## STANDARD FLY ASH CERTIFICATE



FINAL

Prior Reports: None

Certificate Number: CERT231859

**Issued:** 22 June 2023

431 Moffatt Reserve Millmerran QLD 4357

Ltd Head Office

Tel: (07) 4695 6033 Fax: (07) 4695 6133 www.mflyash.com.au

**Independent Flyash Brokers Pty** 

Product being certified: Independent Flyash Broker Monthly Grab Fly Ash

Product sample date: 01-Jun-2023

Sample Identification:Sample Code: 23060139Source Power Station:Millmerran Power Station

Sample Condition: Tested as Received. Testing Commenced on 05-Jun-2023

Certifying Laboratory: 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	86	0.2	0.1	Not Tested	< 0.002	94.6
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:: 23060207	
Result	1.99	95	92	Source: Goliath GP	
Test Method	AS3583.5	AS3583.6	AS3583.6	Product Type: Type GP	
AS 3582.1	-	-	75% Minimum	Sample Date: 07-Jun-23	

**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 %	SO <sub>3</sub> by XRF	MgO by XRF %	Na₂O by XRF %
Result	1.7	61.2	30.3	3.1	0.1	1.3	0.46
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	0.53	<0.1	1.6	0.2	< 0.1	0.81
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
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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:

