



CERTIFICATE OF ANALYSIS

Work Order : **CA2407346**

Client : **Southern Meats**

Contact : Andy Grealy

Address : Mazamet Road
Goulburn NSW 2580

Telephone : 02 4824 0000

Project : Water Sampling Quarterly

Order number : ----

C-O-C number : ----

Sampler : Mick Sperring

Site : ----

Quote number : ----

No. of samples received : 8

No. of samples analysed : 8

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Laboratory : ALS Water Resources Group

Contact : Client Services

Address : 2/33 Couranga Cr Hume ACT Australia 2620

Telephone : +61 2 6202 5404

Date Samples Received : 13-Nov-2024 13:00

Date Analysis Commenced : 14-Nov-2024

Issue Date : 25-Nov-2024 15:33



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	Inorganics, Hume, ACT
Clare Kennedy	Analyst	Inorganics, Hume, ACT
Geetha Ramasundara	Chemistry Teamleader	Inorganics, Hume, ACT
Jing Zeng	Analyst	Inorganics, Hume, ACT
Titus Vimalasiri	Metals Teamleader	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.
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Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				STHMEATS1 Ex Daff	STHMEATS2 Circular Anaerobic Lagoon	STHMEATS3 Aerated Lagoon	STHMEATS4 Settling Pond	STHMEATS5 Storage Dam 1
Sampling date / time				13-Nov-2024 06:00	13-Nov-2024 06:00	13-Nov-2024 06:00	13-Nov-2024 06:00	13-Nov-2024 06:00
Compound	CAS Number	LOR	Unit	CA2407346-001	CA2407346-002	CA2407346-003	CA2407346-004	CA2407346-005
				Result	Result	Result	Result	Result
EA006: Sodium Adsorption Ratio (SAR)								
ø Sodium Adsorption Ratio	----	0.01	-	----	11.5	13.4	13.2	12.8
ED009: Anions								
Chloride	16887-00-6	0.1	mg/L	----	172	176	174	168
EP026: Chemical Oxygen Demand (COD)								
Chemical Oxygen Demand	----	5	mg/L	----	1090	1700	1640	861
EA005CA: pH								
pH	----	0.01	pH Unit	7.17	7.67	8.26	8.20	8.10
EA010CA: Conductivity								
Electrical Conductivity @ 25°C	----	2	µS/cm	2840	4820	4370	4420	4030
ED009CA: Anions								
Chloride	16887-00-6	0.1	mg/L	244	----	----	----	----
EA015CA: Total Dissolved Solids								
Total Dissolved Solids	----	10	mg/L	3360	1860	1950	2000	1560
EA025CA: Suspended Solids								
Suspended Solids (SS)	----	2	mg/L	3010	487	739	649	368
EP030CA: Biochemical Oxygen Demand								
Biochemical Oxygen Demand	----	2	mg/L	7870	717	356	288	164
EP026CA: Chemical Oxygen Demand								
Chemical Oxygen Demand	----	5	mg/L	10800	----	----	----	----
EK059CA: Nitrite plus Nitrate as N								
Nitrite + Nitrate as N	----	0.05	mg/L N	<0.50	<0.50	<0.50	<0.50	<0.50
EK061CA: Total Kjeldahl Nitrogen as N								
Total Kjeldahl Nitrogen as N	----	0.05	mg/L N	517	493	455	449	166
EK062CA: Total Nitrogen as N								
Total Nitrogen as N	----	0.05	mg/L N	517	493	455	449	166
EK067CA: Total Phosphorus as P								
Total Phosphorus as P	----	0.01	mg/L P	86.0	54.6	50.0	56.1	30.2



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				STHMEATS1 Ex Daff	STHMEATS2 Circular Anaerobic Lagoon	STHMEATS3 Aerated Lagoon	STHMEATS4 Settling Pond	STHMEATS5 Storage Dam 1
Sampling date / time				13-Nov-2024 06:00	13-Nov-2024 06:00	13-Nov-2024 06:00	13-Nov-2024 06:00	13-Nov-2024 06:00
Compound	CAS Number	LOR	Unit	CA2407346-001	CA2407346-002	CA2407346-003	CA2407346-004	CA2407346-005
				Result	Result	Result	Result	Result
EG005CA: Total Metals by ICP-OES								
Calcium	7440-70-2	0.10	mg/L	44.6	35.8	37.8	41.3	29.8
Magnesium	7439-95-4	0.10	mg/L	29.2	26.9	25.0	26.5	27.4
Sodium	7440-23-5	0.1	mg/L	384	375	393	408	388
EA006CA: Sodium Adsorption Ratio								
∅ Sodium Adsorption Ratio	----	0.01	-	19.1	----	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	STHMEATS6 Storage Dam 2	STHMEATS7 Run Off Dam 1	STHMEATS8 Run Off Dam 2	----	----
Sampling date / time				13-Nov-2024 06:00	13-Nov-2024 06:00	13-Nov-2024 06:00	----	----	
Compound	CAS Number	LOR	Unit	CA2407346-006	CA2407346-007	CA2407346-008	-----	-----	
				Result	Result	Result	----	----	
EA006: Sodium Adsorption Ratio (SAR)									
ø Sodium Adsorption Ratio	----	0.01	-	12.3	10.9	7.27	----	----	
ED009: Anions									
Chloride	16887-00-6	0.1	mg/L	179	176	122	----	----	
EP026: Chemical Oxygen Demand (COD)									
Chemical Oxygen Demand	----	5	mg/L	711	500	200	----	----	
EA005CA: pH									
pH	----	0.01	pH Unit	8.14	8.02	8.58	----	----	
EA010CA: Conductivity									
Electrical Conductivity @ 25°C	----	2	µS/cm	3720	2450	1480	----	----	
EA015CA: Total Dissolved Solids									
Total Dissolved Solids	----	10	mg/L	1530	1420	985	----	----	
EA025CA: Suspended Solids									
Suspended Solids (SS)	----	2	mg/L	373	194	31	----	----	
EP030CA: Biochemical Oxygen Demand									
Biochemical Oxygen Demand	----	2	mg/L	106	54	7	----	----	
EK059CA: Nitrite plus Nitrate as N									
Nitrite + Nitrate as N	----	0.05	mg/L N	<0.50	2.75	2.93	----	----	
EK061CA: Total Kjeldahl Nitrogen as N									
Total Kjeldahl Nitrogen as N	----	0.05	mg/L N	293	99.2	24.8	----	----	
EK062CA: Total Nitrogen as N									
Total Nitrogen as N	----	0.05	mg/L N	293	102	27.7	----	----	
EK067CA: Total Phosphorus as P									
Total Phosphorus as P	----	0.01	mg/L P	29.1	21.8	15.9	----	----	
EG005CA: Total Metals by ICP-OES									
Calcium	7440-70-2	0.10	mg/L	28.8	30.4	28.9	----	----	
Magnesium	7439-95-4	0.10	mg/L	26.4	26.0	20.3	----	----	
Sodium	7440-23-5	0.1	mg/L	364	332	213	----	----	

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