



## CERTIFICATE OF ANALYSIS

**Work Order** : **CA2500720**  
**Client** : **Southern Meats**  
**Contact** : Mick Sperring  
**Address** : Mazamet Road  
Goulburn NSW 2580  
**Telephone** : ----  
**Project** : Monthly Wastewater  
**Order number** : ----  
**C-O-C number** : ----  
**Sampler** : Mick Sperring  
**Site** : ----  
**Quote number** : ----  
**No. of samples received** : 9  
**No. of samples analysed** : 9

**Page** : 1 of 6  
**Laboratory** : ALS Water  
**Contact** : Client Services  
**Address** : 2/33 Couranga Cr Hume ACT Australia 2620  
**Telephone** : +61 2 6202 5404  
**Date Samples Received** : 05-Feb-2025 11:30  
**Date Analysis Commenced** : 06-Feb-2025  
**Issue Date** : 13-Feb-2025 17:07



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.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Amanda Gonzalez	Laboratory Technician	Canberra Water Inorganics, Hume, ACT
Clare Kennedy	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.

- For samples collected by ALS WRG, sampling was carried out in accordance with Procedure EN67
- 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)

Sample ID

				STHMEATS1 Ex Daf	STHMEATS2 Circular Anaerobic Lagoon	STHMEATS3 Aerated Lagoon	STHMEATS4 Settling Pond 2	STHMEATS5 Storage Dam 1
Sampling date / time				05-Feb-2025 06:00	05-Feb-2025 06:00	05-Feb-2025 06:00	05-Feb-2025 06:00	05-Feb-2025 06:00
Compound	CAS Number	LOR	Unit	CA2500720-001	CA2500720-002	CA2500720-003	CA2500720-004	CA2500720-005
				Result	Result	Result	Result	Result
<b>EA005CA: pH</b>								
pH	----	0.01	pH Unit	7.20	7.61	8.01	8.04	7.95
<b>EA010CA: Conductivity</b>								
Electrical Conductivity @ 25°C	----	2	µS/cm	2290	4050	2870	2930	3090
<b>ED009CA: Anions</b>								
Chloride	16887-00-6	0.1	mg/L	111	134	163	177	212
<b>EA015CA: Total Dissolved Solids</b>								
Total Dissolved Solids	----	10	mg/L	2070	1060	1260	1470	1830
<b>EA025CA: Suspended Solids</b>								
Suspended Solids (SS)	----	2	mg/L	3720	1080	953	497	257
<b>EP030CA: Biochemical Oxygen Demand</b>								
Biochemical Oxygen Demand	----	2	mg/L	3960	368	102	84	44
<b>EP026CA: Chemical Oxygen Demand</b>								
Chemical Oxygen Demand	----	5	mg/L	9440	1970	1420	952	582
<b>EK057CA: Nitrite as N</b>								
Nitrite as N	14797-65-0	0.01	mg/L N	0.11	0.04	0.03	0.02	7.87
<b>EK058CA: Nitrate as N</b>								
ø Nitrate as N	14797-55-8	0.01	mg/L N	0.06	0.06	0.07	<0.05	1.82
<b>EK059CA: Nitrite plus Nitrate as N</b>								
Nitrite + Nitrate as N	----	0.05	mg/L N	0.17	0.10	0.10	0.05	9.69
<b>EK061CA: Total Kjeldahl Nitrogen as N</b>								
Total Kjeldahl Nitrogen as N	----	0.05	mg/L N	401	454	254	213	170
<b>EK062CA: Total Nitrogen as N</b>								
Total Nitrogen as N	----	0.05	mg/L N	401	454	254	213	180
<b>EK067CA: Total Phosphorus as P</b>								
Total Phosphorus as P	----	0.01	mg/L P	80.6	54.6	54.8	52.7	30.5
<b>EG005CA: Total Metals by ICP-OES</b>								
Calcium	7440-70-2	0.10	mg/L	52.3	52.3	47.9	43.7	36.6



### Analytical Results

Sub-Matrix: WATER  
 (Matrix: WATER)

Sample ID

				STHMEATS1 Ex Daf	STHMEATS2 Circular Anaerobic Lagoon	STHMEATS3 Aerated Lagoon	STHMEATS4 Settling Pond 2	STHMEATS5 Storage Dam 1
Sampling date / time				05-Feb-2025 06:00	05-Feb-2025 06:00	05-Feb-2025 06:00	05-Feb-2025 06:00	05-Feb-2025 06:00
Compound	CAS Number	LOR	Unit	CA2500720-001	CA2500720-002	CA2500720-003	CA2500720-004	CA2500720-005
				Result	Result	Result	Result	Result
<b>EG005CA: Total Metals by ICP-OES - Continued</b>								
Magnesium	7439-95-4	0.10	mg/L	21.7	26.4	27.9	28.5	30.8
Sodium	7440-23-5	0.1	mg/L	235	270	290	304	359
<b>EA006CA: Sodium Adsorption Ratio</b>								
ø Sodium Adsorption Ratio	----	0.01	-	11.4	8.60	8.66	8.96	10.6



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	STHMEATS6 Storage Dam 2	STHMEATS7 Run Off Dam 1	STHMEATS8 Run Off Dam 2	STHMEATS9 Runwaters Creek	----
Sampling date / time				05-Feb-2025 06:30	05-Feb-2025 06:30	05-Feb-2025 06:30	05-Feb-2025 06:45	----	
Compound	CAS Number	LOR	Unit	CA2500720-006	CA2500720-007	CA2500720-008	CA2500720-009	-----	
				Result	Result	Result	Result	----	
<b>EA005CA: pH</b>									
pH	----	0.01	pH Unit	8.06	8.87	8.37	7.52	----	
<b>EA010CA: Conductivity</b>									
Electrical Conductivity @ 25°C	----	2	µS/cm	3270	1700	2520	832	----	
<b>ED009CA: Anions</b>									
Chloride	16887-00-6	0.1	mg/L	224	175	241	104	----	
<b>EA015CA: Total Dissolved Solids</b>									
Total Dissolved Solids	----	10	mg/L	1950	1320	1810	609	----	
<b>EA025CA: Suspended Solids</b>									
Suspended Solids (SS)	----	2	mg/L	207	74	66	15	----	
<b>EP020CA: Oil and Grease</b>									
Oil and Grease	----	1	mg/L	----	----	----	<1	----	
<b>EP030CA: Biochemical Oxygen Demand</b>									
Biochemical Oxygen Demand	----	2	mg/L	50	5	16	<2	----	
<b>EP026CA: Chemical Oxygen Demand</b>									
Chemical Oxygen Demand	----	5	mg/L	534	254	462	56	----	
<b>EK057CA: Nitrite as N</b>									
Nitrite as N	14797-65-0	0.01	mg/L N	5.58	0.10	1.70	<0.01	----	
<b>EK058CA: Nitrate as N</b>									
ø Nitrate as N	14797-55-8	0.01	mg/L N	1.24	3.26	0.63	<0.05	----	
<b>EK059CA: Nitrite plus Nitrate as N</b>									
Nitrite + Nitrate as N	----	0.05	mg/L N	6.82	3.36	2.33	<0.05	----	
<b>EK061CA: Total Kjeldahl Nitrogen as N</b>									
Total Kjeldahl Nitrogen as N	----	0.05	mg/L N	173	11.8	51.4	1.34	----	
<b>EK062CA: Total Nitrogen as N</b>									
Total Nitrogen as N	----	0.05	mg/L N	180	15.2	53.7	1.34	----	
<b>EK067CA: Total Phosphorus as P</b>									
Total Phosphorus as P	----	0.01	mg/L P	30.4	16.6	24.1	0.12	----	
<b>EG005CA: Total Metals by ICP-OES</b>									



**Analytical Results**

Sub-Matrix: WATER  
 (Matrix: WATER)

Sample ID

				STHMEATS6 Storage Dam 2	STHMEATS7 Run Off Dam 1	STHMEATS8 Run Off Dam 2	STHMEATS9 Runwaters Creek	----
Sampling date / time				05-Feb-2025 06:30	05-Feb-2025 06:30	05-Feb-2025 06:30	05-Feb-2025 06:45	----
Compound	CAS Number	LOR	Unit	CA2500720-006	CA2500720-007	CA2500720-008	CA2500720-009	-----
				Result	Result	Result	Result	----
<b>EG005CA: Total Metals by ICP-OES - Continued</b>								
Calcium	7440-70-2	0.10	mg/L	35.8	26.3	29.5	49.3	----
Magnesium	7439-95-4	0.10	mg/L	30.4	21.0	27.6	29.6	----
Sodium	7440-23-5	0.1	mg/L	387	262	385	67.2	----
<b>EA006CA: Sodium Adsorption Ratio</b>								
∅ Sodium Adsorption Ratio	----	0.01	-	11.5	9.25	12.0	1.88	----