovery	0.36	0.36	В		
		0.88 - 1.12 mg/L	80.0 - 120.0 % Recovery		•	0.0 - 0.0 %		
NU102 Total Phosphorus	NU102 Total Phosphorus							
<0.002 mg/L	<0.002	0.052	102 % Recovery	0.003	0.003	В		
		0.045 - 0.055 mg/L	80.0 - 120.0 % Recovery			0.0 - 0.0 %		
WC12MET Conductivity (mS/	WC12MET Conductivity (mS/m)							
<0.1 mS/m	F	141.0	E	121.0	120.8	0.17 %		
		139.3 - 143.3 mS/m				0.0 - 20.0 %		



LOQ	Blank	Control	Spike	Duplicate1	Duplicate2	RPD		
		Acceptance Criteria	Acceptance Criteria	eptance Criteria		Acceptance Criteria		
WC17NS BOD5								
<2 mg/L	<2	210	E	160	150	6.45 %		
		139.0 - 257.0 mg/L				0.0 - 20.0 %		
WC26NS500 Oil & Grease	WC26NS500 Oil & Grease							
<5 mg/L	<5	99	E					
		85.1 - 101.5 mg/L						
WC44NS Total Suspended S	WC44NS Total Suspended Solids							
<2 mg/L	<2	48	E	1500	1800	18.18 %		
		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

DUPLICATE Total Phosphorus B: Duplicate F

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