



CERTIFICATE OF ANALYSIS

Work Order : EM2612403
Client : CASH SALES ADELAIDE
Contact : Barossa Infrastructure Ltd - Adam Broadbent
Address : 2 Basedow Rd
Tanunda 5532
Telephone : ----
Project : Barossa Infrastructure Ltd - Routine 26/27
Order number : ----
C-O-C number : ----
Sampler : ----
Site : ----
Quote number : EM26CASHADEL0002
No. of samples received : 2
No. of samples analysed : 2

Page : 1 of 5
Laboratory : Environmental Division Melbourne
Contact : Customer Services EM
Address : 4 Westall Rd Springvale VIC Australia 3171
Telephone : +61-3-8549 9600
Date Samples Received : 08-Jul-2026 13:00
Date Analysis Commenced : 08-Jul-2026
Issue Date : 16-Jul-2026 16:10



Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Dilani Fernando	Laboratory Coordinator	WRG Subcontracting, Springvale, VIC
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Non-Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Kinman Chan	Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC



General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

ø = ALS is not NATA accredited for these tests.

~ = Indicates an estimated value.

- As per QWI – EN55-3 Data Interpreting Procedures, Ionic balances are typically calculated using Major Anions - Chloride, Alkalinity and Sulfate; and Major Cations - Calcium, Magnesium, Potassium and Sodium. Where applicable and dependent upon sample matrix, the Ionic Balance may also include the additional contribution of Ammonia, Dissolved Metals by ICPMS and H⁺ to the Cations and Nitrate, SiO₂ and Fluoride to the Anions.
- As per QWI-EN/55-3 Ionic Balance % is only reported when the anion sum exceeds or is equal to 3.0 meq/L. When the anion sum is less than 3.0 meq/L the acceptable difference is 0.2 meq/l and ionic balance % is not reported.
- EK010:EM2612403-001 has been diluted prior to Free, Total and Monochlorine analysis due to sample matrix. The LOR has been raised accordingly.
- E.coli and Faecal Coliforms by MF (Chromogenic Media) (MM696) is conducted by ALS Scoresby NATA accreditation no. 992, site no. 989.
- EA016: Calculated TDS is determined from Electrical conductivity using a conversion factor of 0.65.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.
- ED045G: The presence of Thiocyanate, Thiosulfate and Sulfite can positively contribute to the chloride result, thereby may bias results higher than expected. Results should be scrutinised accordingly.



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				Fromm Sq - Williamstown	Gomersal (CWMS) - Tanunda	----	----	----
Sampling date / time				08-Jul-2026 09:05	08-Jul-2026 09:35	----	----	----
Compound	CAS Number	LOR	Unit	EM2612403-001	EM2612403-002	-----	-----	-----
				Result	Result	----	----	----
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	6.81	6.69	----	----	----
EA010P: Conductivity by PC Titrator								
Electrical Conductivity @ 25°C	----	1	µS/cm	576	773	----	----	----
EA016: Calculated TDS (from Electrical Conductivity)								
Total Dissolved Solids (Calc.)	----	1	mg/L	374	502	----	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	<5	24	----	----	----
EA045: Turbidity								
Turbidity	----	0.1	NTU	0.5	10.3	----	----	----
EA065: Total Hardness as CaCO3								
Total Hardness as CaCO3	----	1	mg/L	94	117	----	----	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	----	1	mg/L	<1	<1	----	----	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	----	----	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	73	74	----	----	----
Total Alkalinity as CaCO3	----	1	mg/L	73	74	----	----	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	55	64	----	----	----
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	98	127	----	----	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	18	27	----	----	----
Magnesium	7439-95-4	1	mg/L	12	12	----	----	----
Sodium	7440-23-5	1	mg/L	84	108	----	----	----
Potassium	7440-09-7	1	mg/L	5	26	----	----	----
EK010-1: Chlorine								
Total Residual Chlorine	----	0.02	mg/L	6.20	0.09	----	----	----

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Compound	CAS Number	LOR	Unit	EM2612403-001	EM2612403-002	-----	-----	-----	
				Result	Result	----	----	----	
EK010-1: Chlorine - Continued									
Free Chlorine	----	0.02	mg/L	4.50	0.06	----	----	----	
Monochloramine	10599-90-3	0.02	mg/L	0.60	<0.02	----	----	----	
EK040P: Fluoride by PC Titrator									
Fluoride	16984-48-8	0.1	mg/L	0.9	0.8	----	----	----	
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L	0.58	5.29	----	----	----	
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L	0.02	0.43	----	----	----	
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L	0.13	14.6	----	----	----	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L	0.15	15.0	----	----	----	
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	1.1	11.0	----	----	----	
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L	1.2	26.0	----	----	----	
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L	0.03	7.93	----	----	----	
EN055: Ionic Balance									
∅ Total Anions	----	0.01	meq/L	----	7.49	----	----	----	
∅ Total Anions	----	0.01	meq/L	5.37	----	----	----	----	
∅ Total Cations	----	0.01	meq/L	----	8.08	----	----	----	
∅ Total Cations	----	0.01	meq/L	5.67	----	----	----	----	
∅ Ionic Balance	----	0.01	%	----	3.78	----	----	----	
∅ Ionic Balance	----	0.01	%	2.71	----	----	----	----	
EP030: Biochemical Oxygen Demand (BOD)									
Biochemical Oxygen Demand	----	2	mg/L	<2	13	----	----	----	
MM696: E. coli & Faecal Coliforms by MF (Chromogenic)									



Analytical Results

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 (Matrix: **WATER**)

Sample ID

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Sampling date / time				08-Jul-2026 09:05	08-Jul-2026 09:35	----	----	----
Compound	CAS Number	LOR	Unit	EM2612403-001	EM2612403-002	-----	-----	-----
Result				Result	Result	----	----	----
MM696: E. coli & Faecal Coliforms by MF (Chromogenic) - Continued								
<i>Escherichia coli</i>	----	0	CFU/100mL	0	----	----	----	----
<i>Escherichia coli</i>	----	2	CFU/100mL	----	<2	----	----	----
Faecal Coliforms	----	0	CFU/100mL	0	160	----	----	----