

ENX Inc. Acheson Terminal 10798 HWY 60 Acheson, AB T7X 6N5 Report Date: Project Number: Revision: February 3, 2021 19-01608-002 0

## Attention: Mr. Paul Johnson

Test Report Number:	ENX GUb-20F_February2021		
Year:	2021		
Month of Analysis:	February		
Cement Type:	ENX GUb-20F		

FLY ASH SOURCE: SAMPLES RECEIVED: SAMPLED BY: Genesee Generating Station (G3) January 22, 2021 Client CEMENT SOURCE SAMPLES RECEIVED: TESTED BY: Lafarge Exshaw December 18, 2020 EXL Engineering

## CHEMICAL ANALYSIS SPECIFICAITON LIMITS TEST DESCRIPTION TEST RESULTS (1) UNITS CSA A3001-18 ASTM C150M-12 28.6 Silicon Dioxide (SiO<sub>2</sub>) % Aluminum Oxide (Al<sub>2</sub>O<sub>3</sub>) 8.0 % Iron Oxide (Fe<sub>2</sub>O<sub>3</sub>) 3.9 % 52.4 % Calcium Oxide (CaO) 3.9 % Magnesium Oxide (MgO) Sulphur Trioxide (SO<sub>3</sub>) 2.3 % 1.90 % Loss on Ignition (LOI) Equivalent Alkali Content (Na2Oeq) 1.17 %

(1) Rapid Method, X-Ray (A3003)

PHYSICAL ANALYSIS					
TEST DESCRIPTION	TEST RESULTS	UNITS	SPECIFICAITON LIMITS		
	TEST RESOLTS		CSA A3001-18	ASTM C150M-12	
Fineness Retained on 45µm	7.3	%	24 max	-	
Soundness, Autoclave Expansion	0.060	%	0.80 max	-	
Compressive Strength					
3-Day	20.0	MPa	14.5 min	-	
7-Day	25.0	MPa	20.0 min	-	
28-Day (previous month's result)	36.0	MPa	26.5 min	-	
Time of Setting, Vicat Initial	162	Minutes	45 - 480	-	
Density	2.87	g/cm³	-	-	

## COMMENTS

We hereby certify that the cement represented by the above chemical and physical analyses meets the requirements of CSA A3001-18. Testing performed in accordance with CSA, ASTM and Concrete Reference Laboratory (CCRL) certification requirements.

Report prepared by:

**EXL Engineering Inc.** 

em λ

Gene Lecuyer, P. Eng. Senior Materials Engineer



Results pertain only to the sample(s) provided and constitutes a testing service only. Engineering interpretation or evaluation of the test results will be provided upon written request only.