## STANDARD FLY ASH CERTIFICATE



FINAL

Prior Reports: None

Certificate Number: CERT233812 Issued: 21 November 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: Muja Power Station Monthly Grab Fly Ash 01-Nov-2023 Sample Code: 23110304 Muja Power Station Tested as Received. Testing Commenced on 08-Nov-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	81	0.6	0.2	n/a	< 0.002	95.1
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:: 23110362	
Result	2.32	94	98	Source: Goliath GP	
Test Method	AS3583.5	AS3583.6	AS3583.6	Product Type: Type GP	
AS 3582.1	-	-	75% Minimum	Sample Date: 10-Nov-23	

## **Additional Testing - Oxides**

					-		
Test	CaO by XRF	SiO₂ by XRF	Al <sub>2</sub> O <sub>3</sub> by XRF	Fe <sub>2</sub> O <sub>3</sub> by XRF	SO <sub>3</sub> by XRF	MgO by XRF	Na <sub>2</sub> O by XRF
	%	%	%	%	%	%	%
Result	0.4	62.5	24.2	8.4	0.2	0.6	0.22
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 <sub>2</sub> O <sub>3</sub> by XRF	Total Alkali (NaEQ)
	%	%	%	%	%	%
Result	0.84	<0.1	1.4	0.2	< 0.1	0.77
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



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:

