



# STANDARD FLY ASH CERTIFICATE

**FINAL**  
Prior Reports: None

Independent Flyash Brokers Pty  
Ltd

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**Certificate Number:** CERT190617  
**Issued:** 02 May 2019

**Product being certified:** Independent Flyash Broker Monthly Grab Fly Ash  
**Product sample date:** 12-Mar-2019  
**Sample Identification:** Sample Code: 19030612  
**Source Power Station:** Millmerran Power Station  
**Sample Condition:** Tested as Received. Testing Commenced on 13-Mar-2019  
**Certifying Laboratory:** Cement Australia - Darra Laboratory,  
18 Station Avenue, Darra Queensland 4076 Australia.

## Test Results

Test	Moisture %	Fineness @ 45 micron % Passed	Loss on Ignition %	Sulfuric Anhydride %	Available Alkali %	Chloride Ion %	Chemical Composition %
Result	< 0.1	88	0.2	0.1	Not Tested	<0.001	95.6
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 %	Reference Cement Details
Result	1.95	94	93	Identification:: 19030679 Source: Goliath GP
Test Method	AS3583.5	AS3583.6	AS3583.6	Product Type: Type GP
AS 3582.1	-	-	75% Minimum	Sample Date: 14-Mar-19

## 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	0.9	59.8	33.1	2.7	0.1	0.8	0.27
Test Method	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2

Test	K <sub>2</sub> O by XRF %	SrO by XRF %	TiO <sub>2</sub> by XRF %	P <sub>2</sub> O <sub>5</sub> by XRF %	Mn <sub>2</sub> O <sub>3</sub> by XRF %	Total Alkali (NaEQ) %
Result	0.78	<0.1	1.7	0.2	< 0.1	0.78
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	

### 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**

### Notes:

