



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

08/11/2021

Dear Simon

Please find attached the Final Analytical Report for

**Customer Service Request:**      122622-2021-CSR-1  
**Account:**                              122622  
**Project:**                                AWQC-164023 Barossa Infrastructure Ltd - Routine 21/22

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,

Jason Cutler  
Customer Service Officer  
[Jason.Cutler@sawater.com.au](mailto:Jason.Cutler@sawater.com.au)





**FINAL REPORT: 324189**

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**Report Information**

**Project Name** AWQC-164023  
**Customer** Barossa Infrastructure Ltd  
**CSR\_ID** 122622-2021-CSR-1

**Analytical Results**

**Sampling Point** 84513-Barossa Infrastructure Ltd - Fromms Square Williamstown  
**Sampled Date** 22/10/2021 8:47:57AM  
**Sample Received Date** 22/10/2021 8:47:57AM  
**Sample Analysis Completed** 3/11/2021 4:48:45PM  
**Sample ID** \*2021-009-2385  
**Status** Endorsed  
**Collection Type** AWQC Collected

Bacteriology	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
<b>E.coli &amp; Thermotolerant Coliforms T0081-01 WMZ-500(ADEL)</b>			22/10/2021
E.coli		0 cfu/100mL	
Thermotolerant Coliforms		0 cfu/100mL	

Inorganic Chemistry - Metals	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
<b>Arsenic - Total TIC-006 W09-023(ADEL)</b>			25/10/2021
Arsenic - Total	0.0003	0.0011 mg/L	
<b>Boron - Soluble TIC-006 W09-023(ADEL)</b>			25/10/2021
Boron - Soluble	0.020	<0.020 mg/L	
<b>Cadmium - Total TIC-006 W09-023(ADEL)</b>			25/10/2021
Cadmium - Total	0.0001	<0.0001 mg/L	
<b>Calcium TIC-004 W09-023(ADEL)</b>			27/10/2021
Calcium	0.1	11.2 mg/L	
<b>Chromium - Total TIC-006 W09-023(ADEL)</b>			25/10/2021
Chromium - Total	0.0001	0.0068 mg/L	
<b>Iron - Total TIC-006 W09-023(ADEL)</b>			25/10/2021
Iron - Total	0.0005	4.428 mg/L	
<b>Lead - Total TIC-006 W09-023(ADEL)</b>			25/10/2021
Lead - Total	0.0001	0.0023 mg/L	
<b>Magnesium TIC-004 W09-023(ADEL)</b>			27/10/2021
Magnesium	0.05	8.67 mg/L	
<b>Manganese - Total TIC-006 W09-023(ADEL)</b>			25/10/2021



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**Analytical Results**

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<b>Manganese - Total TIC-006 W09-023(ADEL)</b>			25/10/2021
Manganese - Total	0.0001	0.1375 mg/L	
<b>Potassium TIC-004 W09-023(ADEL)</b>			27/10/2021
Potassium	0.05	3.02 mg/L	
<b>Sodium Adsorption Ratio TMZ-M06 W09-023(ADEL)</b>			22/10/2021
Sodium Adsorption Ratio - Calculation		2.75	
<b>Sodium TIC-004 W09-023(ADEL)</b>			27/10/2021
Sodium	0.1	50.4 mg/L	
<b>Sulphur TIC-004 W09-023(ADEL)</b>			27/10/2021
Sulphate	1.5	15.6 mg/L	
Sulphur	0.5	5.2 mg/L	
<b>Total Hardness as CaCO3 TMZ-M06 W09-023(ADEL)</b>			22/10/2021
Total Hardness as CaCO3	2.0	64 mg/L	
<b>Zinc - Total TIC-006 W09-023(ADEL)</b>			25/10/2021
Zinc - Total	0.0003	0.0150 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>			26/10/2021
Chloride	4.0	94 mg/L	
<b>Nitrate + Nitrite as N T0161-01 W09-023(ADEL)</b>			26/10/2021
Nitrate + Nitrite as N	0.003	0.189 mg/L	
<b>Nitrogen - Total TMZ-M06 W09-023(ADEL)</b>			22/10/2021
Nitrogen - Total		1.18 mg/L	
<b>Phosphorus - Total T0109-01 W09-023(ADEL)</b>			01/11/2021
Phosphorus - Total	0.005	0.106 mg/L	
<b>TKN as N T0112-01 W09-023(ADEL)</b>			01/11/2021
TKN as Nitrogen	0.05	0.99 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
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Status	Endorsed
Collection Type	AWQC Collected

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**Sample temperature at time of receipt NA**

**Conductivity & Total Dissolved Solids T0016-01 W09-023(ADEL) 26/10/2021**

Conductivity	2	416 µS/cm
Note		Conductivity measurement is corrected to 25°C
Total Dissolved Solids (by EC)	1	230 mg/L

**pH T0010-01 W09-023(ADEL) 26/10/2021**

pH		7.2 pH units
Temperature at which pH is measured		22.2 °C

**Turbidity T0018-01 W09-023(ADEL) 26/10/2021**

Turbidity	0.1	52 NTU
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Sampling	LOR	Result	Test Start Date
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**Sample temperature at time of receipt NA**

**Chlorine T0012-01 W09-023(ADEL) 22/10/2021**

Chlorine - Free	0.1	<0.1 mg/L
Chlorine - Total	0.1	<0.1 mg/L
Monochloramine	0.1	<0.1 mg/L

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Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
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**Sample temperature at time of receipt NA**

**Biochemical Oxygen Demand - Total T0153-01 W09-023(ADEL) 22/10/2021**

Biochemical Oxygen Demand	2	4 mg/L
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**Suspended Solids T0160-01 W09-023(ADEL) 25/10/2021**

Suspended Solids	1.0	10 mg/L
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**AWQC Signatories**

Mira Banasiak - Supervisor Bacteriology and Molecular Testing Services

Dzung Bui - Supervisor Metals and Physical

Ivana Cech - Technical Officer Chemistry

Thuy Diep - Technical Officer Chemistry

David Evans - Technical Officer Chemistry

Aji John - Technical Officer Chemistry

Andrew Kay - Technical Officer Chemistry

Simon Livingston - Field Technician

Melissa Phillips - Technical Officer Chemistry

Saiful Talukder - Technical Officer Chemistry



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**Incidents**

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2021-009-2385	84513	Barossa Infrastructure Ltd - Fromms Square Williamstown	22/10/2021	Turbidity	Test not processed within holding time
2021-009-2385	84513	Barossa Infrastructure Ltd - Fromms Square Williamstown	22/10/2021	pH	Test not processed within holding time

**Analytical Method**

Analytical Method Code	Description	Reference Method
T0112-01	Nitrogen- Total Kjeldahl by discrete analyser	AP4500NORGA
T0161-01	Nitrate + Nitrate (NOx) - Automated Flow Colorimetry	AP4500NO3I
T0012-01	Chlorine by classical and portable meter (field test)	AP4500CLF
T0016-01	Determination of Conductivity - Corrected to 25C	AP2510B
T0104-02	Chloride - Discrete Analyser	AP4500CLE
T0160-01	Suspended Solids 103C to 105C	AP4500
T0010-01	Determination of pH	AP4500HB
T0018-01	Turbidity - Nephelometric Measurement	APAWWA-WEF
T0153-01	Biochemical Oxygen Demand	AP5210B
TMZ-M06	Derived Results and Data Checks	AP4500NORGA
T0081-01	E. coli - Membrane filtration	USEPA1604_1H
T0109-01	Phosphorus - total by discrete analyser	AP4500PF
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	
TMZ-M06	Derived Results and Data Checks	APHA2340B
W-052	Preparation of Samples for Metal Analysis	AP3030AD

**Sampling Method**

Sampling Method Code	Description
W09-023	Sampling Method for Chemical Analyses
WMZ-500	Sampling Method for Microbiological Analyses
<b>When samples are taken by customers, samples are analysed as received.</b>	



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**Laboratory Information**

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<b>Laboratory</b>	<b>NATA accreditation ID</b>
Inorganic Chemistry - Waste Water	1115
Inorganic Chemistry - Physical	1115
Inorganic Chemistry - Metals	1115
Sampling	1115
Inorganic Chemistry - Nutrients	1115
Bacteriology	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. Where a result is required to meet compliance limits the associated measurement uncertainty must be considered. Measurement uncertainty is available at <https://www.awqc.com.au/our-services/Water-quality-testing-and-analysis/measurement-uncertainty>
  7. Uncertainty of Measurement is reported with a coverage factor of 2 providing approximately 95% confidence interval
  8. 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.
  9. 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.
  10. If pH has been tested then the pH will be outside of its holding time unless measured in the field.
  11. (ADEL) indicates analysed in Adelaide, (MELB) indicates analysed in Melbourne.