ALS Environmental

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Work Order** | : **EW2101113** | Page | : 1 of 2 |
| Client | : **WOLLONGONG CITY COUNCIL** | Laboratory | : Environmental Division NSW South Coast |
| Contact | : DELLA KUTZNER | Contact | : Glenn Davies |
| Address | : 41 BURELLI STREET<br>WOLLONGONG NSW, AUSTRALIA 2500 | Address | : 1/19 Ralph Black Dr, North Wollongong 2500<br>4/13 Geary Pl, North Nowra 2541<br>Australia NSW Australia |
| Telephone | : +61 02 4227 7111 | Telephone | : 02 42253125 |
| Project | : Whytes Gully PM10 and TSP | Date Samples Received | : 11-Mar-2021 13:38 |
| Order number | : 1021509 | Date Analysis Commenced | : 15-Mar-2021 |
| C-O-C number | : ---- | Issue Date | : 22-Mar-2021 11:13 |
| Sampler | : ---- | | |
| Site | : Monthy HVAS & Dust | | |
| Quote number | : WO/005/18 TENDER | | |
| No. of samples received | : 4 | | |
| No. of samples analysed | : 4 | | |

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.

| *Signatories* | *Position* | *Accreditation Category* |
|---|---|---|
| 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.

- **Analytical work for this work order will be conducted at ALS Newcastle.**
- NATA accreditation is not held for results reported in µg/m³. Air volume data was provided by the client.

## Analytical Results

| Sub-Matrix: **FILTER** (Matrix: **AIR**) | | | Sample ID | **Glengarry Cottage PM10 9915676** | **Glengarry Cottage TSP 9915675** | **Landfill PM10 9915678** | **Landfill TSP 9915677** | **----** |
|---|---|---|---|---|---|---|---|---|
| | | | *Sampling date / time* | 08-Mar-2021 00:00 | 08-Mar-2021 00:00 | 09-Mar-2021 00:00 | 09-Mar-2021 00:00 | ---- |
| *Compound* | *CAS Number* | *LOR* | *Unit* | **EW2101113-001** | **EW2101113-002** | **EW2101113-003** | **EW2101113-004** | **--------** |
| | | | | Result | Result | Result | Result | ---- |
| **EA143: Particulates in Air - HVAFs** | | | | | | | | |
| ø **Total Suspended Particulates** | ---- | 0.1 | µg/m³ | **----** | **64.7** | **----** | **33.5** | **----** |
| ø **PM10** | ---- | 0.1 | µg/m³ | **34.3** | **----** | **16.2** | **----** | **----** |
| **Total Suspended Particulates (mass per filter)** | ---- | 0.1 | mg/filter | **----** | **95.4** | **----** | **49.9** | **----** |
| **PM10 (mass per filter)** | ---- | 0.1 | mg/filter | **50.0** | **----** | **24.0** | **----** | **----** |

## Inter-Laboratory Testing

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

(AIR) EA143: Particulates in Air - HVAFs