Cement Mill Test Report

Plant:	**Kamloops, British Columbia**
Product:	**Portland Cement Type GUL**
Mill Test Report #	**Kamloops_Type GUL_2_25**
Manufactured:	**January 2025**

CSA A3001-23 Standard Requirements

CHEMICAL ANALYSIS

Item	Spec limit	Test Result
Rapid Method, X-Ray		
SiO2 (%)	---	19.8
Al2O3 (%)	---	4.6
Fe2O3 (%)	---	3.2
CaO (%)	---	62.4
MgO (%)	---	0.9
SO3 (%)	3.0 max*	2.9
Loss on ignition @ 950 (%)	10.0 max	2.9
Insoluble residue (%)	---	0.68
Free Lime (%)	---	1.0
Inorganic Process Addition (%)		0.0
Potential Phase Composition		
C3A%	---	7

PHYSICAL ANALYSIS

Item	Spec limit	Test Result
Air content of mortar (%) (C 185)	---	7.1
Blaine Fineness (m2/kg)	---	560
Passing 45 um (%)	72 min	1.9
Compressive strength (MPa)		
3 days	14.5 min	32.5
7 days	20.0 min	39.7
28 days (Reflects previous month's data)	26.5 min	49.8
Time of setting (minutes)		
Vicat Initial	45-375	114
Sulphate Resistance (C6)	---	0.06
A30004-C5	0.020 Max	0.00
Cement Density		3.14

CSA A3001-18 Optional Chemical Requirements:

NaEq (Alkali) (%)	0.48

* May exceed 3.0% SO3 maximum based on our A3004-C5 results of <0.020% expansion at 14 days.

We certify that the above described cement, at the time of shipment, meets the chemical and physical requirements of CSAS A3001 Type GUL

Certified By:

Robert S. Shogren

Robert Shogren
Technical Director
2/3/2025

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