CERTIFICATE OF ANALYSIS

Work Order	: **CA2507018**	Page	: 1 of 6
Client	: **Southern Meats**	Laboratory	: ALS Water
Contact	: Mick Sperring	Contact	: Client Services
Address	: Mazamet Road Goulburn NSW 2580	Address	: 2/33 Couranga Cr Hume ACT Australia 2620
Telephone	: ----	Telephone	: +61 2 6202 5404
Project	: Water Sampling Quarterly	Date Samples Received	: 13-Nov-2025 16:15
Order number	: Not provided	Date Analysis Commenced	: 14-Nov-2025
C-O-C number	: ----	Issue Date	: 21-Nov-2025 15:58
Sampler	: Mick Sperring		
Site	: ----		
Quote number	: ----		
No. of samples received	: 10		
No. of samples analysed	: 10		

Accreditation No. 992
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*
Amanda Gonzalez	Laboratory Technician	Canberra Water Inorganics, Hume, ACT
Clare Kennedy	Analyst	Canberra Water Inorganics, Hume, ACT
Geetha Ramasundara	Chemistry Teamleader	Canberra Water Inorganics, Hume, ACT
Jing Zeng	Analyst	Canberra Water Inorganics, Hume, ACT
Titus Vimalasiri	Metals Teamleader	Canberra Water Inorganics, Hume, ACT

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.

- **Water samples collected by ALS according to one of the following procedures : Potable = EN67.5, Pools = EN67.3,Lakes/ Reservoirs = EN67.4, River/Stream = EN67.6, Beach = EN67.9, Wastewater = EN67.10, Groundwater = EN67.11**
- Result for pH in water tested in the laboratory may be indicative only as holding time is generally not achievable.

Analytical Results

Sub-Matrix: WATER
(Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID	STHMEATS1 Ex Daff	STHMEATS2 Circular Anaerobic Lagoon	STHMEATS3 Aerated Lagoon	STHMEATS4 Settling Pond	STHMEATS5 Storage Dam 1
				Sampling date / time	13-Nov-2025 06:00	13-Nov-2025 06:00	13-Nov-2025 06:00	13-Nov-2025 06:00	13-Nov-2025 06:00
					CA2507018-001	CA2507018-002	CA2507018-003	CA2507018-004	CA2507018-005
					Result	Result	Result	Result	Result
EA005CA: pH									
pH	----	0.01	pH Unit		**9.55**	**7.38**	**6.68**	**7.51**	**9.11**
EA010CA: Conductivity									
Electrical Conductivity @ 25°C	----	2	µS/cm		**2460**	**4050**	**2470**	**2480**	**2430**
ED009CA: Anions									
Chloride	16887-00-6	0.1	mg/L		**135**	**137**	**121**	**129**	**164**
EA015CA: Total Dissolved Solids									
Total Dissolved Solids	----	10	mg/L		**2580**	**1280**	**1280**	**1480**	**1460**
EA025CA: Suspended Solids									
Suspended Solids (SS)	----	2	mg/L		**4730**	**1660**	**1840**	**249**	**141**
EP030CA: Biochemical Oxygen Demand									
Biochemical Oxygen Demand	----	2	mg/L		**4200**	**278**	**530**	**31**	**17**
EP026CA: Chemical Oxygen Demand									
Chemical Oxygen Demand	----	5	mg/L		**7540**	**1840**	**1320**	**527**	**305**
EK058CA: Nitrate as N									
ø Nitrate as N	14797-55-8	0.01	mg/L N		**85.0**	<5.00	**87.0**	**72.0**	**53.4**
EK059CA: Nitrite plus Nitrate as N									
Nitrite + Nitrate as N	----	0.05	mg/L N		**225**	<5.00	**225**	**193**	**86.2**
EK061CA: Total Kjeldahl Nitrogen as N									
Total Kjeldahl Nitrogen as N	----	0.05	mg/L N		**171**	**425**	**90.0**	**26.0**	**50.8**
EK062CA: Total Nitrogen as N									
Total Nitrogen as N	----	0.05	mg/L N		**396**	**425**	**315**	**219**	**137**
EK067CA: Total Phosphorus as P									
Total Phosphorus as P	----	0.01	mg/L P		**70.0**	**52.4**	**54.8**	**42.3**	**9.03**
EG005CA: Total Metals by ICP-OES									
Calcium	7440-70-2	0.10	mg/L		**6.62**	**6.75**	**6.99**	**52.4**	**33.8**
Magnesium	7439-95-4	0.10	mg/L		**37.2**	**7.60**	**7.72**	**76.1**	**66.9**
Sodium	7440-23-5	0.1	mg/L		**25.3**	**24.2**	**24.3**	**279**	**306**

Analytical Results

Sub-Matrix: **WATER**
(Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Sample ID	STHMEATS1 Ex Daff	STHMEATS2 Circular Anaerobic Lagoon	STHMEATS3 Aerated Lagoon	STHMEATS4 Settling Pond	STHMEATS5 Storage Dam 1
				Sampling date / time	13-Nov-2025 06:00	13-Nov-2025 06:00	13-Nov-2025 06:00	13-Nov-2025 06:00	13-Nov-2025 06:00
				CA2507018-001	CA2507018-002	CA2507018-003	CA2507018-004	CA2507018-005	
				Result	Result	Result	Result	Result	
EA006CA: Sodium Adsorption Ratio									
ø Sodium Adsorption Ratio	----	0.01	-	**5.17**	**5.67**	**5.56**	**5.70**	**7.03**	

Analytical Results

Sub-Matrix: WATER
(Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID	STHMEATS6 Storage Dam 2	STHMEATS7 Run Off Dam 1	STHMEATS8 Run Off Dam 2	STHMEATS9 Runowaters Creek	STHMEATS10 Runowaters Creek Downstream
				Sampling date / time	13-Nov-2025 06:30	13-Nov-2025 06:30	13-Nov-2025 06:30	13-Nov-2025 06:45	13-Nov-2025 06:45
					CA2507018-006	CA2507018-007	CA2507018-008	CA2507018-009	CA2507018-010
					Result	Result	Result	Result	Result
EA005CA: pH									
pH	----	0.01	pH Unit		7.75	8.71	9.26	8.21	8.10
EA010CA: Conductivity									
Electrical Conductivity @ 25°C	----	2	µS/cm		2330	1440	1470	802	861
ED009CA: Anions									
Chloride	16887-00-6	0.1	mg/L		170	163	153	112	130
EA015CA: Total Dissolved Solids									
Total Dissolved Solids	----	10	mg/L		1400	1160	1030	518	498
EA025CA: Suspended Solids									
Suspended Solids (SS)	----	2	mg/L		110	101	92	10	8
EP020CA: Oil and Grease									
Oil and Grease	----	1	mg/L		----	----	----	<1	<1
EP030CA: Biochemical Oxygen Demand									
Biochemical Oxygen Demand	----	2	mg/L		70	19	14	4	2
EP026CA: Chemical Oxygen Demand									
Chemical Oxygen Demand	----	5	mg/L		267	307	216	19	23
EK058CA: Nitrate as N									
ø Nitrate as N	14797-55-8	0.01	mg/L N		36.4	<0.05	<0.05	<0.05	<0.05
EK059CA: Nitrite plus Nitrate as N									
Nitrite + Nitrate as N	----	0.05	mg/L N		62.7	<0.05	0.07	<0.05	<0.05
EK061CA: Total Kjeldahl Nitrogen as N									
Total Kjeldahl Nitrogen as N	----	0.05	mg/L N		33.0	17.2	12.6	0.67	0.80
EK062CA: Total Nitrogen as N									
Total Nitrogen as N	----	0.05	mg/L N		95.7	17.2	12.7	0.67	0.80
EK067CA: Total Phosphorus as P									
Total Phosphorus as P	----	0.01	mg/L P		15.0	15.8	13.4	0.17	<0.01
EG005CA: Total Metals by ICP-OES									
Calcium	7440-70-2	0.10	mg/L		30.3	23.6	19.5	51.8	53.5

Analytical Results

Sub-Matrix: **WATER**
(Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Sample ID	STHMEATS6 Storage Dam 2	STHMEATS7 Run Off Dam 1	STHMEATS8 Run Off Dam 2	STHMEATS9 Runowaters Creek	STHMEATS10 Runowaters Creek Downstream
				Sampling date / time	13-Nov-2025 06:30	13-Nov-2025 06:30	13-Nov-2025 06:30	13-Nov-2025 06:45	13-Nov-2025 06:45
					CA2507018-006	**CA2507018-007**	**CA2507018-008**	**CA2507018-009**	**CA2507018-010**
					Result	Result	Result	Result	Result
EG005CA: Total Metals by ICP-OES - Continued									
Magnesium	7439-95-4	0.10	mg/L		**58.3**	**25.7**	**22.6**	**35.5**	**39.6**
Sodium	7440-23-5	0.1	mg/L		**307**	**306**	**284**	**64.7**	**75.1**
EA006CA: Sodium Adsorption Ratio									
ø Sodium Adsorption Ratio	----	0.01	-		**7.48**	**10.4**	**10.5**	**1.54**	**1.77**