

#### **CERTIFICATE OF ANALYSIS** Work Order Page : CA2402992 : 1 of 5 Client : Southern Meats Laboratory : ALS Water Resources Group Contact : Andy Grealy Contact : Client Services Address Address : 2/33 Couranga Cr Hume ACT Australia 2620 : Mazamet Road Goulburn NSW 2580 Telephone : 02 4824 0000 Telephone : +61 2 6202 5404 Project : Water Sampling Quarterly **Date Samples Received** : 08-May-2024 11:00 Order number : -----Date Analysis Commenced : 09-May-2024 C-O-C number Issue Date : -----: 15-May-2024 15:56 Sampler : Mick Sperring Site : -----Quote number · \_\_\_\_ No. of samples received : 8

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:

: 8

- 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

No. of samples analysed

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

Accreditation No. 992 Accredited for compliance with ISO/IEC 17025 - Testing



## **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	STHMEATS3 Aerated Lagoon	STHMEATS4 Settling Pond 2	STHMEATS5 Storage Dam 1
					Lagoon		-	_
		Sampli	ng date / time	08-May-2024 06:00	08-May-2024 06:00	08-May-2024 06:00	08-May-2024 06:00	08-May-2024 06:00
Compound	CAS Number	LOR	Unit	CA2402992-001	CA2402992-002	CA2402992-003	CA2402992-004	CA2402992-005
				Result	Result	Result	Result	Result
EA006: Sodium Adsorption Ratio (SAR)								
ø Sodium Adsorption Ratio		0.01	-	21.3	10.1	9.34	9.65	10.8
ED009: Anions								
Chloride	16887-00-6	0.1	mg/L	139	140	134	137	196
EP026: Chemical Oxygen Demand (COD)								
Chemical Oxygen Demand		5	mg/L	8740	3290	2600	2550	468
EA005CA: pH							· 	·
рН		0.01	pH Unit	6.93	7.31	7.94	7.96	7.90
EA010CA: Conductivity								÷.
Electrical Conductivity @ 25°C		2	µS/cm	2330	3740	3490	3480	3150
A015CA: Total Dissolved Solids								÷.
Total Dissolved Solids		10	mg/L	2010	1290	1190	1260	1320
EA025CA: Suspended Solids								
Suspended Solids (SS)		2	mg/L	2340	1800	2040	590	138
EP030CA: Biochemical Oxygen Demand								
Biochemical Oxygen Demand		2	mg/L	1860	803	240	104	26
EK059CA: Nitrite plus Nitrate as N								
Nitrite + Nitrate as N		0.05	mg/L N	<0.50	<0.50	<0.50	<0.50	1.76
EK061CA: Total Kjeldahl Nitrogen as N								
Total Kjeldahl Nitrogen as N		0.05	mg/L N	424	416	428	426	223
EK062CA: Total Nitrogen as N								
Total Nitrogen as N		0.05	mg/L N	424	416	428	426	225
EK067CA: Total Phosphorus as P							· 	·
Total Phosphorus as P		0.01	mg/L P	66.6	53.2	54.9	53.6	29.1
EG005CA: Total Metals by ICP-OES								
Calcium	7440-70-2	0.10	mg/L	28.8	59.2	60.9	58.1	32.5
Magnesium	7439-95-4	0.10	mg/L	15.7	26.8	27.0	26.5	29.8
Sodium	7440-23-5	0.1	mg/L	292	302	291	288	345



# Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	STHMEATS6 Storage Dam 2	STHMEATS7 Run Off Dam 1	STHMEATS8 Run Off Dam 2	 
		Sampli	ng date / time	08-May-2024 06:30	08-May-2024 06:30	08-May-2024 06:30	 
Compound	CAS Number	LOR	Unit	CA2402992-006	CA2402992-007	CA2402992-008	 
				Result	Result	Result	 
EA006: Sodium Adsorption Ratio (SAR)							
ø Sodium Adsorption Ratio		0.01	-	11.4	8.07	6.45	 
ED009: Anions							
Chloride	16887-00-6	0.1	mg/L	192	109	84.5	 
EP026: Chemical Oxygen Demand (COD)							
Chemical Oxygen Demand		5	mg/L	504	290	183	 
			0				
EA005CA: pH		0.01	n I I I nit	0.00	7 70	0.40	
рН		0.01	pH Unit	8.02	7.70	8.19	 
EA010CA: Conductivity							
Electrical Conductivity @ 25°C		2	μS/cm	3300	1430	1090	 
EA015CA: Total Dissolved Solids							
Total Dissolved Solids		10	mg/L	1450	796	690	 
EA025CA: Suspended Solids							
Suspended Solids (SS)		2	mg/L	209	22	10	 
		_	<u>g</u>				
EP030CA: Biochemical Oxygen Demand		2		40	40	-	
Biochemical Oxygen Demand		2	mg/L	42	42	5	 
EK059CA: Nitrite plus Nitrate as N							
Nitrite + Nitrate as N		0.05	mg/L N	<0.50	0.92	2.56	 
EK061CA: Total Kjeldahl Nitrogen as N							
Total Kjeldahl Nitrogen as N		0.05	mg/L N	230	46.1	15.4	 
EK062CA: Total Nitrogen as N							
Total Nitrogen as N		0.05	mg/L N	230	47.0	18.0	 <b></b>
- -							
EK067CA: Total Phosphorus as P		0.01			40.0	44.0	
Total Phosphorus as P		0.01	mg/L P	34.6	16.6	14.3	 
EG005CA: Total Metals by ICP-OES							
Calcium	7440-70-2	0.10	mg/L	35.0	20.5	22.0	 
Magnesium	7439-95-4	0.10	mg/L	28.7	16.3	14.8	 
Sodium	7440-23-5	0.1	mg/L	368	209	162	 
	1110 20 0		J				

Page	5 of 5
Work Order	CA2402992
Client	: Southern Meats
Project	Water Sampling Quarterly

