## STANDARD FLY ASH CERTIFICATE



FINAL
Prior Reports: None

Certificate Number: CERT202702

Issued: 30 November 2020

Product being certified: Muja Power Station Monthly Grab Fly Ash

Product sample date: 05-Nov-2020

Sample Identification: Sample Code: 20110645
Source Power Station: Muja Power Station

Sample Condition: Tested as Received. Testing Commenced on 16-Nov-2020

Certifying Laboratory: Cement Australia - Darra Laboratory,

18 Station Avenue, Darra Queensland 4076 Australia.

## ABN 68 002 840 271 Head Office C/- Lindfield Corporate Centre Suite 18, 12 Tryon Road

Flyash Australia Pty Ltd

Lindfield NSW 2070 Tel: (02) 9413 8422 Fax: (02) 9413 84.32 www.flyashaustralia.com.au

## **Test Results**

Test	Moisture	Fineness @ 45 micron	Loss on Ignition	Sulfuric Anhydride	Available Alkali	Chloride Ion	Chemical Composition
	%	% Passed	%	%	%	%	%
Result	0.1	85	0.8	0.3	n/a	0.001	94.7
Test Method	AS3583.2	AS3583.1	AS3583.3	AS2350.2	AS3583.12	AS3583.13	AS2350.2
AS 3582.1	0.5 % Maximum	85% Minimum	3.0 % Maximum	3.0 % Maximum	-	0.1 % Maximum	70% Minimum

Test	Relative Density	Relative Water Requirement	Strength Index 7 Day Acc.	Reference Cement Details	
		%	%	Identification:: 20110656	
Result	2.42	95	106	Source: Goliath GP	
Test Method	AS3583.5	AS3583.6	AS3583.6	Product Type: Type GP	
AS 3582.1	-	-	Exceeds 105%	Sample Date: 17-Nov-20	

**Additional Testing - Oxides** 

Test	CaO by XRF %	SiO <sub>2</sub> by XRF %	Al <sub>2</sub> O <sub>3</sub> by XRF %	Fe <sub>2</sub> O <sub>3</sub> by XRF %	SO₃ by XRF %	MgO by XRF %	Na₂O by XRF %
Result	0.9	55.5	26.8	12.4	0.3	0.9	0.25
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	P <sub>2</sub> O <sub>5</sub> by XRF	Mn₂O₃ by XRF	Total Alkali (NaEQ)
	%	%	%	%	%	%
Result	0.55	0.1	1.5	0.7	0.1	0.61
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
Х	Х	

**Approved Signatory** 

A Prem Signatory - Cement Australia Chemical Testing

Construction Materials Testing

Accredited for compliance with ISO/IEC 17025 - Testing. The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Cement Australia - Darra Laboratory NATA Accredited Laboratory Numbers 187 188







Notes: