

FLY ASH TEST REPORT

CSA A3001-18

 ENX Inc.
 Report Date:
 March 3, 2022

 Acheson Terminal
 Project Number:
 22-01608-002

 10798 HWY 60
 Test No.:
 ENX-03-2022

 Acheson, AB T7X 6N5
 Revision:
 0

Attention: Mr. Paul Johnson

Test Report Number: ENX G3-03-2022_F_CSA
Year: 2022
Month of Analysis: March

FLY ASH SOURCE: Genesee Generating Station (G3) SAMPLED BY: Client
SAMPLE DATE: SAMPLES RECEIVED: March 1, 2022

CHEMICAL ANALYSIS								
TEST DESCRIPTION	TEST RESULTS	UNITS	SPECIFICATION LIMITS					
			TYPE F	TYPE CI	TYPE CH			
Silicon Dioxide (SiO ₂)	59.9	%	-	-	-			
Aluminum Oxide (Al ₂ O ₃)	21.2	%	-	-	-			
Iron Oxide (Fe ₂ O ₃)	4.4	%	-	-	-			
Total (SiO ₂) + (Al ₂ O ₃) + (Fe ₂ O ₃)	85.5	%	-	-	-			
Sulphur Trioxide (SO ₃)	0.15	%	5.0% (max)	5.0% (max)	5.0% (max)			
Calcium Oxide (CaO)	6.3	%	≤ 15%	> 15% - ≤ 20%	> 20%			
Magnesium Oxide (MgO)	1.30	%	-	-	-			
Moisture Content (1)	0.04	%	3.0% (max)	3.0% (max)	3.0% (max)			
Loss on Ignition (LOI)	1.69	%	8.0% (max)	6.0% (max)	6.0% (max)			
Γotal Equivalent Alkali Content (Na₂Oeq)	2.72	%	-	-	-			
Total Available Equivalent Alkali Content (Na ₂ Oeq)	-	%	-	-	-			

⁽¹⁾ Optional requirement as per CSA A3001-18 - Table A.3

PHYSICAL ANALYSIS								
TEST DESCRIPTION	TEST RESULTS	UNITS	SPECIFICATION LIMITS					
			TYPE F	TYPE CI	TYPE CH			
Fineness Retained on 45µm (No. 325 Sieve)	24.5	%	34% (max)	34% (max)	34% (max)			
Quantity of Air Entrainment	1.2	%	-	-	-			
Drying Shrinkage (Increase at 28-days)	0.30	%	-	-	-			
Strength Activity Index with Portland Cement (2)								
% of Control at 7-Days	76	%	-	-	-			
% of Control at 28-Days (previous month's result)	87	%	75% (min)	75% (min)	75% (min)			
Water Requirement, Percent of Control	97	%	-	-	-			
Soundness, Autoclave Expansion	0.00	%	0.8% (max)	0.8% (max)	0.8% (max)			
Density	2.09	g/cm³	-	-	-			

(2) Optional requirement as per CSA A3001-18 - Table A.3

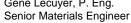
COMMENTS

We hereby certify that the fly ash represented by the above chemical and physical analyses meets the requirements of CSA A3001-18 for Type F. Testing performed by accredited laboratory in accordance with CSA A283-19 and Canadian Council of Independent Laboratories (CCIL) certification requirements.

Report prepared by:

EXL Engineering Inc.









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.