

CERTIFICATE OF ANALYSIS

Work Order : EW2100114 Page : 1 of 4

Client : KIAMA COUNCIL Laboratory : Environmental Division NSW South Coast

Contact : MR PAUL CZULOWSKI Contact : Glenn Davies

: 11 MANNING STREET

Address : 1/19 Ralph Black Dr, North Wollongong 2500

4/13 Geary PI, North Nowra 2541 Australia NSW Australia

Accreditation No. 825

Accredited for compliance with ISO/IEC 17025 - Testing

KIAMA NSW, AUSTRALIA 2533

Telephone 02 42253125

Project : Gerroa Landfill Ammonia Testing

: +61 02 4232 0444

Date Samples Received : 08-Jan-2021 15:06

Order number : 126591 **Date Analysis Commenced** : 15-Jan-2021

C-O-C number

Address

Telephone

Issue Date · 19-Jan-2021 08:59

Sampler : Duncan McIntosh

Site

: WO/015/18 Quote number

No. of samples received : 9 : 9 No. of samples analysed

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

Wisam Marassa Inorganics Coordinator Sydney Inorganics, Smithfield, NSW Page : 2 of 4
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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 Contact 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.
- Analytical work for this work order will be conducted at ALS Sydney.

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	MW 1D	MW 3	MW 5	MW 6D	MW 7D		
Sampling date / time				08-Jan-2021 13:10	08-Jan-2021 13:00	08-Jan-2021 12:55	08-Jan-2021 13:45	08-Jan-2021 12:45		
Compound	CAS Number	LOR	Unit	EW2100114-001	EW2100114-002	EW2100114-003	EW2100114-004	EW2100114-005		
				Result	Result	Result	Result	Result		
EK055G: Ammonia as N by Discrete Analyser										
Ammonia as N	7664-41-7	0.01	mg/L	16.4	0.31	0.02	37.2	18.5		

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	MW 11	MW 12	MW 13	MW 14				
Sampling date / time				08-Jan-2021 14:00	08-Jan-2021 13:30	08-Jan-2021 13:17	08-Jan-2021 13:05				
Compound	CAS Number	LOR	Unit	EW2100114-006	EW2100114-007	EW2100114-008	EW2100114-009				
				Result	Result	Result	Result				
EK055G: Ammonia as N by Discrete Analyser											
Ammonia as N	7664-41-7	0.01	mg/L	0.97	38.9	34.6	69.9				