



## **Cement Mill Test Report**

Month of Issue: December 2020

Plant: Richmond, BC

Product: Portland Cement Type GU

Manufactured: November 2020

Mill Test Report Number: GU(L25)\_December2020

## **ASTM C-1157 Standard Requirements**

CHEMICAL ANALYSIS			PHYSICAL ANALYSIS		
Item	Spec limit	Test Result	Item	Spec limit	Test Result
Rapid Method, X-Ray			Air content of mortar (%)		8
SiO2 (%)		17.8			
AI2O3 (%)		4.5	Blaine Fineness (m2/kg)		725
Fe2O3 (%)		3.0			
CaO (%)		60.2	-45 (%)		99.1
MgO (%)		1.3			
SO3 (%)		2.3	Autoclave expansion (%)	0.8 max	0.01
Loss on ignition (%)		10.2	Community of someth (DCI)		
Insoluble residue (%) Free Lime (%)		0.30 1.1	Compressive strength (PSI)		
Free Lilie (%)		1.1	3 days	1450 min	4450.0
			7 days	2470 min	5440.0
			28 days (Previous month's data)	2470 111111	6380.0
			Time of setting (minutes)		
			Vicat Initial (	45 - 420	88
			Limestone (%)		25.0
			Lillestolle (70)		23.0
NaEq (%)		0.46			

We certify that the above described cement, at the time of shipment, meets the chemical and physical requirements of ASTM C-1157 Type GU Cement.

Certified By:

**Rob Shogren - Technical Director** 

Kolut J. Shoopen

February 15, 2021