# STANDARD FLY ASH CERTIFICATE



FINAL

Prior Reports: None

### Certificate Number: CERT210796 Issued: 15 April 2021

Product being certified: Product sample date: Sample Identification: Source Power Station: Sample Condition: Certifying Laboratory:

Collie Monthly Grab Fly Ash 15-Mar-2021 Sample Code: 21031182 Collie Power Station Tested as Received. Testing Commenced on 26-Mar-2021 Cement Australia - Darra Laboratory, 18 Station Avenue, Darra Queensland 4076 Australia.

## **Test Results**

Flyash Australia Pty Ltd ABN 68 002 840 271 Head Office C/- Lindfield Corporate Centre Suite 18, 12 Tryon Road Lindfield NSW 2070 Tel : (02) 9413 8422 Fax: (02) 9413 84.32 www.flyashaustralia.com.au

Test	Moisture	Fineness @ 45 micron	Loss on Ignition	Sulfuric Anhydride	Available Alkali	Chloride Ion	Chemical Composition
	%	% Passed	%	%	%	%	%
Result	< 0.1	86	0.2	0.2	n/a	< 0.001	95.3
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:: 21031276
Result	2.43	93	107	Source: Goliath GP
Test Method	AS3583.5	AS3583.6	AS3583.6	Product Type: Type GP
AS 3582.1	-	-	Exceeds 105%	Sample Date: 30-Mar-21

### **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	Na <sub>2</sub> O by XRF
	%	%	%	%	%	%	%
Result	0.8	62.9	22.4	10.0	0.2	0.9	0.28
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	0.48	<0.1	1.4	0.5	< 0.1	0.60
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 X



Signatory - Cement Australia Chemical Testing Construction Materials Testing

Notes:

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



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