



CERTIFICATE OF ANALYSIS

Work Order	: CA2400922	Page	: 1 of 5
Client	: Southern Meats	Laboratory	: ALS Water Resources Group
Contact	: Andy Grealy	Contact	: Client Services
Address	: Mazamet Road Goulburn NSW 2580	Address	: 2/33 Couranga Cr Hume ACT Australia 2620
Telephone	: 02 4824 0000	Telephone	: +61 2 6202 5404
Project	: Water Sampling - Monthly Wastewater	Date Samples Received	: 08-Feb-2024 10:00
Order number	: ----	Date Analysis Commenced	: 09-Feb-2024
C-O-C number	: ----	Issue Date	: 19-Feb-2024 17:02
Sampler	: ----		
Site	: Water Sampling - Monthly Wastewater		
Quote number	: ----		
No. of samples received	: 8		
No. of samples analysed	: 8		



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
Joel Nicholson	Laboratory Manager	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.



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				07-Feb-2024 00:00	07-Feb-2024 00:00	07-Feb-2024 00:00	07-Feb-2024 00:00	07-Feb-2024 00:00
Compound	CAS Number	LOR	Unit	CA2400922-001	CA2400922-002	CA2400922-003	CA2400922-004	CA2400922-005
				Result	Result	Result	Result	Result
EA006: Sodium Adsorption Ratio (SAR)								
∅ Sodium Adsorption Ratio	----	0.01	-	21.0	10.0	9.90	10.0	10.9
ED009: Anions								
Chloride	16887-00-6	0.1	mg/L	152	123	127	126	157
EP026: Chemical Oxygen Demand (COD)								
Chemical Oxygen Demand	----	5	mg/L	9400	1050	970	747	419
EA005CA: pH								
pH	----	0.01	pH Unit	6.62	7.34	7.42	7.69	7.96
EA010CA: Conductivity								
Electrical Conductivity @ 25°C	----	2	µS/cm	2610	3910	4000	3830	2810
EA015CA: Total Dissolved Solids								
Total Dissolved Solids	----	10	mg/L	3230	2030	1660	1410	1280
EA025CA: Suspended Solids								
Suspended Solids (SS)	----	2	mg/L	4640	332	577	292	264
EP030CA: Biochemical Oxygen Demand								
Biochemical Oxygen Demand	----	2	mg/L	2380	356	182	130	46
EK059CA: Nitrite plus Nitrate as N								
Nitrite + Nitrate as N	----	0.05	mg/L N	0.11	<0.10	<0.10	<0.10	2.06
EK061CA: Total Kjeldahl Nitrogen as N								
Total Kjeldahl Nitrogen as N	----	0.05	mg/L N	416	423	418	376	229
EK062CA: Total Nitrogen as N								
Total Nitrogen as N	----	0.05	mg/L N	416	423	418	376	231
EK067CA: Total Phosphorus as P								
Total Phosphorus as P	----	0.01	mg/L P	75.6	47.5	42.6	39.8	30.6
EG005CA: Total Metals by ICP-OES								
Calcium	7440-70-2	0.10	mg/L	25.9	35.8	43.0	39.6	32.6
Magnesium	7439-95-4	0.10	mg/L	15.2	22.4	23.5	23.4	26.2
Sodium	7440-23-5	0.1	mg/L	326	319	327	326	355



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				07-Feb-2024 00:00	07-Feb-2024 00:00	07-Feb-2024 00:00	----	----	
Compound	CAS Number	LOR	Unit	CA2400922-006	CA2400922-007	CA2400922-008	-----	-----	
				Result	Result	Result	----	----	
EA006: Sodium Adsorption Ratio (SAR)									
ø Sodium Adsorption Ratio	----	0.01	-	13.0	9.86	5.98	----	----	
ED009: Anions									
Chloride	16887-00-6	0.1	mg/L	209	111	63.0	----	----	
EP026: Chemical Oxygen Demand (COD)									
Chemical Oxygen Demand	----	5	mg/L	550	347	364	----	----	
EA005CA: pH									
pH	----	0.01	pH Unit	8.01	9.31	7.45	----	----	
EA010CA: Conductivity									
Electrical Conductivity @ 25°C	----	2	µS/cm	3370	1190	807	----	----	
EA015CA: Total Dissolved Solids									
Total Dissolved Solids	----	10	mg/L	1630	901	608	----	----	
EA025CA: Suspended Solids									
Suspended Solids (SS)	----	2	mg/L	269	146	182	----	----	
EP030CA: Biochemical Oxygen Demand									
Biochemical Oxygen Demand	----	2	mg/L	26	37	26	----	----	
EK059CA: Nitrite plus Nitrate as N									
Nitrite + Nitrate as N	----	0.05	mg/L N	4.94	<0.10	0.82	----	----	
EK061CA: Total Kjeldahl Nitrogen as N									
Total Kjeldahl Nitrogen as N	----	0.05	mg/L N	216	21.1	13.2	----	----	
EK062CA: Total Nitrogen as N									
Total Nitrogen as N	----	0.05	mg/L N	221	21.1	14.0	----	----	
EK067CA: Total Phosphorus as P									
Total Phosphorus as P	----	0.01	mg/L P	39.5	15.7	12.0	----	----	
EG005CA: Total Metals by ICP-OES									
Calcium	7440-70-2	0.10	mg/L	35.7	17.1	20.4	----	----	
Magnesium	7439-95-4	0.10	mg/L	26.4	12.2	10.8	----	----	
Sodium	7440-23-5	0.1	mg/L	421	213	134	----	----	

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