

FINAL REPORT: 180612

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Report Information

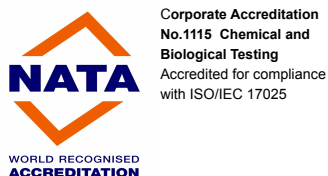
| | |
|--------------|----------------------------|
| Project Name | AWQC-101317 |
| Customer | BAROSSA INFRASTRUCTURE LTD |
| CSR_ID | 122622-2015-CSR-1 |

Analytical Results

| | |
|-----------------------------|---|
| Customer Sample Description | BIL connection point |
| Sampling Point | 84513-Barossa Infrastructure Ltd - Fromms Square Williamstown |
| Sampled Date | 18/03/2016 7:38:50AM |
| Sample Received Date | 18/03/2016 7:38:50AM |
| Sample ID | 2016-001-2763 |
| Status | Endorsed |
| GuidelineType | ECOLI |
| Collection Type | AWQC Collected |

Inorganic Chemistry - Metals

| LOR | Result |
|---|---------------------|
| Sample temperature at time of receipt NA | |
| Arsenic - Total TIC-006 W09-023 | |
| Arsenic - Total | 0.0003 0.0005 mg/L |
| Boron - Soluble TIC-006 W09-023 | |
| Boron - Soluble | 0.020 0.034 mg/L |
| Cadmium - Total TIC-006 W09-023 | |
| Cadmium - Total | 0.0001 <0.0001 mg/L |
| Calcium TIC-004 W09-023 | |
| Calcium | 0.1 9.8 mg/L |
| Chromium - Total TIC-006 W09-023 | |
| Chromium - Total | 0.0001 0.0013 mg/L |
| Ion Balance W09-023 | |
| Ion balance | -3.2 % |
| Iron - Total TIC-006 W09-023 | |
| Iron - Total | 0.0005 0.9038 mg/L |
| Lead - Total TIC-006 W09-023 | |
| Lead - Total | 0.0001 0.0012 mg/L |
| Magnesium TIC-004 W09-023 | |
| Magnesium | 0.05 7.10 mg/L |
| Manganese - Total TIC-006 W09-023 | |
| Manganese - Total | 0.0001 0.0284 mg/L |
| Potassium TIC-004 W09-023 | |
| Potassium | 0.05 2.66 mg/L |
| Sodium Adsorption Ratio W09-023 | |
| Sodium Adsorption Ratio - Calculation | 2.35 |
| Sodium TIC-004 W09-023 | |
| Sodium | 0.1 39.5 mg/L |
| Sulphur TIC-004 W09-023 | |



Notes

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Sulphur TIC-004 W09-023

| | | |
|----------|-----|-----------|
| Sulphate | 1.5 | 15.9 mg/L |
|----------|-----|-----------|

Total Hardness as CaCO3 W09-023

| | | |
|-------------------------|-----|---------|
| Total Hardness as CaCO3 | 2.0 | 54 mg/L |
|-------------------------|-----|---------|

Zinc - Total TIC-006 W09-023

| | | |
|--------------|--------|-------------|
| Zinc - Total | 0.0003 | 0.0064 mg/L |
|--------------|--------|-------------|

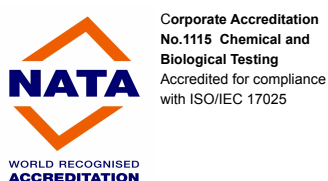
Inorganic Chemistry - Nutrients

| | LOR | Result |
|---|-------|------------|
| <i>Sample temperature at time of receipt NA</i> | | |
| Chloride T0104-02 W09-023 | | |
| Chloride | 4.0 | 63 mg/L |
| Nitrate + Nitrite as N T0161-01 W09-023 | | |
| Nitrate + Nitrite as N | 0.003 | 0.278 mg/L |
| Nitrogen - Total W09-023 | | |
| Nitrogen - Total | 0.06 | 0.79 mg/L |
| Phosphorus - Total T0109-01 W09-023 | | |
| Phosphorus - Total | 0.005 | 0.057 mg/L |
| TKN as N T0112-01 W09-023 | | |
| TKN as Nitrogen | 0.05 | 0.51 mg/L |

Inorganic Chemistry - Physical

| | LOR | Result |
|--|-----|--------------|
| <i>Sample temperature at time of receipt NA</i> | | |
| Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01 W09-023 | | |
| Alkalinity as Calcium Carbonate | | 46 mg/L |
| Bicarbonate | | 56 mg/L |
| Carbonate | | 0 mg/L |
| Hydroxide | | 0 mg/L |
| Conductivity & Total Dissolved Solids T0016-01 W09-023 | | |
| Conductivity | 1 | 342 µScm |
| Total Dissolved Solids (by EC) | 1.0 | 190 mg/L |
| pH T0010-01 W09-023 | | |
| pH | | 7.9 pH units |

Turbidity T0018-01 W09-023



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Turbidity T0018-01 W09-023

| | | |
|-----------|-----|--------|
| Turbidity | 0.1 | 20 NTU |
|-----------|-----|--------|



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

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AWQC Signatories

Roger Kennedy - Snr Technical Officer - Method Dev



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Guidelines

| ECOLI | Ecoli | Minimum Value | Maximum Value | Units |
|--|----------------------------------|---------------|---------------|-----------|
| Guideline Version:2 | | | | |
| Health1 | | | | |
| 110960, 110961, 110963, 110964, 120464, 120465, 120466, 120468, 120469, 122450 122436, 122437 | E.coli | - | 0 | cfu/100mL |
| 110965, 110967, 110968, 110970, 110972, 120470, 120471, 120472, 120475, 120476 110969, 110971, 110973, 110974, 120473, 120474 | E.coli/F Coliforms - Presumptive | - | 0 | cfu/100mL |
| Primary Contact | | | | |
| 110965, 110967, 110968, 110970, 110972, 120470, 120471, 120472, 120475, 120476 110969, 110971, 110973, 110974, 120473, 120474 | E.coli | - | 150 | MPN/100mL |
| | Faecal coliforms | - | 150 | cfu/100mL |

Analytical Method

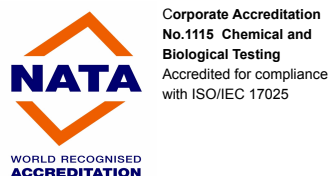
| Analytical Method Code | Description | Reference Method |
|------------------------|--|---------------------|
| T0010-01 | Determination of pH | APHA 4500-H B |
| T0016-01 | Determination of Conductivity | APHA 2510 B |
| T0018-01 | Turbidity - Nephelometric Measurement | APHA-AWWA-WEF |
| T0101-01 | Alkalinity - Automated Acidimetric Titration | APHA 2320 B |
| T0104-02 | Chloride - Discrete Analyser | APHA 4500-Cl- E |
| T0109-01 | Phosphorus - total by discrete analyser | APHA 4500-P F |
| T0112-01 | Nitrogen- Total Kjeldahl by discrete analyser | APHA 4500-N org A |
| T0161-01 | Nitrate + Nitrate (NOx) - Automated Flow Colorimetry | APHA 4500-NO3-I |
| TIC-004 | Determination of Metals - ICP Spectrometry by ICP2 | APHA 3120 |
| TIC-006 | Elemental Analysis By ICP- MS | EPA method 200.8 |
| W-052 | Preparation of Samples for Metal Analysis | APHA 3030A to 3030D |

Sampling Method

| Sampling Method Code | Description |
|----------------------|---------------------------------------|
| W09-023 | Sampling Method for Chemical Analyses |

Laboratory Information

| Laboratory | NATA accreditation ID |
|---------------------------------|-----------------------|
| Inorganic Chemistry - Metals | 1115 |
| Inorganic Chemistry - Nutrients | 1115 |
| Inorganic Chemistry - Physical | 1115 |



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