



**Cement**

**FLY ASH TEST REPORT**

Analysis by: Edmonton Mortar Lab  
Sample from : Sundance Power Plant  
Average Analysis: May 2021  
Test Report Number 6-21 Class F CSA

**Chemical Analysis**

|   |               |
|---|---------------|
| Silicon Dioxide (SiO <sub>2</sub> )   | <b>59.1 %</b> |
| Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )  | <b>22.6 %</b> |
| Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )  | <b>3.8 %</b>  |
| Total (SiO <sub>2</sub> ) + (Al <sub>2</sub> O <sub>3</sub> ) + (Fe <sub>2</sub> O <sub>3</sub> ) | <b>85.5 %</b> |
| Sulphur Trioxide (SO <sub>3</sub> )   | <b>0.1 %</b>  |
| Calcium Oxide (CaO)   | <b>8.8 %</b>  |
| Magnesium Oxide   | <b>1.2 %</b>  |
| Moisture Content  | <b>0.07 %</b> |
| Loss on Ignition  | <b>0.90 %</b> |
| Total Alkalies as Equivalent Na <sub>2</sub> O  | <b>3.14 %</b> |

**Physical Analysis**

|  |                              |
|--|------------------------------|
| Fineness Retained on 45 um (No. 325 Sieve)   | <b>27.6 %</b>                |
| Strength Activity Index with Portland Cement<br>% of Control at 28 Days ( <i>previous month's result</i> ) | <b>85 %</b>                  |
| Water Requirement, Percent of Control  | <b>96 %</b>                  |
| Autoclave Expansion  | <b>0.00 %</b>                |
| Density  | <b>2.02 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 : \_\_\_\_\_

**WESTERN REGION**

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