

# Analytical Report 218790



## Laboratory Services

**Issue Date:** 25/02/2020  
**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](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

Jeya Gajendran, Clean & Waste Water Analyst  
Greta Haddad, Nutrients Laboratory Supervisor

Rong Feng, 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 Polisher	L20014387	1	11/02/2020	12/02/2020	24/02/2020	
Point 2 Turkeys	L20014388	1	11/02/2020	12/02/2020	20/02/2020	
Inlet	L20014389	1	11/02/2020	12/02/2020	20/02/2020	
Splitter Box 1	L20014390	1	11/02/2020	12/02/2020	20/02/2020	
Splitter Box 2	L20014391	1	11/02/2020	12/02/2020	20/02/2020	

**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**

<b>Client Sample ID</b>	Point 1 Polisher	Point 2 Turkeys	Inlet	Splitter Box 1	Splitter Box 2			
<b>Sampled Date</b>	11/02/2020 12:00:00 AM	11/02/2020 12:00:00 AM	11/02/2020 12:00:00 AM	11/02/2020 12:00:00 AM	11/02/2020 12:00:00 AM			
<b>Sample Number</b>	L20014387	L20014388	L20014389	L20014390	L20014391			

**CHEMISTRY**

**WC12MET : Conductivity**

Conductivity (mS/m)	mS/m	197.6	177.4	-	-	-		
Date of Performance	DD/MM/YY	12/02/20	12/02/20					

**WC17NS : Biological oxygen demand**

BOD5	mg/L	10	12	160	150	9		
Date of Performance	DD/MM/YY	14/02/20	14/02/20	14/02/20	14/02/20	14/02/20		

**WC26NS500 : Grease**

Oil & Grease	mg/L	<5	<5	-	-	-		
Date of Performance	DD/MM/YY	14/02/20	14/02/20					

**WC44NS : Determination of Total, Fixed & Volatile Suspended Solids**

Total Suspended Solids	mg/L	34	43	-	-	-		
Date of Performance	DD/MM/YY	17/02/20	14/02/20					

**NUTRIENTS**

"-" = Not required or refer to Laboratory comment

<b>Client Sample ID</b>		Point 1 Polisher	Point 2 Turkeys	Inlet	Splitter Box 1	Splitter Box 2			
<b>Sampled Date</b>		11/02/2020 12:00:00 AM	11/02/2020 12:00:00 AM	11/02/2020 12:00:00 AM	11/02/2020 12:00:00 AM	11/02/2020 12:00:00 AM			
<b>Sample Number</b>		L20014387	L20014388	L20014389	L20014390	L20014391			
<b>NUTRIENTS</b>									
NU102 : Nitrogen & Phosphorus									
Total Nitrogen	mg/L	5.76	6.52	-	-	-			
Total Phosphorus	mg/L	0.946	0.632	-	-	-			
Date of Performance	DD/MM/YY	14/02/20	14/02/20						

**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>102 % Recovery</b> <i>80 - 120 % Recovery</i>	<b>0.24</b>	<b>0.26</b>	<b>B</b> <i>0 - 0 %</i>
<b>NU102 Total Phosphorus</b>						
<0.002 mg/L	<0.002	<b>0.047</b> <i>0.045 - 0.055 mg/L</i>	<b>98 % Recovery</b> <i>80 - 120 % Recovery</i>	<b>0.003</b>	<b>0.003</b>	<b>B</b> <i>0 - 0 %</i>
<b>WC12MET Conductivity (mS/m)</b>						
<0.1 mS/m	<b>F</b>	<b>142.2</b> <i>139.3 - 143.3 mS/m</i>	<b>E</b>	<b>26.2</b>	<b>26.2</b>	<b>0.00 %</b> <i>0 - 20 %</i>
<b>WC17NS BOD5</b>						
<2 mg/L	<2	<b>170</b> <i>139 - 257 mg/L</i>	<b>E</b>	<b>160</b>	<b>150</b>	<b>6.45 %</b> <i>0 - 20 %</i>
<b>WC26NS500 Oil &amp; Grease</b>						
<5 mg/L	<5	<b>96</b> <i>85.1 - 101.5 mg/L</i>	<b>E</b>			
<b>WC44NS Total Suspended Solids</b>						
<2 mg/L	<2	<b>51</b> <i>42.5 - 57.5 mg/L</i>	<b>E</b>	<b>200</b>	<b>190</b>	<b>5.13 %</b> <i>0 - 20 %</i>

Extra Note:

F: Blank is not applicable for this analyte

E: Spike is not applicable for this analyte

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

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