

Analytical Report 203976



Laboratory Services

Issue Date: 21/05/2019
Issued By : Sydney Water Laboratory Services

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Sydney Water Approved Signatory

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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	L19038257	1	08/05/2019	09/05/2019	20/05/2019	Polisher
Point 2	L19038258	1	08/05/2019	09/05/2019	18/05/2019	Turkey
Point 3	L19038259	1	08/05/2019	09/05/2019	17/05/2019	Inlet STW
Point 4	L19038260	1	08/05/2019	09/05/2019	16/05/2019	Splitter box large aerator
Point 5	L19038261	1	08/05/2019	09/05/2019	16/05/2019	Outlet of sml aerator

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	Point 3	Point 4	Point 5			
Sampled Date	08/05/2019 07:30:00 AM	08/05/2019 08:00:00 AM	08/05/2019 07:43:00 AM	08/05/2019 07:35:00 AM	08/05/2019 07:35:00 AM			
Sample Number	L19038257	L19038258	L19038259	L19038260	L19038261			

CHEMISTRY

WC12MET : Conductivity

Conductivity (uS/cm)	uS/cm	1020	1152	-	-	-		
Date of Performance	DD/MM/YY	09/05/19	10/05/19					

WC17NS : Biological oxygen demand

BOD5	mg/L	<2	-	120	280	36		
Date of Performance	DD/MM/YY	10/05/19		10/05/19	10/05/19	10/05/19		

WC26NS500 : Grease

Oil & Grease	mg/L	<5	<5	-	-	-		
Date of Performance	DD/MM/YY	13/05/19	14/05/19					

WC44NS : Determination of Total, Fixed & Volatile Suspended Solids

Total Suspended Solids	mg/L	6	-	-	-	-		
Date of Performance	DD/MM/YY	13/05/19						

MICRO

"-" = Not required or refer to Laboratory comment

Client Sample ID		Point 1	Point 2	Point 3	Point 4	Point 5			
Sampled Date		08/05/2019 07:30:00 AM	08/05/2019 08:00:00 AM	08/05/2019 07:43:00 AM	08/05/2019 07:35:00 AM	08/05/2019 07:35:00 AM			
Sample Number		L19038257	L19038258	L19038259	L19038260	L19038261			
MICRO									
MI01MUG : Faecal Coliform and/or E. coli									
E.coli	CFU/100mL	-	~550	-	-	-			
Faecal Coliform	CFU/100mL	-	~550	-	-	-			
Date of Performance	D/M/Y H:M		09/05/19 16:40						
NUTRIENTS									
NU102 : Nitrogen & Phosphorus									
Total Nitrogen	mg/L	3.66	4.00	-	-	-			
Total Phosphorus	mg/L	0.740	0.900	-	-	-			
Date of Performance	DD/MM/YY	13/05/19	13/05/19						

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

COMMENTS

<u>Sample ID</u>	<u>Comment Level</u>	<u>Method</u>	<u>Test</u>	<u>Comment</u>
L19038258	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	~550	~550	Not Calculated
MI01MUG [Membrane Filtration]Faecal Coliform						
<1 CFU/100mL	<1	Accepted	Accepted	~550	~550	Not Calculated

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	0.94 <i>0.88 - 1.12 mg/L</i>	95 % Recovery <i>80 - 120 % Recovery</i>	3.66	3.56	2.77 % <i>0 - 20 %</i>
NU102 Total Phosphorus						
<0.002 mg/L	<0.002	0.052 <i>0.045 - 0.055 mg/L</i>	98 % Recovery <i>80 - 120 % Recovery</i>	0.740	0.720	2.74 % <i>0 - 20 %</i>
WC12MET Conductivity (uS/cm)						
<1 uS/cm	F	1414 <i>1393 - 1433 uS/cm</i>	E	708.3	708.4	0.14e-1 % <i>0 - 20 %</i>
WC17NS BOD5						
<2 mg/L	<2	180 <i>139 - 257 mg/L</i>	E	180	160	11.76 % <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	100 85.1 - 101.5 mg/L	E	55	55	5.31 % 0 - 50 %
WC44NS Total Suspended Solids						
<2 mg/L	<2	50 42.5 - 57.5 mg/L	E	180	180	0.00 % 0 - 20 %

Extra Note:

F: Blank is not applicable for this analyte

E: Spike is not applicable for this analyte