



Barossa Infrastructure Ltd  
ATTN: Simon Schutz  
PO Box 665  
TANUNDA  
SA 5352 AUSTRALIA

05/09/2019

Dear Simon

Please find attached the Final Analytical Report for

**Customer Service Request:**      122622-2019-CSR-1  
**Account:**                              122622  
**Project:**                                AWQC-139854 Barossa Infrastructure Ltd - Routine 19/20

This report has also been sent to: Neville Skipworth

**AWQC Sample Receipt hours are Monday and Tuesday 8:30am to 8pm and Wednesday, Thursday and Friday 8:30am to 4:30pm.**

Yours sincerely,

Brendan Walsh  
Customer Service Officer  
[Brendan.Walsh@sawater.com.au](mailto:Brendan.Walsh@sawater.com.au)  
+61 8 7424 2889





**FINAL REPORT: 258688**

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**Report Information**

**Project Name** AWQC-139854  
**Customer** Barossa Infrastructure Ltd  
**CSR\_ID** 122622-2019-CSR-1

**Analytical Results**

**Customer Sample Description** BIL Connection Point  
**Sampling Point** 84513-Barossa Infrastructure Ltd - Fromms Square Williamstown  
**Sampled Date** 23/08/2019 7:25:57AM  
**Sample Received Date** 23/08/2019 7:25:57AM  
**Sample Analysis Completed** 4/09/2019 2:58:27PM  
**Sample ID** \*2019-006-6282  
**Status** Endorsed  
**GuidelineType** ECOLI  
**Collection Type** AWQC Collected

**Bacteriology** **LOR** **Result** **Test Start Date**

*Sample temperature at time of receipt NA*

**E.coli & Thermotolerant Coliforms T0081-01 WMZ-500(ADEL)**

E.coli 0 cfu/100mL  
Thermotolerant Coliforms 0 cfu/100mL

**Inorganic Chemistry - Metals** **LOR** **Result** **Test Start Date**

*Sample temperature at time of receipt NA*

**Arsenic - Total TIC-006 W09-023(ADEL)** 26/08/2019

Arsenic - Total 0.0003 <0.0003 mg/L

**Boron - Soluble TIC-006 W09-023(ADEL)** 26/08/2019

Boron - Soluble 0.020 <0.020 mg/L

**Cadmium - Total TIC-006 W09-023(ADEL)** 26/08/2019

Cadmium - Total 0.0001 <0.0001 mg/L

**Calcium TIC-004 W09-023(ADEL)** 26/08/2019

Calcium 0.1 9.5 mg/L

**Chromium - Total TIC-006 W09-023(ADEL)** 26/08/2019

Chromium - Total 0.0001 0.0002 mg/L

**Iron - Total TIC-006 W09-023(ADEL)** 26/08/2019

Iron - Total 0.0005 0.0877 mg/L

**Lead - Total TIC-006 W09-023(ADEL)** 26/08/2019

Lead - Total 0.0001 0.0002 mg/L

**Magnesium TIC-004 W09-023(ADEL)** 26/08/2019

Magnesium 0.05 5.22 mg/L

**Manganese - Total TIC-006 W09-023(ADEL)** 26/08/2019

Manganese - Total 0.0001 0.0065 mg/L

**Potassium TIC-004 W09-023(ADEL)** 26/08/2019

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<b>Potassium TIC-004 W09-023(ADEL)</b>			26/08/2019
Potassium	0.05	1.55 mg/L	
<b>Sodium Adsorption Ratio W09-023(ADEL)</b>			23/08/2019
Sodium Adsorption Ratio - Calculation		2.32	
<b>Sodium TIC-004 W09-023(ADEL)</b>			26/08/2019
Sodium	0.1	35.9 mg/L	
<b>Sulphur TIC-004 W09-023(ADEL)</b>			26/08/2019
Sulphate	1.5	26.4 mg/L	
Sulphur	0.5	8.8 mg/L	
<b>Total Hardness as CaCO3 W09-023(ADEL)</b>			23/08/2019
Total Hardness as CaCO3	2.0	45 mg/L	
<b>Zinc - Total TIC-006 W09-023(ADEL)</b>			26/08/2019
Zinc - Total	0.0003	0.0015 mg/L	

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
<b>Chloride T0104-02 W09-023(ADEL)</b>			27/08/2019
Chloride	4.0	51 mg/L	
<b>Nitrate + Nitrite as N T0161-01 W09-023(ADEL)</b>			04/09/2019
Nitrate + Nitrite as N	0.003	0.030 mg/L	
<b>Nitrogen - Total TMZ-M06 W09-023(ADEL)</b>			23/08/2019
Nitrogen - Total		0.52 mg/L	
<b>Phosphorus - Total T0109-01 W09-023(ADEL)</b>			28/08/2019
Phosphorus - Total	0.005	0.011 mg/L	
<b>TKN as N T0112-01 W09-023(ADEL)</b>			28/08/2019
TKN as Nitrogen	0.05	0.49 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
<b>Conductivity &amp; Total Dissolved Solids T0016-01 W09-023(ADEL)</b>			27/08/2019
Conductivity	2	310 µS/cm	
Total Dissolved Solids (by EC)	1	171 mg/L	



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**pH T0010-01 W09-023(ADEL) 27/08/2019**

pH 7.7 pH units  
Temperature at which pH is measured 22.6 °C

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**Turbidity T0018-01 W09-023(ADEL) 26/08/2019**

Turbidity 0.1 1.2 NTU



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**AWQC Signatories**

Dzung Bui - Supervisor Metals and Physical

Ivana Cech - Technical Officer Chemistry

Vickie Dalgleish - Snr Technical Officer

David Evans - Technical Officer Chemistry

Gayle Polley - Snr Technical Officer



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**Incidents**

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2019-006-6282	84513	BIL Connection Point	23/08/2019	Turbidity	Test results have been checked and the results verified

**Guidelines**

ECOLI	E.coli	Minimum Value	Maximum Value	Units
<b>Guideline Version:2</b>				
<b>Health1</b>				
110960, 110961, 110963, 110964, 120464, 120465, 120466, 120468, 120469, 122450	E.coli	-	0	cfu/100mL
122436, 122437	E.coli/F Coliforms - Presumptive	-	0	cfu/100mL
<b>Primary Contact</b>				
110965, 110967, 110968, 110970, 110972, 120470, 120471, 120472, 120475, 120476	E.coli	-	150	MPN/100mL
110969, 110971, 110973, 110974, 120473, 120474	Faecal coliforms	-	150	cfu/100mL

**Analytical Method**

Analytical Method Code	Description	Reference Method
T0010-01	Determination of pH	AP4500HB
T0016-01	Determination of Conductivity - Corrected to 25C	AP2510B
T0018-01	Turbidity - Nephelometric Measurement	APAWWA-WEF
T0081-01	E. coli - Membrane filtration	USEPA1604_1H
T0104-02	Chloride - Discrete Analyser	AP4500CLE
T0109-01	Phosphorus - total by discrete analyser	AP4500PF
T0112-01	Nitrogen- Total Kjeldahl by discrete analyser	AP4500NORGA
T0161-01	Nitrate + Nitrate (NOx) - Automated Flow Colorimetry	AP4500NO3I
TIC-004	Determination of Metals - ICP Spectrometry by ICP2	AP3120
TIC-006	Elemental Analysis By ICP- MS	EPA200.8
TMZ-M06	Derived Results and Data Checks	AP4500NORGA
W-052	Preparation of Samples for Metal Analysis	AP3030AD



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### Sampling Method

Sampling Method Code	Description
W09-023	Sampling Method for Chemical Analyses
WMZ-500	Sampling Method for Microbiological Analyses

**When samples are taken by customers, samples are analysed as received.**

### Laboratory Information

Laboratory	NATA accreditation ID
Inorganic Chemistry - Physical	1115
Inorganic Chemistry - Nutrients	1115
Bacteriology	1115
Inorganic Chemistry - Metals	1115



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#### Notes

1. The last figure of the result value is a significant figure.
2. # determination of the component is not covered by NATA Accreditation.
3. ^ indicates result is out of specification according to the reference guideline. Refer to report footer.
4. \* indicates an incident has been recorded against the sample. Refer to report footer.
5. & Indicates the results have changed since the last issued report.
6. The Limit of Reporting (LOR) is the lowest concentration of analyte which is reported at the AWQC and is based on the LOQ rounded up to a more readily used value. The Limit of Quantitation (LOQ) is the lowest concentration of analyte for which quantitative results may be obtained within a specified degree of confidence.
7. Where collection type is AWQC Collect, NATA has confirmed that due to a robust system in place for maintaining the temperature integrity for samples collected by AWQC's Field Laboratory Services, the recording of temperature when samples arrive at the AWQC is out of scope.
8. Where applicable the [Measurement of Uncertainty](https://www.awqc.com.au/our-services/analytical-services/measurement-uncertainty) is available at <https://www.awqc.com.au/our-services/analytical-services/measurement-uncertainty>.
9. If pH has been tested then the pH will be outside of its holding time unless measured in the field.
10. (ADEL) indicates analysed in Adelaide, (MELB) indicates analysed in Melbourne.