

Cement Mill Test Report

Month of Issue: AUGUST 2021

Plant: Richmond, British Columbia
Product: Portland Cement Type GU / MS
Mill Test Report # C-GU-21-08
Manufactured: JULY 2021

CSA A3001-18 Standard Requirements

CHEMICAL ANALYSIS			PHYSICAL ANALYSIS		
Item	Spec limit	Test Result	Item	Spec limit	Test Result
Rapid Method, X-Ray			Air content of mortar (%) (C 185)	---	5.3
SiO ₂ (%)	---	20.0	Blaine Fineness (m ² /kg)	---	381
Al ₂ O ₃ (%)	---	4.8	Passing 45 um (%) (C 430)	72 min	98.1
Fe ₂ O ₃ (%)	---	3.2			
CaO (%)	---	64.3	Compressive strength (Mpa)		
MgO (%)	5.0 max	0.9	3 days	14.5 min	28.1
SO ₃ (%)	3.0 max*	3.0	7 days	20.0 min	35.3
Loss on ignition @ 950 (%)	3.5 max	2.7	28 days (Reflects previous month's data)	26.5 min	43.1
Loss on ignition @ 550 (%)	3.0 max	0.9			
Insoluble residue (%)	1.5 Max	0.6	Time of setting (minutes)		
Potential Phase Composition			Vicat Initial (C 191)	45 - 375	89
C3S (%)	---	64	Colour (L*)		58
C2S (%)	---	9	Mortar Bar Expansion C5 (%) **	0.020 max	0.008
C3A (%)	8	7	Mortar Bar Resistance C6 (%) **	0.050 max	0.031
C4AF (%)	---	10			

CSA A3001-18 Optimal Chemical Requirements

NaEq (Alkali) (%)	0.60 max	0.50
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* May exceed 3.0% SO₃ maximum based on our A3004-C5 results of <0.02% expansion at 14 days

** Current Production run not available - most recent provided

We certify that the above described cement, at the time of shipment, meets the chemical and physical requirements of applicable specifications for Type GU & Type MS

CSA A3001-18 STANDARD SPECIFICATIONS FOR TYPE GU / MS CEMENT;

CSA A3001-18 OPTIONAL CHEMICAL REQUIREMENTS FOR TYPES GU / MS LOW ALKALI CEMENT.

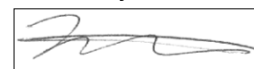
Cement complies with NSF 61

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Questions or enquiries can be directed to Matt Dalkie

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Certified By:



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 8/9/2021