



**Cement**

**FLY ASH TEST REPORT**

Analysis by: Edmonton Mortar Lab  
Sample from : Sundance Power Plant  
Average Analysis: April 2021  
Test Report Number 5-21 Class F CSA

**Chemical Analysis**

Silicon Dioxide (SiO <sub>2</sub> )	56.6 %
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	22.6 %
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	3.7 %
Total (SiO <sub>2</sub> ) + (Al <sub>2</sub> O <sub>3</sub> ) + (Fe <sub>2</sub> O <sub>3</sub> )	82.9 %
Sulphur Trioxide (SO <sub>3</sub> )	0.2 %
Calcium Oxide (CaO)	9.3 %
Magnesium Oxide	1.3 %
Moisture Content	0.02 %
Loss on Ignition	1.40 %
Total Alkalies as Equivalent Na <sub>2</sub> O	3.31 %

**Physical Analysis**

Fineness Retained on 45 um (No. 325 Sieve)	22.3 %
Strength Activity Index with Portland Cement	
% of Control at 28 Days ( <i>previous month's result</i> )	85 %
Water Requirement, Percent of Control	95 %
Autoclave Expansion	-0.01 %
Density	2.03 g/cm <sup>3</sup>

We hereby certify that the composite fly ash sample above meets the chemical and physical requirements of CAN/CSA A3001 for Type F Fly Ash.

Certified : Robert S. Sheggen

**WESTERN REGION**

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