



Cement Mill Test Report

Date of Issue: January 9, 2026

Plant: Exshaw, AB
 Product: Portland Cement Type III
 Mill Test Report Number: ESW_Type III 2025-12
 Manufactured during the month of: December 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 (%)	---	19.2		12 max	6
Al ₂ O ₃ (%)	---	3.9	Blaine Fineness (m²/kg) (C204)		
Fe ₂ O ₃ (%)	---	3.3		---	526
CaO (%)	---	62.0	Passing 45 μm (%) (C430)		
MgO (%)	6.0 max	4.8		---	99.3
SO ₃ (%) **	3.5 max	3.4	Compressive strength (MPa, [psi]) (C109)		
Loss on Ignition (%)	3.5 max	2.2	1 day	12.0 [1740] min	24.3 [3,528]
Insoluble Residue (%)	1.5 max	0.3	3 days	24.0 [3480] min	33.9 [4,917]
CO ₂ (%)	---	1.6	28 days	<u>(Previous Month's Result)</u>	48.4 [7,013]
Limestone (%)	5.0 max	3.8	Time of setting (minutes)		
CaCO ₃ in Limestone (%)	70 min	88	Vicat Initial (C191)		
Inorganic Process Addition				45 - 375	77
(Cement Kiln Dust)	5.0 max	0.5	Mortar Bar Expansion (%) (C1038)		
Adjusted Potential Phase Composition (C150)				0.020 max	0.016
C ₃ S (%)	---	59	Specific Gravity (For Information Purposes Only)		
C ₂ S (%)	---	11			3.15
C ₃ A (%)	15 max	5			
C ₄ AF (%)	---	10			

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

Na₂Oeq (%) Weekly Averages: Week 1 Week 2 Week 3 0.56 Week 4 0.57 Max 0.60

** 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 (%)	1.6	14.5
Al ₂ O ₃ (%)	0.5	3.5
Fe ₂ O ₃ (%)	0.2	2.2
CaO (%)	49.2	51.7
SO ₃ (%)	0.2	2.7
CO ₂ (%)	42.6	n/a

Base Cement Phase Composition

Item	Test Result
C ₃ S (%)	61
C ₂ S (%)	11
C ₃ A (%)	5
C ₄ AF (%)	10

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

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