# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Work Order** | : **CA2504535** | Page | : 1 of 6 |
| Client | : **Southern Meats** | Laboratory | : ALS Water |
| Contact | : Andy Grealy | Contact | : Client Services |
| Address | : Mazamet Road<br>Goulburn NSW 2580 | Address | : 2/33 Couranga Cr Hume ACT Australia 2620 |
| Telephone | : 02 4824 0000 | Telephone | : +61 2 6202 5404 |
| Project | : Water Sampling Quarterly | Date Samples Received | : 31-Jul-2025 12:40 |
| Order number | : ---- | Date Analysis Commenced | : 31-Jul-2025 |
| C-O-C number | : ---- | Issue Date | : 11-Aug-2025 16:13 |
| Sampler | : Mick Sperring | | |
| Site | : ---- | | |
| Quote number | : ---- | | |
| No. of samples received | : 9 | | |
| No. of samples analysed | : 9 | | |

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 |
| 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 Daf | STHMEATS2 Circular Anaerobic Lagoon | STHMEATS3 Aerated Lagoon | STHMEATS4 Settling Pond 2 | STHMEATS5 Storage Dam 1 |
|---|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | | 31-Jul-2025 06:00 | 31-Jul-2025 06:00 | 31-Jul-2025 06:00 | 31-Jul-2025 06:00 | 31-Jul-2025 06:00 |
| | | | | | CA2504535-001 | CA2504535-002 | CA2504535-003 | CA2504535-004 | CA2504535-005 |
| | | | | | Result | Result | Result | Result | Result |
| **EA005CA: pH** | | | | | | | | | |
| pH | ---- | 0.01 | pH Unit | | 6.94 | 7.28 | 7.44 | 7.89 | 8.15 |
| **EA010CA: Conductivity** | | | | | | | | | |
| Electrical Conductivity @ 25°C | ---- | 2 | µS/cm | | 3310 | 3960 | 3100 | 2990 | 3070 |
| **ED009CA: Anions** | | | | | | | | | |
| Chloride | 16887-00-6 | 0.1 | mg/L | | 130 | 145 | 125 | 128 | 175 |
| **EA015CA: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved Solids | ---- | 10 | mg/L | | 2400 | 1410 | 1620 | 1560 | 1590 |
| **EA025CA: Suspended Solids** | | | | | | | | | |
| Suspended Solids (SS) | ---- | 2 | mg/L | | 633 | 1940 | 592 | 5180 | 83 |
| **EP030CA: Biochemical Oxygen Demand** | | | | | | | | | |
| Biochemical Oxygen Demand | ---- | 2 | mg/L | | 1240 | 488 | 62 | 258 | 18 |
| **EP026CA: Chemical Oxygen Demand** | | | | | | | | | |
| Chemical Oxygen Demand | ---- | 5 | mg/L | | 3600 | 2440 | 966 | 4710 | 305 |
| **EK057CA: Nitrite as N** | | | | | | | | | |
| Nitrite as N | 14797-65-0 | 0.01 | mg/L N | | 42.5 | 0.04 | 137 | 108 | 64.7 |
| **EK058CA: Nitrate as N** | | | | | | | | | |
| ø Nitrate as N | 14797-55-8 | 0.01 | mg/L N | | 22.6 | 0.95 | 85.0 | 64.0 | 41.3 |
| **EK059CA: Nitrite plus Nitrate as N** | | | | | | | | | |
| Nitrite + Nitrate as N | ---- | 0.05 | mg/L N | | 65.1 | 0.99 | 222 | 172 | 106 |
| **EK061CA: Total Kjeldahl Nitrogen as N** | | | | | | | | | |
| Total Kjeldahl Nitrogen as N | ---- | 0.05 | mg/L N | | 198 | 368 | 104 | 209 | 92.0 |
| **EK062CA: Total Nitrogen as N** | | | | | | | | | |
| Total Nitrogen as N | ---- | 0.05 | mg/L N | | 263 | 369 | 326 | 381 | 198 |
| **EK067CA: Total Phosphorus as P** | | | | | | | | | |
| Total Phosphorus as P | ---- | 0.01 | mg/L P | | 77.7 | 46.4 | 48.6 | 64.0 | 15.9 |
| **EG005CA: Total Metals by ICP-OES** | | | | | | | | | |
| Calcium | 7440-70-2 | 0.10 | mg/L | | 47.8 | 53.7 | 42.8 | 82.3 | 36.4 |

## Analytical Results

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

| Compound | CAS Number | LOR | Unit | Sample ID | STHMEATS1 Ex Daf | STHMEATS2 Circular Anaerobic Lagoon | STHMEATS3 Aerated Lagoon | STHMEATS4 Settling Pond 2 | STHMEATS5 Storage Dam 1 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 31-Jul-2025 06:00 | 31-Jul-2025 06:00 | 31-Jul-2025 06:00 | 31-Jul-2025 06:00 | 31-Jul-2025 06:00 |
| | | | | | **CA2504535-001** | **CA2504535-002** | **CA2504535-003** | **CA2504535-004** | **CA2504535-005** |
| | | | | | Result | Result | Result | Result | Result |
| **EG005CA: Total Metals by ICP-OES - Continued** | | | | | | | | | |
| **Magnesium** | 7439-95-4 | 0.10 | mg/L | | **79.0** | **67.6** | **72.5** | **85.7** | **85.6** |
| **Sodium** | 7440-23-5 | 0.1 | mg/L | | **398** | **330** | **351** | **355** | **339** |
| **EA006CA: Sodium Adsorption Ratio** | | | | | | | | | |
| **ø Sodium Adsorption Ratio** | ---- | 0.01 | - | | **8.17** | **7.36** | **7.44** | **7.54** | **6.87** |

## Analytical Results

| Sub-Matrix: WATER (Matrix: WATER) | | | Sample ID | STHMEATS6 Storage Dam 2 | STHMEATS7 Run Off Dam 1 | STHMEATS8 Run Off Dam 2 | STHMEATS9 Runowaters Creek | ---- |
|---|---|---|---|---|---|---|---|---|
| | | | Sampling date / time | 31-Jul-2025 06:30 | 31-Jul-2025 06:30 | 31-Jul-2025 06:30 | 31-Jul-2025 06:45 | ---- |
| Compound | CAS Number | LOR | Unit | CA2504535-006 | CA2504535-007 | CA2504535-008 | CA2504535-009 | -------- |
| | | | | Result | Result | Result | Result | ---- |
| **EA005CA: pH** | | | | | | | | |
| pH | ---- | 0.01 | pH Unit | 8.15 | 8.06 | 7.81 | 7.86 | ---- |
| **EA010CA: Conductivity** | | | | | | | | |
| Electrical Conductivity @ 25°C | ---- | 2 | µS/cm | 2800 | 2300 | 1990 | 1110 | ---- |
| **ED009CA: Anions** | | | | | | | | |
| Chloride | 16887-00-6 | 0.1 | mg/L | 165 | 180 | 167 | 156 | ---- |
| **EA015CA: Total Dissolved Solids** | | | | | | | | |
| Total Dissolved Solids | ---- | 10 | mg/L | 1330 | 1340 | 1290 | 656 | ---- |
| **EA025CA: Suspended Solids** | | | | | | | | |
| Suspended Solids (SS) | ---- | 2 | mg/L | 155 | 57 | 248 | 6 | ---- |
| **EP020CA: Oil and Grease** | | | | | | | | |
| Oil and Grease | ---- | 1 | mg/L | ---- | ---- | ---- | <1 | ---- |
| **EP030CA: Biochemical Oxygen Demand** | | | | | | | | |
| Biochemical Oxygen Demand | ---- | 2 | mg/L | 44 | 16 | 22 | <2 | ---- |
| **EP026CA: Chemical Oxygen Demand** | | | | | | | | |
| Chemical Oxygen Demand | ---- | 5 | mg/L | 437 | 300 | 313 | 10 | ---- |
| **EK057CA: Nitrite as N** | | | | | | | | |
| Nitrite as N | 14797-65-0 | 0.01 | mg/L N | 0.35 | 0.03 | 1.50 | <0.01 | ---- |
| **EK058CA: Nitrate as N** | | | | | | | | |
| ø Nitrate as N | 14797-55-8 | 0.01 | mg/L N | 2.48 | 3.04 | 16.1 | 0.13 | ---- |
| **EK059CA: Nitrite plus Nitrate as N** | | | | | | | | |
| Nitrite + Nitrate as N | ---- | 0.05 | mg/L N | 2.83 | 3.07 | 17.6 | 0.13 | ---- |
| **EK061CA: Total Kjeldahl Nitrogen as N** | | | | | | | | |
| Total Kjeldahl Nitrogen as N | ---- | 0.05 | mg/L N | 138 | 57.6 | 28.1 | 0.53 | ---- |
| **EK062CA: Total Nitrogen as N** | | | | | | | | |
| Total Nitrogen as N | ---- | 0.05 | mg/L N | 141 | 60.7 | 45.7 | 0.66 | ---- |
| **EK067CA: Total Phosphorus as P** | | | | | | | | |
| Total Phosphorus as P | ---- | 0.01 | mg/L P | 22.2 | 20.7 | 21.2 | 0.04 | ---- |
| **EG005CA: Total Metals by ICP-OES** | | | | | | | | |

## Analytical Results

| Sub-Matrix: WATER (Matrix: WATER) | | | | Sample ID | STHMEATS6 Storage Dam 2 | STHMEATS7 Run Off Dam 1 | STHMEATS8 Run Off Dam 2 | STHMEATS9 Runowaters Creek | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Sampling date / time | 31-Jul-2025 06:30 | 31-Jul-2025 06:30 | 31-Jul-2025 06:30 | 31-Jul-2025 06:45 | ---- |
| Compound | CAS Number | LOR | Unit | | CA2504535-006 | CA2504535-007 | CA2504535-008 | CA2504535-009 | -------- |
| | | | | | Result | Result | Result | Result | ---- |
| **EG005CA: Total Metals by ICP-OES - Continued** | | | | | | | | | |
| **Calcium** | 7440-70-2 | 0.10 | mg/L | | **28.1** | **24.6** | **26.0** | **72.4** | **----** |
| **Magnesium** | 7439-95-4 | 0.10 | mg/L | | **46.9** | **25.4** | **24.8** | **44.8** | **----** |
| **Sodium** | 7440-23-5 | 0.1 | mg/L | | **332** | **356** | **324** | **82.2** | **----** |
| **EA006CA: Sodium Adsorption Ratio** | | | | | | | | | |
| **ø Sodium Adsorption Ratio** | ---- | 0.01 | - | | **8.94** | **11.8** | **10.9** | **1.87** | **----** |