STANDARD FLY ASH CERTIFICATE



FINAL

Prior Reports: None

Certificate Number: CERT232429 Issued: 01 August 2023 Flyash Australia Pty Ltd ABN 68 002 840 271 P.O. Box 190 Eastwood NSW 2122 Email: contact@flyash.com.au www.flyashaustralia.com.au

Product being certified: Product sample date: Sample Identification: Source Power Station: Sample Condition: Certifying Laboratory: Mt Piper Monthly Grab Fly Ash 01-Jul-2023 Sample Code: 23070123 Mount Piper Power Station Tested as Received. Testing Commenced on 06-Jul-2023 Cement Australia - Darra Laboratory, 18 Station Avenue, Darra Queensland 4076 Australia.

Test Results

| Test | Moisture | Fineness @ 45 micron | Loss on Ignition | Sulfuric Anhydride | Available Alkali | Chloride Ion | Chemical Composition |
|-------------|---------------|-------------------------|---------------------|-----------------------|---------------------|-----------------|-------------------------|
| | % | % Passed | % | % | % | % | % |
| Result | < 0.1 | 84 | 0.9 | < 0.1 | n/a | < 0.002 | 94.3 |
| Test Method | AS3583.2 | AS3583.1 | AS3583.3 | AS2350.2 | AS3583.12 | AS3583.13 | AS2350.2 |
| AS 3582.1 | 0.5 % Maximum | 75% Minimum | 4.0 % Maximum | 3.0 % Maximum | - | 0.1 % Maximum | 70% Minimum |

| Test | Relative Density | Relative Water Requirement | Strength Index 7 Day Acc. | Reference Cement Details | |
|-------------|---------------------|-------------------------------|------------------------------|---------------------------|--|
| | | % | % | Identification:: 23070565 | |
| Result | 2.12 | 95 | 96 | Source: Goliath GP | |
| Test Method | AS3583.5 | AS3583.6 | AS3583.6 | Product Type: Type GP | |
| AS 3582.1 | - | - | 75% Minimum | Sample Date: 18-Jul-23 | |

Additional Testing - Oxides

| Test | CaO by XRF | SiO ₂ by XRF | Al ₂ O ₃ by XRF | Fe ₂ O ₃ by XRF | SO ₃ by XRF | MgO by XRF | Na₂O by XRF |
|-------------|---------------|----------------------------|--|--|---------------------------|---------------|----------------|
| | % | % | % | % | % | % | % |
| Result | 0.2 | 68.0 | 23.9 | 2.4 | < 0.1 | 0.2 | 0.44 |
| Test Method | AS2350.2 | AS2350.2 | AS2350.2 | AS2350.2 | AS2350.2 | AS2350.2 | AS2350.2 |

| Test | K₂O by XRF | SrO by XRF | TiO2 by XRF | P₂O₅ by XRF | Mn ₂ O ₃ by XRF | Total Alkali (NaEQ) |
|-------------|---------------|---------------|----------------|----------------|--|------------------------|
| | % | % | % | % | % | % |
| Result | 2.47 | <0.1 | 0.8 | 0.3 | < 0.1 | 2.07 |
| Test Method | AS2350.2 | AS2350.2 | AS2350.2 | AS2350.2 | AS2350.2 | AS2350.2 |

This sample grade conforms to the following requirements of AS 3582.1:2016

Special Grade 1 Grade 2 X

Approved Signatory A Prem Signatory - Cement Australia Chemical Testing Construction Materials Testing

Accredited for compliance with ISO/IEC 17025 - Testing NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Laboratory accreditation number: 188 Laboratory accreditation number: 187



Notes:

