



CERTIFICATE OF ANALYSIS

Work Order	: EP2602573	Page	: 1 of 5
Client	: GASCOYNE WATER COOPERATIVE LTD	Laboratory	: Environmental Division Perth
Contact	: Lisa Sweetman	Contact	: Customer Services EP
Address	: 50 BOUNDARY ROAD PO BOX 5 CARNARVON WESTERN AUSTRALIA, AUSTRALIA 6701	Address	: 26 Rigall Way Wangara WA Australia 6065
Telephone	: ---	Telephone	: +61-8-9406 1301
Project	: 3 Site testing February 2026	Date Samples Received	: 18-Feb-2026 11:30
Order number	: ---	Date Analysis Commenced	: 18-Feb-2026
C-O-C number	: ---	Issue Date	: 23-Feb-2026 22:58
Sampler	: Carnarvon Plumbing		
Site	: Town Sites		
Quote number	: EP24GASWVA10004_V2		
No. of samples received	: 3		
No. of samples analysed	: 3		



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
Canhuanh Ke	Inorganics Supervisor	Perth Inorganics, Wangara, WA
Efua Wilson	Metals Chemist	Perth Inorganics, Wangara, WA
Jasmine Myintaye	Lab Technician	Perth Microbiology, Wangara, WA



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.

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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

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⊖ = ALS is not NATA accredited for these tests.

~ = Indicates an estimated value.

- MF = membrane filtration
- CFU = colony forming unit
- 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.
- MMW06 is ALS's internal code and is equivalent to AS4276.5.
- MMW06 and MMW07 Analysis Commenced: Date: 18/2/2026, Time: 1:00PM.
- EG020: It is recognised that total Boron concentration is less than dissolved for sample EP2602573-002. However, the difference is within experimental variation of the methods.
- Microbiological Comment: In accordance with ALS work instruction QWI-MIC/04, membrane filtration result is reported an approximate (~) when the count of colonies on the filtered membrane is outside the range of 10 - 100cfu.
- MMW07 is ALS's internal code and is equivalent to AS4276.5.
- 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

Compound	CAS Number	LOR	Unit	Sample ID			Result	Result	Result	Result	Result	Result
				186 North River Road	23 McGlades Road	50 Boundary road						
EG020F: Dissolved Metals by ICP-MS - Continued												
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	<0.005	---	---	---	---	---	---
Boron	7440-42-8	0.05	mg/L	0.24	0.21	0.30	---	---	---	---	---	---
Iron	7439-89-6	0.05	mg/L	<0.05	<0.05	<0.05	---	---	---	---	---	---
EG020T: Total Metals by ICP-MS												
Aluminium	7429-90-5	0.01	mg/L	<0.01	<0.01	<0.01	---	---	---	---	---	---
Arsenic	7440-38-2	0.001	mg/L	0.001	0.002	0.002	---	---	---	---	---	---
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	---	---	---	---	---	---
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	---	---	---	---	---	---
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	---	---	---	---	---	---
Manganese	7439-96-5	0.001	mg/L	<0.001	<0.001	<0.001	---	---	---	---	---	---
Molybdenum	7439-98-7	0.001	mg/L	0.003	0.002	0.007	---	---	---	---	---	---
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	<0.001	---	---	---	---	---	---
Selenium	7782-49-2	0.004	mg/L	<0.004	<0.004	<0.004	---	---	---	---	---	---
Zinc	7440-66-6	0.005	mg/L	0.006	<0.005	<0.005	---	---	---	---	---	---
Boron	7440-42-8	0.05	mg/L	0.25	0.20	0.30	---	---	---	---	---	---
Iron	7439-89-6	0.05	mg/L	<0.05	<0.05	<0.05	---	---	---	---	---	---
EG052G: Silica by Discrete Analyser												
Reactive Silica	---	0.05	mg/L	49.5	51.8	47.0	---	---	---	---	---	---
Reactive Silica as Silicon	---	0.05	mg/L	23.1	24.2	22.0	---	---	---	---	---	---
EK040P: Fluoride by PC Titrator												
Fluoride	16984-48-8	0.1	mg/L	0.4	0.3	0.6	---	---	---	---	---	---
EK057G: Nitrite as N by Discrete Analyser												
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	<0.01	---	---	---	---	---	---
EK058G: Nitrate as N by Discrete Analyser												
Nitrate as N	14797-55-8	0.01	mg/L	0.70	0.75	0.78	---	---	---	---	---	---
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser												
Nitrite + Nitrate as N	---	0.01	mg/L	0.70	0.75	0.78	---	---	---	---	---	---



Analytical Results

Compound	CAS Number	LOR	Unit	Sample ID			
				186 North River Road	23 McGlades Road	50 Boundary road	
			17-Feb-2026 13:36 EP2602573-001 Result	17-Feb-2026 14:00 EP2602573-002 Result	17-Feb-2026 14:19 EP2602573-003 Result		
EA010P: Conductivity by PC Titrator							
Electrical Conductivity @ 25°C	---	1	µS/cm	861	949	839	---
ED037P: Alkalinity by PC Titrator							
Hydroxide Alkalinity as CaCO3	---	1	mg/L	<1	<1	<1	---
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	<1	---
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	97	114	107	---
Total Alkalinity as CaCO3	---	1	mg/L	97	114	107	---
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA							
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	71	72	70	---
ED045G: Chloride by Discrete Analyser							
Chloride	16887-00-6	1	mg/L	155	188	157	---
ED093F: Dissolved Major Cations							
Calcium	7440-70-2	1	mg/L	47	58	40	---
Magnesium	7439-95-4	1	mg/L	21	24	19	---
Sodium	7440-23-5	1	mg/L	89	86	91	---
Potassium	7440-09-7	1	mg/L	10	10	10	---
ED093F: SAR and Hardness Calculations							
Total Hardness as CaCO3	---	1	mg/L	204	244	178	---
EG020F: Dissolved Metals by ICP-MS							
Aluminium	7429-90-5	0.01	mg/L	<0.01	<0.01	<0.01	---
Arsenic	7440-38-2	0.001	mg/L	0.001	0.001	0.002	---
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	---
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	---
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	---
Manganese	7439-96-5	0.001	mg/L	<0.001	<0.001	<0.001	---
Molybdenum	7439-98-7	0.001	mg/L	0.003	0.001	0.005	---
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	<0.001	---
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- MF = membrane filtration
- CFU = colony forming unit
- MW006 is ALS's internal code and is equivalent to AS4276.5.
- MW006 and MW007:Analysis Commenced:Date:10/03/2026,Time:2:10PM.
- Microbiological Comment: In accordance with ALS work instruction QWI-MIC/04, membrane filtration result is reported an approximate (~) when the count of colonies on the filtered membrane is outside the range of 10 - 100cfu.
- MW007 is ALS's internal code and is equivalent to AS4276.5.

Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID			Result	Result	Result
				186 North River Road	23 McGlades Road	50 Boundary road			
MW006: Faecal Coliforms & E.coli by MF									
Thermotolerant Coliforms		1	CFU/100mL	09-Mar-2026 13:45 EP2603765-001	09-Mar-2026 14:00 EP2603765-002	09-Mar-2026 13:30 EP2603765-003	~4	<1	~4
Escherichia coli		1	CFU/100mL				~1	<1	~1
MW007: Coliforms by MF									
Coliforms		1	CFU/100mL				37	76	~5

