



**Cement**

**FLY ASH TEST REPORT**

Analysis by: Edmonton Mortar Lab  
Sample from : Sundance Power Plant  
Average Analysis: September 2021  
Test Report Number 10-21 Class F CSA

**Chemical Analysis**

Silicon Dioxide (SiO <sub>2</sub> )	<b>61.9 %</b>
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	<b>22.4 %</b>
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	<b>3.7 %</b>
Total (SiO <sub>2</sub> ) + (Al <sub>2</sub> O <sub>3</sub> ) + (Fe <sub>2</sub> O <sub>3</sub> )	<b>88.0 %</b>
Sulphur Trioxide (SO <sub>3</sub> )	<b>0.0 %</b>
Calcium Oxide (CaO)	<b>8.6 %</b>
Magnesium Oxide	<b>1.1 %</b>
Moisture Content	<b>0.10 %</b>
Loss on Ignition	<b>0.44 %</b>
Total Alkalies as Equivalent Na <sub>2</sub> O	<b>2.96 %</b>

**Physical Analysis**

Fineness Retained on 45 um (No. 325 Sieve)	<b>23.7 %</b>
Strength Activity Index with Portland Cement	
% of Control at 28 Days ( <i>previous month's result</i> )	<b>93 %</b>
Water Requirement, Percent of Control	<b>95 %</b>
Autoclave Expansion	<b>-0.02 %</b>
Density	<b>2.06 g/cm<sup>3</sup></b>

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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