



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

09/08/2021

Dear Simon

Please find attached the Final Analytical Report for

Customer Service Request: 122622-2021-CSR-1
Account: 122622
Project: AWQC-160509 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





FINAL REPORT: 316768

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Analytical Results

Sampling Point	921120-Barossa Infrastructure CWMS Supply cnr Gomersal and Fromm Rd Tanunda
Sampled Date	26/07/2021 9:54:46AM
Sample Received Date	26/07/2021 9:54:46AM
Sample Analysis Completed	5/08/2021 11:42:58AM
Sample ID	*2021-005-8324
Status	Endorsed
Collection Type	AWQC Collected

Bacteriology	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
E.coli & Thermotolerant Coliforms T0081-01 WMZ-500(ADEL)			26/07/2021
E.coli		0 cfu/100mL	
Thermotolerant Coliforms		10000 cfu/100mL	

Inorganic Chemistry - Metals	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
Arsenic - Total TIC-006 W09-023(ADEL)			27/07/2021
Arsenic - Total	0.0003	0.0006 mg/L	
Boron - Soluble TIC-006 W09-023(ADEL)			27/07/2021
Boron - Soluble	0.020	0.073 mg/L	
Cadmium - Total TIC-006 W09-023(ADEL)			27/07/2021
Cadmium - Total	0.0001	<0.0001 mg/L	
Calcium TIC-004 W09-023(ADEL)			27/07/2021
Calcium	0.1	19.9 mg/L	
Chromium - Total TIC-006 W09-023(ADEL)			27/07/2021
Chromium - Total	0.0001	0.0009 mg/L	
Iron - Total TIC-006 W09-023(ADEL)			27/07/2021
Iron - Total	0.0005	0.1677 mg/L	
Lead - Total TIC-006 W09-023(ADEL)			27/07/2021
Lead - Total	0.0001	0.0007 mg/L	
Magnesium TIC-004 W09-023(ADEL)			27/07/2021
Magnesium	0.05	8.03 mg/L	
Manganese - Total TIC-006 W09-023(ADEL)			27/07/2021
Manganese - Total	0.0001	0.0376 mg/L	
Potassium TIC-004 W09-023(ADEL)			27/07/2021
Potassium	0.05	28.4 mg/L	
Sodium Adsorption Ratio TMZ-M06 W09-023(ADEL)			26/07/2021



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Sodium Adsorption Ratio TMZ-M06 W09-023(ADEL)		26/07/2021
Sodium Adsorption Ratio - Calculation	4.76	
Sodium TIC-004 W09-023(ADEL)		27/07/2021
Sodium	0.1	99.5 mg/L
Sulphur TIC-004 W09-023(ADEL)		27/07/2021
Sulphate	1.5	44.4 mg/L
Sulphur	0.5	14.8 mg/L
Total Hardness as CaCO3 TMZ-M06 W09-023(ADEL)		26/07/2021
Total Hardness as CaCO3	2.0	83 mg/L
Zinc - Total TIC-006 W09-023(ADEL)		27/07/2021
Zinc - Total	0.0003	0.0620 mg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
Chloride T0104-02 W09-023(ADEL)			27/07/2021
Chloride	4.0	111 mg/L	
Nitrate + Nitrite as N T0161-01 W09-023(ADEL)			04/08/2021
Nitrate + Nitrite as N	0.003	11.0 mg/L	
Nitrogen - Total TMZ-M06 W09-023(ADEL)			26/07/2021
Nitrogen - Total		31.80 mg/L	
Phosphorus - Total T0109-01 W09-023(ADEL)			03/08/2021
Phosphorus - Total	0.005	11.1 mg/L	
TKN as N T0112-01 W09-023(ADEL)			03/08/2021
TKN as Nitrogen	0.05	20.8 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt NA</i>			
Conductivity & Total Dissolved Solids T0016-01 W09-023(ADEL)			27/07/2021
Conductivity	2	910 µS/cm	



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Conductivity & Total Dissolved Solids T0016-01 W09-023(ADEL)		27/07/2021
Total Dissolved Solids (by EC)	1	505 mg/L
pH T0010-01 W09-023(ADEL)		27/07/2021
pH		7.2 pH units
Temperature at which pH is measured		22.3 °C
Turbidity T0018-01 W09-023(ADEL)		26/07/2021
Turbidity	0.1	20 NTU

Sampling	LOR	Result	Test Start Date
Sample temperature at time of receipt NA			
Chlorine T0012-01 W09-023(ADEL)			26/07/2021
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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AWQC Signatories

Mira Banasiak - Supervisor Bacteriology and Molecular Testing Services

Dzung Bui - Supervisor Metals and Physical

Ivana Cech - Technical Officer Chemistry

Vickie Dalglish - Senior Technical Officer Bacteriology & Molecular Testing

Thuy Diep - Technical Officer Chemistry

David Evans - Technical Officer Chemistry

Andrew Ford - Senior Technical Officer Chemistry

Aji John - Technical Officer Chemistry

Chami Karunatilaka - Technical Officer Chemistry

Brendan Walsh - Senior Field Officer



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2021-005-8323	84513	Barossa Infrastructure Ltd - Fromms Square Williamstown	16/07/2021	pH	Test not processed within holding time
2021-005-8323	84513	Barossa Infrastructure Ltd - Fromms Square Williamstown	16/07/2021	Turbidity	Test not processed within holding time
2021-005-8324	921120	Barossa Infrastructure CWMS Supply cnr Gomersal and Fromm Rd Tanunda	26/07/2021	pH	Test not processed within holding time

Analytical Method

Analytical Method Code	Description	Reference Method
W-052	Preparation of Samples for Metal Analysis	AP3030AD
TMZ-M06	Derived Results and Data Checks	
T0104-02	Chloride - Discrete Analyser	AP4500CLE
T0018-01	Turbidity - Nephelometric Measurement	APAWWA-WEF
TMZ-M06	Derived Results and Data Checks	AP4500NORGA
T0109-01	Phosphorus - total by discrete analyser	AP4500PF
T0081-01	E. coli - Membrane filtration	USEPA1604_1H
T0012-01	Chlorine by classical and portable meter (field test)	AP4500CLF
T0112-01	Nitrogen- Total Kjeldahl by discrete analyser	AP4500NORGA
TMZ-M06	Derived Results and Data Checks	APHA2340B
T0016-01	Determination of Conductivity - Corrected to 25C	AP2510B
TIC-006	Elemental Analysis By ICP- MS	EPA200.8
T0161-01	Nitrate + Nitrate (NOx) - Automated Flow Colorimetry	AP4500NO3I
T0010-01	Determination of pH	AP4500HB
TIC-004	Determination of Metals - ICP Spectrometry by ICP2	AP3120

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.



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Laboratory Information

Laboratory	NATA accreditation ID
Inorganic Chemistry - Physical 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.