



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

01/08/2019

Dear Simon

Please find attached the Final Analytical Report for

Customer Service Request: 122622-2018-CSR-1
Account: 122622
Project: AWQC-137524 Barossa Infrastructure Ltd - Routine 18/19

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,

Michelle de Ruyter
Scientist
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FINAL REPORT: 256235

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This report supercedes the following issued reports: 255930

Report Information

Project Name AWQC-137524
Customer Barossa Infrastructure Ltd
CSR_ID 122622-2018-CSR-1

Analytical Results

Sampling Point 921120-Barossa Infrastructure CWMS Supply cnr Gomersal and Fromm Rd Tanunda
Sampled Date 28/06/2019 9:12:56AM
Sample Received Date 28/06/2019 9:12:56AM
Sample Analysis Completed 4/07/2019 4:59:20PM
Sample ID 2019-004-2849
Status Endorsed
GuidelineType ECOLI
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)			28/06/2019
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>			
Arsenic - Total TIC-006 W09-023(ADEL)			01/07/2019
Arsenic - Total	0.0003	0.0007 mg/L	
Boron - Soluble TIC-006 W09-023(ADEL)			01/07/2019
Boron - Soluble	0.020	0.264 mg/L	
Cadmium - Total TIC-006 W09-023(ADEL)			01/07/2019
Cadmium - Total	0.0001	<0.0001 mg/L	
Calcium TIC-004 W09-023(ADEL)			01/07/2019
Calcium	0.1	21.0 mg/L	
Chromium - Total TIC-006 W09-023(ADEL)			01/07/2019
Chromium - Total	0.0001	0.0011 mg/L	
Iron - Total TIC-006 W09-023(ADEL)			01/07/2019
Iron - Total	0.0005	0.3311 mg/L	
Lead - Total TIC-006 W09-023(ADEL)			01/07/2019
Lead - Total	0.0001	0.0022 mg/L	
Magnesium TIC-004 W09-023(ADEL)			01/07/2019
Magnesium	0.05	8.04 mg/L	
Manganese - Total TIC-006 W09-023(ADEL)			01/07/2019
Manganese - Total	0.0001	0.0485 mg/L	
Potassium TIC-004 W09-023(ADEL)			01/07/2019



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GuidelineType	ECOLI		
Collection Type	AWQC Collected		

Potassium TIC-004 W09-023(ADEL)			01/07/2019
Potassium	0.05	25.5 mg/L	
Sodium Adsorption Ratio W09-023(ADEL)			28/06/2019
Sodium Adsorption Ratio - Calculation		4.15	
Sodium TIC-004 W09-023(ADEL)			01/07/2019
Sodium	0.1	88.1 mg/L	
Sulphur TIC-004 W09-023(ADEL)			01/07/2019
Sulphate	1.5	50.1 mg/L	
Sulphur	0.5	16.7 mg/L	
Total Hardness as CaCO3 W09-023(ADEL)			28/06/2019
Total Hardness as CaCO3	2.0	86 mg/L	
Zinc - Total TIC-006 W09-023(ADEL)			01/07/2019
Zinc - Total	0.0003	0.0867 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)			01/07/2019
Chloride	4.0	107 mg/L	
Nitrate + Nitrite as N T0161-01 W09-023(ADEL)			02/07/2019
Nitrate + Nitrite as N	0.003	2.61 mg/L	
Nitrogen - Total TMZ-M06 W09-023(ADEL)			28/06/2019
Nitrogen - Total		26.71 mg/L	
Phosphorus - Total T0109-01 W09-023(ADEL)			03/07/2019
Phosphorus - Total	0.005	10.4 mg/L	
TKN as N T0112-01 W09-023(ADEL)			03/07/2019
TKN as Nitrogen	0.05	24.1 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)			28/06/2019
Conductivity	2	848 µS/cm	
Total Dissolved Solids (by EC)	1	470 mg/L	



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GuidelineType	ECOLI
Collection Type	AWQC Collected

pH T0010-01 W09-023(ADEL) 28/06/2019

pH	7.3 pH units
Temperature at which pH is measured	22.5 °C

Turbidity T0018-01 W09-023(ADEL) 01/07/2019

Turbidity	0.1	23 NTU
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Sampling	LOR	Result	Test Start Date
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Sample temperature at time of receipt NA 28/06/2019

Chlorine T0012-01 W09-023(ADEL) 28/06/2019

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

Dzung Bui - Supervisor Metals and Physical

Thuy Diep - Technical Officer Chemistry

David Evans - Technical Officer Chemistry

Andrew Ford - Technical Officer Chemistry

Mazen Ghamrawi - Supervisor Field Services

Aji John - Technical Officer Chemistry

Melissa Phillips - Technical Officer Chemistry

Saiful Talukder - Technical Officer Chemistry



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Samples Not Collected

Sample ID	S.Point	Description	Sampled Date	Non Collect Reason
2019-004-2850	92112	Winery Waste -Apprx Belvidere Rd and Sturt Hwy	28/06/2019	Customer chose not to collect sample

Guidelines

ECOLI	Ecoli	Minimum Value	Maximum Value	Units
Guideline Version:2				
Health1				
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
Primary Contact				
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
T0104-02	Chloride - Discrete Analyser	AP4500CLE
W-052	Preparation of Samples for Metal Analysis	AP3030AD
T0109-01	Phosphorus - total by discrete analyser	AP4500PF
T0018-01	Turbidity - Nephelometric Measurement	APAWWA-WEF
T0081-01	E. coli - Membrane filtration	USEPA1604_1H
TMZ-M06	Derived Results and Data Checks	AP4500NORGA
T0012-01	Chlorine by classical and portable meter (field test)	AP4500CLF
T0016-01	Determination of Conductivity - Corrected to 25C	AP2510B
T0112-01	Nitrogen- Total Kjeldahl by discrete analyser	AP4500NORGA
T0161-01	Nitrate + Nitrate (NOx) - Automated Flow Colorimetry	AP4500NO3I
T0010-01	Determination of pH	AP4500HB
TIC-006	Elemental Analysis By ICP- MS	EPA200.8
TIC-004	Determination of Metals - ICP Spectrometry by ICP2	AP3120



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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 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. 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.