

CERTIFICATE OF ANALYSIS

Work Order : **CA2205611** Page : 1 of 4

Client : Southern Meats Laboratory : ALS Water Resources Group

Contact : Andy Grealy Contact : Client Services

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 Project
 : Monthly Wastewater
 Date Samples Received
 : 18-Aug-2022 12:20

 Order number
 --- Date Analysis Commenced
 : 19-Aug-2022

C-O-C number : ---Sampler : ---Site : ---Quote number : ---No. of samples received : 8
No. of samples analysed : 8

Date Samples Received : 18-Aug-2022 12:20

Date Analysis Commenced : 19-Aug-2022

Issue Date : 31-Aug-2022 16:26



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, Fyshwick, ACT
Clare Kennedy	Analyst	Inorganics, Fyshwick, ACT
Geetha Ramasundara	Chemistry Teamleader	Inorganics, Fyshwick, ACT
Titus Vimalasiri	Metals Teamleader	Inorganics, Fyshwick, ACT

Page : 2 of 4
Work Order : CA2205611

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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.

 Page
 : 3 of 4

 Work Order
 : CA2205611

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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				17-Aug-2022 13:30	17-Aug-2022 14:40	17-Aug-2022 14:45	17-Aug-2022 15:00
Compound	CAS Number	LOR	Unit	CA2205611-001	CA2205611-002	CA2205611-003	CA2205611-004	CA2205611-005
				Result	Result	Result	Result	Result
EA005CA: pH								
рН		0.01	pH Unit	6.93	7.53	7.71	8.21	8.07
EA010CA: Conductivity								
Electrical Conductivity @ 25°C		2	μS/cm	2030	3290	3330	3200	2810
ED009CA: Anions								
Chloride	16887-00-6	0.1	mg/L	112	138	129	142	170
EA015CA: Total Dissolved Solids								
Total Dissolved Solids		10	mg/L	1980	888	1310	1310	1170
EA025CA: Suspended Solids								
Suspended Solids (SS)		2	mg/L	2630	16500	8460	291	148
EP030CA: Biochemical Oxygen Demand								
Biochemical Oxygen Demand		2	mg/L	5110	1820	933	130	86
EP026CA: Chemical Oxygen Demand								
Chemical Oxygen Demand		5	mg/L	10200	24500	13300	835	410
EK059CA: Nitrite plus Nitrate as N								
Nitrite + Nitrate as N		0.05	mg/L N	0.21	0.18	0.16	0.12	0.07
EK061CA: Total Kjeldahl Nitrogen as N								
Total Kjeldahl Nitrogen as N		0.05	mg/L N	334	1150	802	309	202
EK062CA: Total Nitrogen as N								
Total Nitrogen as N		0.05	mg/L N	334	1150	802	309	202
EK067CA: Total Phosphorus as P								
Total Phosphorus as P		0.01	mg/L P	69.0	155	123	39.6	30.2
EG005CA: Total Metals by ICP-OES								
Calcium	7440-70-2	0.05	mg/L	35.0	222	138	28.3	30.1
Magnesium	7439-95-4	0.05	mg/L	17.6	44.3	30.4	19.7	27.0
Sodium	7440-23-5	0.1	mg/L	260	336	329	354	314
EA006CA: Sodium Adsorption Ratio								
Ø Sodium Adsorption Ratio		0.01	-	19.4	10.9	11.3	12.3	9.74

 Page
 : 4 of 4

 Work Order
 : CA2205611

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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		17-Aug-2022 13:00	17-Aug-2022 13:05	17-Aug-2022 00:00	 	
Compound	CAS Number	LOR	Unit	CA2205611-006	CA2205611-007	CA2205611-008	
				Result	Result	Result	
EA005CA: pH							
рН		0.01	pH Unit	8.14	8.81	8.09	
EA010CA: Conductivity							
Electrical Conductivity @ 25°C		2	μS/cm	2570	621	584	
ED009CA: Anions							
Chloride	16887-00-6	0.1	mg/L	155	56.9	58.8	
EA015CA: Total Dissolved Solids							
Total Dissolved Solids		10	mg/L	1090	428	426	
EA025CA: Suspended Solids							
Suspended Solids (SS)		2	mg/L	119	12	8	
EP030CA: Biochemical Oxygen Demand							
Biochemical Oxygen Demand		2	mg/L	44	5	<2	
EP026CA: Chemical Oxygen Demand							
Chemical Oxygen Demand		5	mg/L	540	112	123	
EK059CA: Nitrite plus Nitrate as N							
Nitrite + Nitrate as N		0.05	mg/L N	0.14	<0.05	0.36	
EK061CA: Total Kjeldahl Nitrogen as N							
Total Kjeldahl Nitrogen as N		0.05	mg/L N	211	4.33	4.84	
EK062CA: Total Nitrogen as N							
Total Nitrogen as N		0.05	mg/L N	211	4.33	5.20	
EK067CA: Total Phosphorus as P							
Total Phosphorus as P		0.01	mg/L P	31.6	8.47	4.52	
EG005CA: Total Metals by ICP-OES							
Calcium	7440-70-2	0.05	mg/L	31.0	16.6	12.3	
Magnesium	7439-95-4	0.05	mg/L	24.4	11.4	9.18	
Sodium	7440-23-5	0.1	mg/L	316	97.0	102	
EA006CA: Sodium Adsorption Ratio							
Ø Sodium Adsorption Ratio		0.01	-	9.75	4.35	5.22	