

ENX Inc.
Acheson Terminal
10798 HWY 60
Acheson, AB T7X 6N5

Report Date: March 3, 2021
Project Number: 19-01608-002
Revision: 0

Attention: Mr. Paul Johnson

Test Report Number:	ENX Gub-20F_March2021
Year:	2021
Month of Analysis:	March
Cement Type:	ENX GUB-20F

FLY ASH SOURCE: Genesee Generating Station (G3)
SAMPLES RECEIVED: February 23, 2021
SAMPLED BY: Client

CEMENT SOURCE: Lafarge Exshaw
SAMPLES RECEIVED: January 25, 2021
TESTED BY: EXL Engineering

CHEMICAL ANALYSIS				
TEST DESCRIPTION	TEST RESULTS ⁽¹⁾	UNITS	SPECIFICATION LIMITS	
			CSA A3001-18	ASTM C150M-12
Silicon Dioxide (SiO ₂)	27.7	%	-	-
Aluminum Oxide (Al ₂ O ₃)	7.4	%	-	-
Iron Oxide (Fe ₂ O ₃)	3.9	%	-	-
Calcium Oxide (CaO)	51.6	%	-	-
Magnesium Oxide (MgO)	3.8	%	-	-
Sulphur Trioxide (SO ₃)	2.2	%	-	-
Loss on Ignition (LOI)	1.80	%	-	-
Equivalent Alkali Content (Na ₂ O _{eq})	1.15	%	-	-


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

PHYSICAL ANALYSIS				
TEST DESCRIPTION	TEST RESULTS	UNITS	SPECIFICATION LIMITS	
			CSA A3001-18	ASTM C150M-12
Fineness Retained on 45µm	6.3	%	24 max	-
Soundness, Autoclave Expansion	0.050	%	0.80 max	-
Compressive Strength				
3-Day	21.0	MPa	14.5 min	-
7-Day	26.0	MPa	20.0 min	-
28-Day (previous month's result)	36.0	MPa	26.5 min	-
Time of Setting, Vicat Initial	160	Minutes	45 - 480	-
Density	2.86	g/cm ³	-	-

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.


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.