## STANDARD FLY ASH CERTIFICATE



**FINAL Prior Reports: None** 

Certificate Number: CERT201820

Issued: 20 August 2020

Product being certified: Mundra Monthly Grab Fly Ash

03-Aug-2020 Product sample date:

Sample Code: 20080223 Sample Identification:

Source Power Station: Imported Ash

Sample Condition: Tested as Received. Testing Commenced on 06-Aug-2020

**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	88	0.1	1.0	n/a	0.003	74.9
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:: 20080255	
Result	2.67	85	130	Source: Goliath GP	
Test Method	AS3583.5	AS3583.6	AS3583.6	Product Type: Type GP	
AS 3582.1	-	-	Exceeds 105%	Sample Date: 07-Aug-20	

**Additional Testing - Oxides** 

Test	CaO by XRF %	SiO <sub>2</sub> by XRF %	Al₂O₃ 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	13.0	43.5	19.7	11.7	1.0	6.3	1.74
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	1.62	<0.1	0.8	0.4	0.1	2.81
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
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

ACCREDITED FOR **TECHNICAL** COMPETENCE

Flyash Australia Pty Ltd

C/- Lindfield Corporate Centre Suite 18, 12 Tryon Road

ABN 68 002 840 271 **Head Office** 

Lindfield NSW 2070

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





Notes: