



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

05/02/2024

Dear Simon

Please find attached the Final Analytical Report for

**Customer Service Request:**      122622-2023-CSR-2  
**Account:**                              122622  
**Project:**                                AWQC-189782 Barossa Infrastructure Ltd - Routine 23/24

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

Yours sincerely,

Corrina Smith  
Customer Service Officer  
[Corrina.Smith@sawater.com.au](mailto:Corrina.Smith@sawater.com.au)



Corporate Accreditation  
No.1115 Chemical and  
Biological Testing  
Accredited for compliance  
with ISO/IEC 17025 -  
Testing



**FINAL REPORT: 377372**

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**Report Information**

**Project Name** AWQC-189782  
**Customer** Barossa Infrastructure Ltd  
**CSR\_ID** 122622-2023-CSR-2

**Analytical Results**

**Sampling Point** 84513-Barossa Infrastructure Ltd - Fromms Square Williamstown  
**Sampled Date** 12/01/2024 9:26:53AM  
**Sample Received Date** 12/01/2024 9:26:53AM  
**Sample Analysis Completed** 23/01/2024 4:42:23PM  
**Sample ID** \*2023-009-9014  
**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>			12/01/2024
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>			19/01/2024
Arsenic - Total	0.00006	0.00106 mg/L	
<b>Boron - Soluble TIC-006 W09-023(ADEL)</b>			19/01/2024
Boron - Soluble	0.020	<0.020 mg/L	
<b>Cadmium - Total TIC-006 W09-023(ADEL)</b>			19/01/2024
Cadmium - Total	0.0001	<0.0001 mg/L	
<b>Calcium TIC-006 W09-023(ADEL)</b>			19/01/2024
Calcium	0.05	13.8 mg/L	
<b>Chromium - Total TIC-006 W09-023(ADEL)</b>			19/01/2024
Chromium - Total	0.0001	0.0010 mg/L	
<b>Iron - Total TIC-006 W09-023(ADEL)</b>			19/01/2024
Iron - Total	0.0005	0.8086 mg/L	
<b>Lead - Total TIC-006 W09-023(ADEL)</b>			19/01/2024
Lead - Total	0.0001	0.0015 mg/L	
<b>Magnesium TIC-006 W09-023(ADEL)</b>			19/01/2024
Magnesium	0.05	9.96 mg/L	
<b>Manganese - Total TIC-006 W09-023(ADEL)</b>			19/01/2024



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<b>Manganese - Total TIC-006 W09-023(ADEL)</b>			19/01/2024
Manganese - Total	0.0001	0.0887 mg/L	
<b>Potassium TIC-006 W09-023(ADEL)</b>			19/01/2024
Potassium	0.05	3.78 mg/L	
<b>Sodium Adsorption Ratio TMZ-M06 W09-023(ADEL)</b>			12/01/2024
Sodium Adsorption Ratio - Calculation		1.95	
<b>Sodium TIC-006 W09-023(ADEL)</b>			19/01/2024
Sodium	0.1	38.9 mg/L	
<b>Sulphur TIC-006 W09-023(ADEL)</b>			19/01/2024
Sulphate	0.6	15.9 mg/L	
Sulphur	0.2	5.3 mg/L	
<b>Total Hardness as CaCO<sub>3</sub> TMZ-M06 W09-023(ADEL)</b>			12/01/2024
Total Hardness as CaCO <sub>3</sub>	2.0	75 mg/L	
<b>Zinc - Total TIC-006 W09-023(ADEL)</b>			19/01/2024
Zinc - Total	0.0003	0.0217 mg/L	

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Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
<b>Ammonia as N T0100-01 W09-023(ADEL)</b>			12/01/2024
Ammonia as N	0.005	0.033 mg/L	
<b>Chloride T0104-02 W09-023(ADEL)</b>			16/01/2024
Chloride	4.0	70 mg/L	
<b>Nitrate + Nitrite as N T0161-01 W09-023(ADEL)</b>			23/01/2024
Nitrate + Nitrite as N	0.003	0.186 mg/L	
<b>Nitrogen - Total TMZ-M06 W09-023(ADEL)</b>			12/01/2024
Nitrogen - Total		0.74 mg/L	
<b>Phosphorus - Total T0109-01 W09-023(ADEL)</b>			18/01/2024
Phosphorus - Total	0.005	0.074 mg/L	
<b>TKN as N T0112-01 W09-023(ADEL)</b>			18/01/2024
TKN as Nitrogen	0.05	0.55 mg/L	



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Inorganic Chemistry - Physical	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
<b>Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01 W09-023(ADEL)</b>			12/01/2024
Alkalinity as Calcium Carbonate		56 mg/L	
Bicarbonate		68 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
<b>Conductivity &amp; Total Dissolved Solids T0016-01 W09-023(ADEL)</b>			12/01/2024
Conductivity	2	396 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	219 mg/L	
<b>pH T0010-01 W09-023(ADEL)</b>			12/01/2024
pH		7.1 pH units	
Temperature at which pH is measured		22.8 °C	
<b>Turbidity T0018-01 W09-023(ADEL)</b>			15/01/2024
Turbidity	0.1	7.0 NTU	

Sampling	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
<b>Chlorine T0012-01 W09-023(ADEL)</b>			12/01/2024
Chlorine - Free	0.1	<0.1 mg/L	
Chlorine - Total	0.1	<0.1 mg/L	
Monochloramine	0.1	<0.1 mg/L	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
<b>Biochemical Oxygen Demand - Total T0153-01 W09-023(ADEL)</b>			12/01/2024
Biochemical Oxygen Demand	2	<2 mg/L	
<b>Suspended Solids T0160-01 W09-023(ADEL)</b>			18/01/2024



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**Suspended Solids T0160-01 W09-023(ADEL)**

18/01/2024

Suspended Solids      1.0      <1 mg/L



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**AWQC Signatories**

- Dzung Bui - Supervisor Metals and Physical
- Ivana Cech - Technical Officer Chemistry
- Vickie Dalgleish - Senior Technical Officer Bacteriology & Molecular Testing
- Thuy Diep - Technical Officer Chemistry
- Van Le Hoang - Technical Officer Chemistry
- Kerrie Jooste - Manager Chemistry Services
- Chad Major - Supervisor Field Services
- Melissa Phillips - Technical Officer Chemistry
- Gayle Polley - Supervisor Nutrients and Waste



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### Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2023-009-9014	84513	Barossa Infrastructure Ltd - Fromms Square Williamstown	12/01/2024	Turbidity	Test not processed within holding time

### Analytical Method

Analytical Method Code	Description	Reference Method
T0010-01	Determination of pH	AP4500HB
T0012-01	Chlorine by classical and portable meter (field test)	AP4500CLF
T0016-01	Determination of Conductivity - Corrected to 25C	AP2510B
T0018-01	Turbidity - Nephelometric Measurement	APAWWA-WEF
T0081-01	E. coli - Membrane filtration	USEPA1604_1H
T0100-01	Ammonia/Ammonium - Automated Flow Colorimetry	AP4500NH3G
T0101-01	Alkalinity - Automated Acidimetric Titration	AP2320B
T0104-02	Chloride - Discrete Analyser	AP4500CLE
T0109-01	Phosphorus - total by discrete analyser	AP4500PF
T0112-01	Nitrogen- Total Kjeldahl by discrete analyser	AP4500NORGA
T0153-01	Biochemical Oxygen Demand	AP5210B
T0160-01	Suspended Solids 103C to 105C	AP4500
T0161-01	Nitrate + Nitrite (NOx) - Automated Flow Colorimetry	AP4500NO3I
TIC-006	Elemental Analysis By ICP- MS	EPA200.8
TMZ-M06	Derived Results and Data Checks	
TMZ-M06	Derived Results and Data Checks	AP4500NORGA
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

**Sampling point and date sampled are provided when collected by customers. Validity of results are based on information and samples supplied by customers. Unless it is reported that sampling has been performed by AWQC, the samples have been analysed as received.**



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**Laboratory Information**

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Laboratory	NATA accreditation ID
Inorganic Chemistry - Physical	1115
Inorganic Chemistry - Waste Water	1115
Sampling	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. 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.
  12. AWQC Melbourne Laboratory are only NATA accredited for sampling of potable waters by inhouse method W09-023.