

CERTIFICATE OF ANALYSIS

Work Order : **EW2102174**
Client : **WOLLONGONG CITY COUNCIL**
Contact : DELLA KUTZNER
Address : 41 BURELLI STREET
 WOLLONGONG NSW, AUSTRALIA 2500

Telephone : +61 02 4227 7111
Project : Whytes Gully PM10 and TSP
Order number : 1021509
C-O-C number : ----
Sampler : Robert DaLio
Site : Monthly HVAS & Dust
Quote number : WO/005/18 TENDER
No. of samples received : 4
No. of samples analysed : 4

Page : 1 of 2
Laboratory : Environmental Division NSW South Coast
Contact : Aneta Prosaroski
Address : 1/19 Ralph Black Dr, North Wollongong 2500
 4/13 Geary Pl, North Nowra 2541
 Australia NSW Australia
Telephone : 02 42253125
Date Samples Received : 13-May-2021 16:27
Date Analysis Commenced : 17-May-2021
Issue Date : 24-May-2021 16:25



Accreditation No. 825
 Accredited for compliance with
 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.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Zoran Grozdanovski	Laboratory Operator	Newcastle - Inorganics, Mayfield West, 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 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.

- EA143-MF: Sample 002 was received with significant damage. The result will bias low and should be scrutinised accordingly.
- **Analytical work for this work order will be conducted at ALS Newcastle.**
- NATA accreditation is not held for results reported in $\mu\text{g}/\text{m}^3$. Concentration in $\mu\text{g}/\text{m}^3$ is calculated from air volume data provided by the client.

Analytical Results

Sub-Matrix: FILTER
 (Matrix: AIR)

Sample ID

				Glengarry Cottage PM10 9915692	Glengarry Cottage TSP 9915683	Landfill PM10 9915690	Landfill TSP 9915691	----
Sampling date / time				10-May-2021 00:00	10-May-2021 00:00	11-May-2021 00:00	11-May-2021 00:00	----
Compound	CAS Number	LOR	Unit	EW2102174-001	EW2102174-002	EW2102174-003	EW2102174-004	-----
				Result	Result	Result	Result	----
EA143: Particulates in Air - HVAFs								
ø Total Suspended Particulates	----	0.1	$\mu\text{g}/\text{m}^3$	----	45.1	----	9.9	----
ø PM10	----	0.1	$\mu\text{g}/\text{m}^3$	19.5	----	6.1	----	----
Total Suspended Particulates (mass per filter)	----	0.1	mg/filter	----	68.0	----	15.1	----
PM10 (mass per filter)	----	0.1	mg/filter	29.0	----	9.2	----	----

Inter-Laboratory Testing

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(AIR) EA143: Particulates in Air - HVAFs