



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



Analytical Report 259001

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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
Jouliet Ashak, Microbiology Analyst

Ricardo Quintana, Clean & Waste Water Analyst
Hyman Akeed, Nutrients Analyst

Linda Gao, 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>
POINT 1	L22013187	1	07/02/2022	08/02/2022	15/02/2022	POLISHER (WASTEWATER)
POINT 2	L22013188	1	07/02/2022	08/02/2022	15/02/2022	TURKEYS (WASTEWATER)
SPLITTER BOX 1	L22013189	1	07/02/2022	08/02/2022	15/02/2022	(WASTEWATER)
SPLITTER BOX 2	L22013190	1	07/02/2022	08/02/2022	15/02/2022	(WASTEWATER)
INLET	L22013191	1	07/02/2022	08/02/2022	15/02/2022	(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		POINT 1	POINT 2	SPLITTER BOX 1	SPLITTER BOX 2	INLET			
Sampled Date		07/02/2022 08:00:00 AM	07/02/2022 08:00:00 AM	07/02/2022 08:00:00 AM	07/02/2022 08:00:00 AM	07/02/2022 08:00:00 AM			
Sample Number		L22013187	L22013188	L22013189	L22013190	L22013191			
CHEMISTRY									
WC12 : Conductivity & Salinity									
Salinity	ppt	-	0.4	-	-	0.3			
Date of Performance	DD/MM/YY		08/02/22			08/02/22			
WC12MET : Conductivity									
Conductivity (mS/m)	mS/m	70.8	78.5	-	-	-			
Date of Performance	DD/MM/YY	08/02/22	08/02/22						
WC17NS : Biochemical oxygen demand									
BOD5	mg/L	13	5	200	22	71			
Date of Performance	DD/MM/YY	09/02/22	09/02/22	09/02/22	09/02/22	09/02/22			
WC26NS500 : Oil & Grease									
Oil & Grease	mg/L	<5	<5	-	-	-			
Date of Performance	DD/MM/YY	09/02/22	09/02/22						
WC44NS : Total, Fixed & Volatile Suspended Solids									

"-" = Not required or refer to Laboratory comment

Client Sample ID	POINT 1	POINT 2	SPLITTER BOX 1	SPLITTER BOX 2	INLET			
Sampled Date	07/02/2022 08:00:00 AM	07/02/2022 08:00:00 AM	07/02/2022 08:00:00 AM	07/02/2022 08:00:00 AM	07/02/2022 08:00:00 AM			
Sample Number	L22013187	L22013188	L22013189	L22013190	L22013191			

CHEMISTRY

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

Total Suspended Solids	mg/L	93	30	-	-	-		
Date of Performance	DD/MM/YY	09/02/22	09/02/22					

METALS

TM70SAR : Metals by Inductively Coupled Plasma Atomic Emission Spectrometry

SAR*	RATIO	-	5.0	-	-	2.5		
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TM70SDT : Single digestion for Metals

Total Digestion	DONE	-	Done	-	-	Done		
Date of Performance	DD/MM/YY		09/02/22			09/02/22		

TM70TW : Metals by ICPAES.

Total Calcium	mg/L	-	21.8	-	-	21.5		
Total Magnesium	mg/L	-	11.4	-	-	7.32		
Total Sodium	mg/L	-	115	-	-	52.4		

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

"-" = Not required or refer to Laboratory comment

Client Sample ID		POINT 1	POINT 2	SPLITTER BOX 1	SPLITTER BOX 2	INLET			
Sampled Date		07/02/2022 08:00:00 AM	07/02/2022 08:00:00 AM	07/02/2022 08:00:00 AM	07/02/2022 08:00:00 AM	07/02/2022 08:00:00 AM			
Sample Number		L22013187	L22013188	L22013189	L22013190	L22013191			
METALS									
Date of Performance	DD/MM/YY	09/02/22				09/02/22			
MICRO									
MI01 : Faecal Coliform and/or E. coli									
E.coli	CFU/100mL	-	25	-	-	-			
Faecal Coliform	CFU/100mL	-	25	-	-	-			
Date of Performance	D/M/Y H:M		08/02/22 12:51						
NUTRIENTS									
NU102 : Total Nitrogen & Total Phosphorus									
Total Nitrogen	mg/L	5.00	3.64	-	-	-			
Total Phosphorus	mg/L	3.42	2.58	-	-	-			
Date of Performance	DD/MM/YY	09/02/22	09/02/22						

COMMENTS

<u>Sample ID</u>	<u>Comment Level</u>	<u>Method</u>	<u>Test</u>	<u>Comment</u>
L22013188	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>
MI01 [Membrane Filtration]E.coli						
<1 CFU/100mL	<1	Accepted	Accepted	25	16	Accepted
MI01 [Membrane Filtration]Faecal Coliform						
<1 CFU/100mL	<1	Accepted	Accepted	25	16	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	1.00 <i>0.88 - 1.12 mg/L</i>	90 % Recovery <i>80 - 120 % Recovery</i>	0.65	0.65	0.00 % <i>0 - 50 %</i>
NU102 Total Phosphorus						
<0.002 mg/L	<0.002	0.050 <i>0.045 - 0.055 mg/L</i>	85 % Recovery <i>80 - 120 % Recovery</i>	0.019	0.019	B <i>0 - 0 %</i>
TM70TW Total Calcium						
<0.01 mg/L	<0.01	51.6 <i>40.0 - 60.0 mg/L</i>	100 % Recovery <i>80 - 120 % Recovery</i>	19.3	19.3	0.00 % <i>0 - 20 %</i>
TM70TW Total Magnesium						
<0.02 mg/L	<0.02	54.1 <i>40.0 - 60.0 mg/L</i>	105 % Recovery <i>80 - 120 % Recovery</i>	9.72	9.71	0.10 % <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>
TM70TW Total Sodium						
<0.05 mg/L	<0.05	52.4 40.0 - 60.0 mg/L	98 % Recovery 80 - 120 % Recovery	45.3	45.3	0.00 % 0 - 20 %
WC12MET Conductivity (mS/m)						
<0.1 mS/m	F	140.6 139.3 - 143.3 mS/m	E	78.5	78.6	0.13 % 0 - 20 %
WC12 Salinity						
<0.1 ppt	F	0.7 0.6 - 0.8 ppt	E	0.3	0.3	B 0 - 0 %
WC17NS BOD5						
<2 mg/L	<2	180 139 - 257 mg/L	E	120	110	8.70 % 0 - 20 %
WC26NS500 Oil & Grease						
<5 mg/L	<5	94 85.1 - 101.5 mg/L	E			
WC44NS Total Suspended Solids						
<2 mg/L	<2	52 42.5 - 57.5 mg/L	E	<2	<2	B 0 - 0 %

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

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