

## **Cement Test Certificate**

Lot 242 Russell Road East, Munster WA 6166 PO Box 38, Hamilton Hill WA 6963 T: +61 8 9411 1000 F: +61 8 9411 1150

Final

ABN 50 006 673 470

			06 5 04
Nominal Blend		Requirements	Result
	Sample Date:	8/10/2018	
	Sample Code:	B067bfc	
	Despatched From:	Cockburn Cement, Port Hedland Plant, WA	
	Test Certificate Number:	180872	
	Product Certified:	Type GP General Purpose Cement	irncement.
013410			

Minor Additional Constituents	Max 5 %	Nil
Calcium Sulphate		<5 %
Mineral Addition	Max 7.5 %	<7.5 %
Ground Granulated Iron Blast-Furnace Slag		Nil
Clinker		>86.5 %

Papartable Droparty	Test Method	<b>Requirements of</b>	Result
Reportable Property	rest method	AS3972	Result
3 Day Strength	AS2350.11	N/R	35.7 MPa
7 Day Strength	AS2350.11	Min 35.0 MPa	54.0 MPa
28 Day Strength	AS2350.11	Min 45.0 MPa	66.7 MPa
Initial Set Time	AS2350.4	Min 45 min	105 min
Final Set Time	AS2350.4	Max 360 min	180 min
Soundness	AS2350.5	Max 5 mm	0 mm
Sulfuric Anhydride content (SO <sub>3</sub> )	AS2350.2	Max 3.5 %	3.0 %
Chloride Ion	BH-TM-0507	Max 0.10 %	0.005 %
Other Properties			
SiO <sub>2</sub>	AS2350.2	N/R	19.2 %
Al <sub>2</sub> O <sub>3</sub>	AS2350.2	N/R	5.3 %
Fe <sub>2</sub> O <sub>3</sub>	AS2350.2	N/R	3.0 %
CaO	AS2350.2	N/R	64.5 %
MgO	AS2350.2	N/R	1.1 %
Na <sub>2</sub> O Equivalent	AS2350.2	N/R	0.4 %
Loss on Ignition	AS2350.2	N/R	2.3 %
Fineness Index	AS2350.8	N/R	340 m²/kg
Normal Consistency	AS2350.3	N/R	27.5 %

This document shall not be reproduced except in full.

## REMARKS

These test result apply specifically to the sample as received at the Adelaide Brighton Cement Birkenhead Laboratory (Accreditation number: 252), 62 Elder Rd Birkenhead SA 5015.

This despatch grab sample complies to the requirements of AS3972:2010, Type GP Cement. N/R = No Requirement



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.

Approved Signatory F. Pope

Issue Date:

19/11/2018