PO Box 1751250 Victoria SquareAdelaide SA 5001Adelaide SA 5000

Tel: 1300 653 366 Fax: 1300 883 171



Internet: www.awqc.com.au

Email: awqc@sawater.com.au

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

18/11/2022

Dear Simon

Please find attached the Final Analytical Report for

Customer Service Request:	122622-2022-CSR-1
Account:	122622
Project:	AWQC-176340 Barossa Infrastructure Ltd - Routine 22/23

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,

10. Ala

Jason Cutler Customer Service Officer Jason.Cutler@sawater.com.au +61 8 7424 1565



ABN 69336525019

AWQC

Internet: www.awqc.com.au

Email: awqc@sawater.com.au

FINAL REPORT: 350121

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Report Information

Project Name	AWQC-1763	340	
Customer	Barossa Infrastructure Ltd		
	122622-202	2-CSR-1	
Analytical Results			
Sampling Point	84513-Baros	sa Infrastucture Ltd - Fromms Square	e Williamstown
Sampled Date	21/10/2022	9:39:15AM	
Sample Received Date	21/10/2022	9:39:15AM	
Sample Analysis Completed	17/11/2022	4:43:32PM	
Sample ID	*2022-008-59	035	
Status	Endorsed		
Collection Type	AWQC Collec	oted	
Bacteriology	LOR	Result	Test Start Date
Sample temperature at time of receip E.coli & Thermotolerant Coliforms T		1)	21/10/2022

2 cfu/100mL

2 cfu/100mL

E.coli

Inorganic Chemistry - Metals	LOR	Result	Test Start Date
Sample temperature at time of receipt N	A		
Arsenic - Total TIC-006 W09-023(ADEL)			25/10/2022
Arsenic - Total	0.0003	0.0017 mg/L	
Boron - Soluble TIC-006 W09-023(ADEL)			25/10/2022
Boron - Soluble	0.020	0.035 mg/L	
Cadmium - Total TIC-006 W09-023(ADEL)			25/10/2022
Cadmium - Total	0.0001	<0.0001 mg/L	
Calcium TIC-006 W09-023(ADEL)			25/10/2022
Calcium	0.04	15.9 mg/L	
Chromium - Total TIC-006 W09-023(ADEL	_)		25/10/2022
Chromium - Total	0.0001	0.0050 mg/L	
Iron - Total TIC-006 W09-023(ADEL)			25/10/2022
Iron - Total	0.0005	4.182 mg/L	
Lead - Total TIC-006 W09-023(ADEL)			25/10/2022
Lead - Total	0.0001	0.0021 mg/L	
Magnesium TIC-006 W09-023(ADEL)			25/10/2022
Magnesium	0.04	12.0 mg/L	
Manganese - Total TIC-006 W09-023(ADE	L)		25/10/2022



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Analytical Results			
Sampling Point Sampled Date Sample Received Date Sample Analysis Completed Sample ID Status Collection Type	84513-Baross 21/10/2022 21/10/2022 17/11/2022 *2022-008-59 Endorsed AWQC Collect	9:39:15AM 4:43:32PM 935	liamstown
Manganese - Total TIC-006 W09-023(ADE	 EL)		25/10/2022
Manganese - Total	0.0001	0.2968 mg/L	
Potassium TIC-006 W09-023(ADEL)			25/10/2022
Potassium	0.040	3.33 mg/L	
Sodium Adsorption Ratio TMZ-M06 W09	-023(ADEL)		21/10/2022
Sodium Adsorption Ratio - Calculation		2.73	
Sodium TIC-006 W09-023(ADEL)			25/10/2022
Sodium	0.04	59.3 mg/L	
Sulphur TIC-006 W09-023(ADEL)			25/10/2022
Sulphate	0.6	18.0 mg/L	
Sulphur	0.2	6.0 mg/L	
Total Hardness as CaCO3 TMZ-M06 W09	-023(ADEL)		21/10/2022
Total Hardness as CaCO3	2.0	89 mg/L	
Zinc - Total TIC-006 W09-023(ADEL)			25/10/2022
Zinc - Total	0.0003	0.0148 mg/L	
Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date

morganie enemiery warrente	Eon	Nesult	lest Start Date
Sample temperature at time of receipt	NA		
Ammonia as N T0100-01 W09-023(ADE	L)		04/11/2022
Ammonia as N	0.005	<0.005 mg/L	
Chloride T0104-02 W09-023(ADEL)			21/10/2022
Chloride	4.0	117 mg/L	
Nitrate + Nitrite as N T0161-01 W09-023	(ADEL)		06/11/2022
Nitrate + Nitrite as N	0.003	0.047 mg/L	
Nitrogen - Total TMZ-M06 W09-023(ADE	EL)		21/10/2022
Nitrogen - Total		1.87 mg/L	
Phosphorus - Total T0109-01 W09-023(ADEL)		14/11/2022
Phosphorus - Total	0.005	0.161 mg/L	
TKN as N T0112-01 W09-023(ADEL)			17/11/2022
TKN as Nitrogen	0.05	1.82 mg/L	



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Analytical Results	
Sampling Point	84513-Barossa Infrastucture Ltd - Fromms Square Williamstown
Sampled Date	21/10/2022 9:39:15AM
Sample Received Date	21/10/2022 9:39:15AM
Sample Analysis Completed	17/11/2022 4:43:32PM
Sample ID	*2022-008-5935
Status	Endorsed
Collection Type	AWQC Collected

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receip	t NA		
Alkalinity Carbonate Bicarbonate and	Hydroxide T0101-0 ⁴	I W09-023(ADEL)	25/10/2022
Alkalinity as Calcium Carbonate		53 mg/L	
Bicarbonate		65 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids	T0016-01 W09-023(A	ADEL)	25/10/2022
Conductivity	2	532 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	294 mg/L	
pH T0010-01 W09-023(ADEL)			25/10/2022
рН		7.4 pH units	
Temperature at which pH is measured		21.9 °C	
Turbidity T0018-01 W09-023(ADEL)			24/10/2022
Turbidity	0.1	40 NTU	

Sampling	LOR	Result	Test Start Date
Sample temperature at time of recei Chlorine T0012-01 W09-023(ADEL)	pt NA		21/10/2022
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
Sample temperature at time of receipt I	VA		
Biochemical Oxygen Demand - Total T0	153-01 W09-023(AI	DEL)	21/10/2022
Biochemical Oxygen Demand	2	3 mg/L	
Suspended Solids T0160-01 W09-023(AI	DEL)		26/10/2022
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Testing



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ampling Point	84513-Barossa Infrastucture Ltd - Fromms Square Williamstown
	•
ampled Date	21/10/2022 9:39:15AM
ample Received Date	21/10/2022 9:39:15AM
Sample Analysis Completed	17/11/2022 4:43:32PM
Sample ID	*2022-008-5935
status	Endorsed
Collection Type	AWQC Collected

Suspended Solids

8 mg/L

1.0

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PO Box 1751 250 Victoria Square Adelaide SA 5001 Adelaide SA 5000

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AWQC Signatories

Mira Banasiak - Supervisor Bacteriology and Molecular Testing Services

Dzung Bui - Supervisor Metals and Physical

David Evans - Technical Officer Chemistry

Kerrie Jooste - Manager Chemistry Services

Chad Major - Supervisor Field Services



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2022-008-5935	84513	Barossa Infrastucture Ltd - Fromms Square Williamstown	21/10/2022	Turbidity	Test not processed within holding time
2022-008-5935	84513	Barossa Infrastucture Ltd - Fromms Square Williamstown	21/10/2022	рН	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 + Nitrate (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
	When complete are taken by sustamore, complete are enclosed as reasized

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



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Laboratory Information

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



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.awgc.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.