

# Analytical Report 214120



## Laboratory Services

**Issue Date:** 3/12/2019  
**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](mailto:analyticalservices@sydneywater.com.au)

**Attention:** Victor Papierniak-Wojtowicz  
**Customer:** Cobar Shire Council  
**Customer ID:** ZCSC

**Address:** PO Box 223  
Cobar NSW 2835  
**Telephone:** 6835 5800

**Email:** [victor.papierniak@cobar.nsw.gov.au](mailto: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

Rong Feng, Clean & Waste Water Analyst  
Lianying Zheng, Nutrients Senior analyst

Ricardo Quintana, Clean & Waste Water 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.

**Corporate Accreditation No 63**

**Accredited for compliance with ISO/IEC 17025 - Testing**

**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	L19093090	1	20/11/2019	21/11/2019	28/11/2019	Polisher
Point 2	L19093091	1	20/11/2019	21/11/2019	28/11/2019	Turkeys
Point 3	L19093092	1	20/11/2019	21/11/2019	02/12/2019	Inlet
Point 4	L19093093	1	20/11/2019	21/11/2019	27/11/2019	Splitter Box 1
Point 5	L19093094	1	20/11/2019	21/11/2019	02/12/2019	Splitter Box 2

**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			
<b>Sampled Date</b>		20/11/2019 08:00:00 AM	20/11/2019 08:10:00 AM	20/11/2019 08:25:00 AM	20/11/2019 08:20:00 AM	20/11/2019 08:20:00 AM			
<b>Sample Number</b>		L19093090	L19093091	L19093092	L19093093	L19093094			
<b>CHEMISTRY</b>									
WC17NS : Biological oxygen demand									
BOD5	mg/L	3	5	130	150	5			
Date of Performance	DD/MM/YY	22/11/19	22/11/19	22/11/19	22/11/19	22/11/19			
WC26NS : Grease									
Oil & Grease	mg/L	<3	<3	-	-	-			
Date of Performance	DD/MM/YY	27/11/19	27/11/19						
WC26NS500 : Grease									
Oil & Grease	mg/L	<5	-	-	-	-			
Date of Performance	DD/MM/YY	27/11/19							
WC44NS : Determination of Total, Fixed & Volatile Suspended Solids									
Total Suspended Solids	mg/L	40	6	-	-	-			
Date of Performance	DD/MM/YY	25/11/19	25/11/19						
<b>NUTRIENTS</b>									

"-" = Not required or refer to Laboratory comment

<b>Client Sample ID</b>		Point 1	Point 2	Point 3	Point 4	Point 5			
<b>Sampled Date</b>		20/11/2019 08:00:00 AM	20/11/2019 08:10:00 AM	20/11/2019 08:25:00 AM	20/11/2019 08:20:00 AM	20/11/2019 08:20:00 AM			
<b>Sample Number</b>		L19093090	L19093091	L19093092	L19093093	L19093094			
<b>NUTRIENTS</b>									
NU102 : Nitrogen & Phosphorus									
Total Nitrogen	mg/L	2.34	3.43	-	-	-			
Total Phosphorus	mg/L	0.350	0.433	-	-	-			
Date of Performance	DD/MM/YY	22/11/19	22/11/19						

**COMMENTS**

"-" = 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	Control <i>Acceptance Criteria</i>	Spike <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	RPD <i>Acceptance Criteria</i>
<b>NU102 Total Nitrogen</b>						
<0.05 mg/L	<0.05	<b>0.93</b> <i>0.88 - 1.12 mg/L</i>	<b>93 % Recovery</b> <i>80 - 120 % Recovery</i>	<b>0.54</b>	<b>0.52</b>	<b>3.77 %</b> <i>0 - 50 %</i>
<b>NU102 Total Phosphorus</b>						
<0.002 mg/L	<0.002	<b>0.048</b> <i>0.045 - 0.055 mg/L</i>	<b>98 % Recovery</b> <i>80 - 120 % Recovery</i>	<b>0.008</b>	<b>0.009</b>	<b>B</b> <i>0 - 0 %</i>
<b>WC17NS BOD5</b>						
<2 mg/L	<2	<b>190</b> <i>168 - 228 mg/L</i>	<b>E</b>	<b>5</b>	<b>6</b>	<b>B</b> <i>0 - 0 %</i>
<b>WC26NS500 Oil &amp; Grease</b>						
<5 mg/L	<5	<b>89</b> <i>85.1 - 101.5 mg/L</i>	<b>E</b>			
<b>WC26NS Oil &amp; Grease</b>						
<3 mg/L	<3	<b>89</b> <i>85.1 - 101.5 mg/L</i>	<b>E</b>			
<b>WC44NS Total Suspended Solids</b>						
<2 mg/L	<2	<b>53</b> <i>42.5 - 57.5 mg/L</i>	<b>E</b>	<b>420</b>	<b>450</b>	<b>6.90 %</b> <i>0 - 20 %</i>

Extra Note:

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 BOD5 B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ