

CERTIFICATE OF ANALYSIS

Work Order : ES2308246

: PF FORMATION

Contact : Josh Graham

Address : 1 Patrica Fay Drive

MAROOTA 2756

Telephone **Project**

Client

Order number C-O-C number

Sampler · M.Mass - South East Environmental

Site

Quote number : EN/333

No. of samples received : 6 No. of samples analysed : 6

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Laboratory : Environmental Division Sydney

Contact : Customer Services ES

Address : 277-289 Woodpark Road Smithfield NSW Australia 2164

Telephone : +61-2-8784 8555

Date Samples Received : 14-Mar-2023 13:35

Date Analysis Commenced : 14-Mar-2023

Issue Date · 21-Mar-2023 16:13



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

Ankit Joshi Senior Chemist - Inorganics Sydney Inorganics, Smithfield, NSW Inorganics Coordinator Sydney Inorganics, Smithfield, NSW Wisam Marassa

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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.
- As per QWI EN55-3 Data Interpreting Procedures, Ionic balances are typically calculated using Major Anions Chloride, Alkalinity and Sulfate; and Major Cations Calcium, Magnesium, Potassium and Sodium. Where applicable and dependent upon sample matrix, the Ionic Balance may also include the additional contribution of Ammonia, Dissolved Metals by ICPMS and H+ to the Cations and Nitrate, SiO2 and Fluoride to the Anions.
- TDS by method EA-015 may bias high for various samples 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.

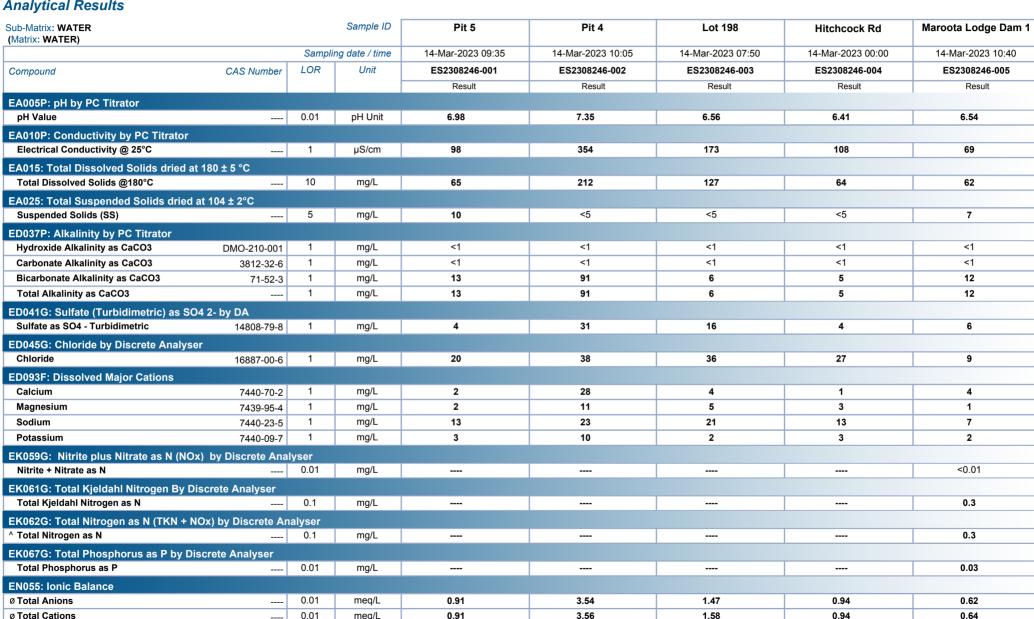
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Analytical Results

ø Ionic Balance



0.33

%

0.01

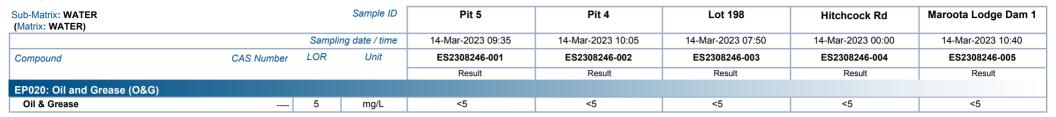


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Analytical Results





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Ø Total Anions

ø Total Cations

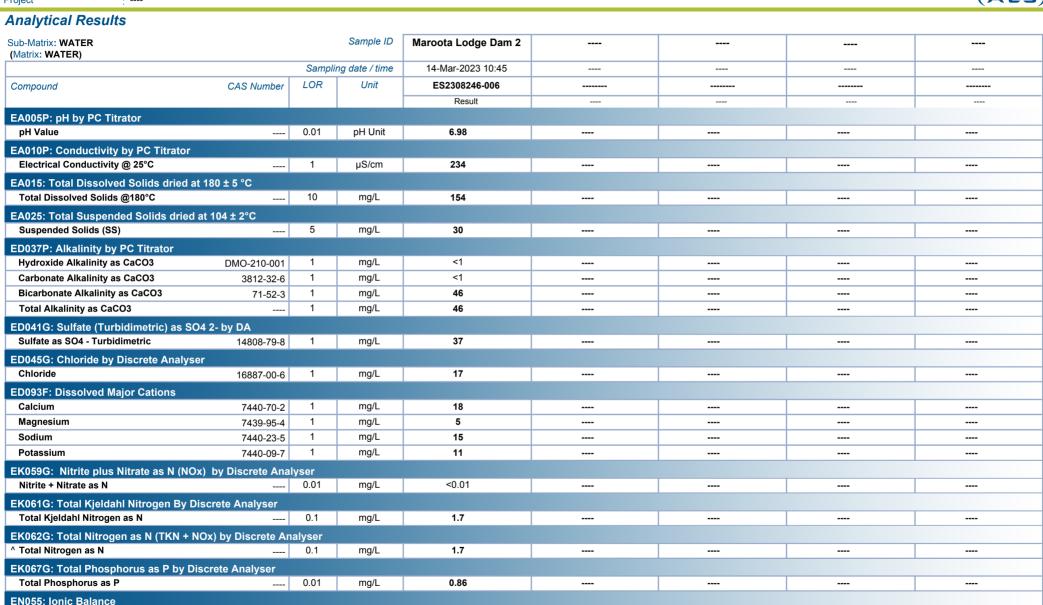
EP020: Oil and Grease (O&G)

0.01

0.01

meq/L

meq/L



2.17

2.24

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ALS

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	Maroota Lodge Dam 2	 	
	Sampling date / time			14-Mar-2023 10:45	 	
Compound	CAS Number	LOR	Unit	ES2308246-006	 	
				Result	 	
EP020: Oil and Grease (O&G) - Continued						
Oil & Grease		5	mg/L	<5	 	