

Analytical Report 228050



Laboratory Services

Issue Date: 6/08/2020
Issued By : Sydney Water Laboratory Services

Delivery Address: Sydney Water Corporation
51 Hermitage Rd
West Ryde NSW 2114

Analysis contact: Tel : (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

CONTENTS

1. Sydney Water Approved Signatory
2. Sample Summary
3. Analytical results
4. Comments
5. Laboratory QC results

Sydney Water Approved Signatory

Jeya Gajendran, Clean & Waste Water Analyst
Melissa Wilding, Microbiology Analyst

Ricardo Quintana, Clean & Waste Water 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.

Corporate Accreditation No 63

Accredited for compliance with ISO/IEC 17025 - Testing

SAMPLE SUMMARY

<u>Client</u> <u>Sample ID</u>	<u>Sample</u> <u>Number</u>	<u>Sampling</u> <u>Procedure</u>	<u>Date</u> <u>Sampled</u>	<u>Date</u> <u>Received</u>	<u>Date</u> <u>Authorised</u>	<u>Description</u>
Point 1	L20061958	1	28/07/2020	29/07/2020	05/08/2020	Polisher
Point 2	L20061959	1	28/07/2020	29/07/2020	05/08/2020	Turkeys
Splitter Box 1	L20061960	1	28/07/2020	29/07/2020	04/08/2020	
Splitter Box 2	L20061961	1	28/07/2020	29/07/2020	04/08/2020	
Inlet	L20061962	1	28/07/2020	29/07/2020	04/08/2020	

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	28/07/2020 08:30:00 AM	28/07/2020 08:30:00 AM	28/07/2020 07:30:00 AM	28/07/2020 07:30:00 AM	28/07/2020 07:30:00 AM			
Sample Number	L20061958	L20061959	L20061960	L20061961	L20061962			

CHEMISTRY

WC12MET : Conductivity

Conductivity (mS/m)	mS/m	99.9	106.7	-	-	-		
Date of Performance	DD/MM/YY	30/07/20	30/07/20					

WC17NS : Biological oxygen demand

BOD5	mg/L	4	7	340	19	170		
Date of Performance	DD/MM/YY	30/07/20	30/07/20	30/07/20	30/07/20	30/07/20		

WC26NS500 : Grease

Oil & Grease	mg/L	8	8	-	-	-		
Date of Performance	DD/MM/YY	05/08/20	05/08/20					

WC44NS : Determination of Total, Fixed & Volatile Suspended Solids

Total Suspended Solids	mg/L	9	9	-	-	-		
Date of Performance	DD/MM/YY	01/08/20	01/08/20					

MICRO

"-" = Not required or refer to Laboratory comment

Client Sample ID		Point 1	Point 2	Splitter Box 1	Splitter Box 2	Inlet			
Sampled Date		28/07/2020 08:30:00 AM	28/07/2020 08:30:00 AM	28/07/2020 07:30:00 AM	28/07/2020 07:30:00 AM	28/07/2020 07:30:00 AM			
Sample Number		L20061958	L20061959	L20061960	L20061961	L20061962			
MICRO									
MI01MUG : Faecal Coliform and/or E. coli									
E.coli	CFU/100mL	-	6	-	-	-			
Faecal Coliform	CFU/100mL	-	6	-	-	-			
Date of Performance	D/M/Y H:M		29/07/20 15:08						
NUTRIENTS									
NU102 : Nitrogen & Phosphorus									
Total Nitrogen	mg/L	9.60	7.71	-	-	-			
Total Phosphorus	mg/L	1.83	1.16	-	-	-			
Date of Performance	DD/MM/YY	30/07/20	30/07/20						

COMMENTS

<u>Sample ID</u>	<u>Comment Level</u>	<u>Method</u>	<u>Test</u>	<u>Comment</u>
L20061959	Method	MI01MUG	-	Result confirmed. Sample analysed outside recommended holding time of 24Hrs.

Analysis

MI01MUG

Analysis Requirements

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

"- " = 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 <i>Acceptance Criteria</i>	Negative Control <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	Precision <i>Acceptance Criteria</i>
MI01MUG [Membrane Filtration]E.coli						
<1 CFU/100mL	<1	Accepted	Accepted	6	6	Accepted
MI01MUG [Membrane Filtration]Faecal Coliform						
<1 CFU/100mL	<1	Accepted	Accepted	6	6	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	0.93 <i>0.88 - 1.12 mg/L</i>	94 % Recovery <i>80 - 120 % Recovery</i>	3.43	3.40	0.88 % <i>0 - 20 %</i>
NU102 Total Phosphorus						
<0.002 mg/L	<0.002	0.047 <i>0.045 - 0.055 mg/L</i>	106 % Recovery <i>80 - 120 % Recovery</i>	3.38	3.48	2.92 % <i>0 - 20 %</i>
WC12MET Conductivity (mS/m)						
<0.1 mS/m	F	141.8 <i>139.3 - 143.3 mS/m</i>	E	106.7	106.8	0.94e-1 % <i>0 - 20 %</i>
WC17NS BOD5						
<2 mg/L	<2	190 <i>139 - 257 mg/L</i>	E	170	180	5.71 % <i>0 - 20 %</i>

LOQ	Blank	Control <i>Acceptance Criteria</i>	Spike <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	RPD <i>Acceptance Criteria</i>
WC26NS500 Oil & Grease						
<5 mg/L	<5	95 85.1 - 101.5 mg/L	E			
WC44NS Total Suspended Solids						
<2 mg/L	<2	51 42.5 - 57.5 mg/L	E	120	120	0.00 % 0 - 20 %

Extra Note:

F: Blank is not applicable for this analyte

E: Spike is not applicable for this analyte