

CERTIFICATE OF ANALYSIS

Work Order : **ES2307710**
Client : **INTEGRA WATER TREATMENT SOLUTIONS**
Contact : **SAMPLE RESULTS**
Address : **UNIT B 195 PORT HACKING ROAD**
MIRANDA NSW, AUSTRALIA 2228
Telephone : **----**
Project : **Alexander Downs Wholesale Meats**
Order number : **----**
C-O-C number : **----**
Sampler : **MICHAEL AXE**
Site : **----**
Quote number : **SYBQ/406/21**
No. of samples received : **4**
No. of samples analysed : **4**

Page : 1 of 4
Laboratory : Environmental Division Sydney
Contact : Wael Saleh
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61 2 8784 8555
Date Samples Received : 08-Mar-2023 16:00
Date Analysis Commenced : 08-Mar-2023
Issue Date : 15-Mar-2023 18:32



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.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics, Smithfield, NSW



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.

- EK059G, EK057G: NOx and Nitrite for sample no:4, confirmed by re-analysis.
- TDS by method EA-015 may bias high due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	wastewater treatment plant in	wastewater treatment plant out	Pond Number 2	Pond Number 3	----
Sampling date / time				08-Mar-2023 09:40	08-Mar-2023 09:50	08-Mar-2023 10:00	08-Mar-2023 10:10	----	
Compound	CAS Number	LOR	Unit	ES2307710-001	ES2307710-002	ES2307710-003	ES2307710-004	-----	
				Result	Result	Result	Result	----	
EA005P: pH by PC Titrator									
pH Value	----	0.01	pH Unit	7.47	7.60	8.19	8.27	----	
EA006: Sodium Adsorption Ratio (SAR)									
^ Sodium Adsorption Ratio	----	0.01	-	20.0	17.6	12.2	12.4	----	
EA010P: Conductivity by PC Titrator									
Electrical Conductivity @ 25°C	----	1	µS/cm	1700	1730	1560	1510	----	
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L	2010	1550	948	936	----	
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L	1390	1670	194	134	----	
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L	----	----	----	16	----	
Magnesium	7439-95-4	1	mg/L	----	----	----	9	----	
Sodium	7440-23-5	1	mg/L	----	----	----	250	----	
Potassium	7440-09-7	1	mg/L	----	----	----	105	----	
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L	----	----	----	12.8	----	
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L	----	----	----	0.21	----	
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L	----	----	----	<0.01	----	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L	----	----	----	0.12	----	
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	----	----	----	34.8	----	
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L	----	----	----	34.9	----	
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L	----	----	----	3.86	----	
EP020: Oil and Grease (O&G)									
Oil & Grease	----	5	mg/L	----	----	----	<5	----	
EP030: Biochemical Oxygen Demand (BOD)									
Biochemical Oxygen Demand	----	2	mg/L	----	----	----	23	----	
EP030: Carbonaceous Biochemical Oxygen Demand (CBOD)									



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Compound	CAS Number	LOR	Unit	ES2307710-001	ES2307710-002	ES2307710-003	ES2307710-004	-----	
				Result	Result	Result	Result	----	
EP030: Carbonaceous Biochemical Oxygen Demand (CBOD) - Continued									
CBOD	----	2	mg/L	----	----	----	17	----	