



Cement Mill Test Report

Date of Issue: December 8, 2025

Plant: Exshaw, AB
Product: Portland Cement Type III
Mill Test Report Number: ESW_Type III 2025-11
Manufactured during the month of: November 2025

ASTM C 150-24 and AASHTO M 85-24 Standard Requirements

CHEMICAL ANALYSIS			PHYSICAL ANALYSIS		
Item	Spec limit	Test Result	Item	Spec limit	Test Result
Rapid Method, X-Ray (XRF) (C114)			Air content of mortar (%) (C185)		
SiO ₂ (%)	---	19.1		12 max	6
Al ₂ O ₃ (%)	---	4.1	Blaine Fineness (m ² /kg) (C204)		
Fe ₂ O ₃ (%)	---	3.4		---	523
CaO (%)	---	61.5	Passing 45 µm (%) (C430)		
MgO (%)	6.0 max	4.8		---	99.1
SO ₃ (%) **	3.5 max	3.5	Compressive strength (MPa, [psi]) (C109)		
Loss on Ignition (%)	3.5 max	2.4	1 day	12.0 [1740] min	23.5 [3,403]
Insoluble Residue (%)	1.5 max	0.3	3 days	24.0 [3480] min	33.6 [4,869]
CO ₂ (%)	---	1.7	28 days (Previous Month's Result)		50.3 [7,291]
Limestone (%)	5.0 max	3.9	Time of setting (minutes)		
CaCO ₃ in Limestone (%)	70 min	88	Vicat Initial (C191)	45 - 375	75
Inorganic Process Addition (Lafarge Cement Kiln Dust)	5.0 max	0.5	Mortar Bar Expansion (%) (C1038)		
Adjusted Potential Phase Composition (C150)				0.020 max	0.013
C ₃ S (%)	---	56			
C ₂ S (%)	---	13			
C ₃ A (%)	15 max	5			
C ₄ AF (%)	---	10			

ASTM C 150-24 and AASHTO M 85-24 Optional Chemical Requirements:

Na ₂ Oeq (%) Weekly Averages:	Week 1	0.57	Week 2	0.62	Week 3	0.56	Week 4	0.54	Max	0.60
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** May exceed 3.0% SO₃ maximum based on C1038 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:

ASTM C 150-24 & AASHTO M 85-24 STANDARD SPECIFICATIONS FOR TYPE III CEMENT; and

ASTM C 150-24 & AASHTO M 85-24 OPTIONAL CHEMICAL REQUIREMENTS FOR TYPE III LOW ALKALI CEMENT.

Exceptions: C430 and C191 are excluded from the scope of the AASHTO accreditation.

Western Canada BU - Exshaw Plant

P.O. Box 160, Highway 1A, Exshaw AB, T0L 2C0

Phone: 403-673-3815

Certified By:


John W Blair
Quality Manager



Certified to
NSF/ANSI/CAN 61



AASHTO
ACCREDITED



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Additional Data

Item	Test Result	
	Limestone	Inorganic Process Addition Lafarge Cement Kiln Dust
Amount (%)		0.5
SiO ₂ (%)	1.8	14.4
Al ₂ O ₃ (%)	0.6	3.5
Fe ₂ O ₃ (%)	0.2	2.2
CaO (%)	49.4	50.4
SO ₃ (%)	0.2	2.5
CO ₂ (%)	42.4	n/a

Base Cement Phase Composition

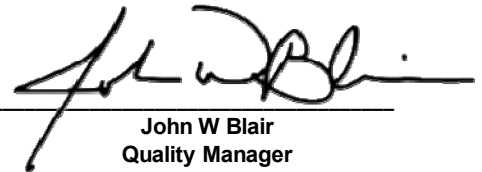
Item	Test Result
C ₃ S (%)	58
C ₂ S (%)	13
C ₃ A (%)	5
C ₄ AF (%)	11

Specific Gravity (For Information Purposes Only) 3.15

We certify that the data above reflects the materials used in cement manufacture during the production period indicated.

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