



## FLY ASH TEST REPORT

Sample from : Centralia/Kamloops Type F Fly Ash  
Average Analysis: January 2024  
Test Report Number Centralia/Kamloops-2-25\_F\_CSA

### Chemical Analysis

Silicon Dioxide ( $\text{SiO}_2$ )	58.6 %
Aluminum Oxide ( $\text{Al}_2\text{O}_3$ )	12.8 %
Iron Oxide ( $\text{Fe}_2\text{O}_3$ )	5.8 %
Total ( $\text{SiO}_2$ ) + ( $\text{Al}_2\text{O}_3$ ) + ( $\text{Fe}_2\text{O}_3$ )	77.2 %
Sulphur Trioxide ( $\text{SO}_3$ )	0.5 %
Calcium Oxide ( $\text{CaO}$ )	13.0 %
Magnesium Oxide	3.3 %
Moisture Content	0.23 %
Loss on Ignition	2.85 %
Total Alkalies as Equivalent $\text{Na}_2\text{O}$	3.18 %

### Physical Analysis

Fineness Retained on 45 um (No. 325 Sieve)	12.1 %
Fineness Retained on 160 um	0.3
Strength Activity Index with Portland Cement	
% of Control at 7 Days	75 %
% of Control at 28 Days ( <i>previous month's result</i> )	83 %
Water Requirement, Percent of Control	99 %
Density	2.70 g/cm <sup>3</sup>
Density, Variation from Average	0.80 %
Fineness 45um Sieve, Variation from Average	2.90 %

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

\* Tested at CCIL, ASTM C1077 and AASHTO R18 Accredited Laboratory

A handwritten signature in black ink, appearing to read 'Robt S. Shogren'.

Rob Shogren, P.E.  
Technical Service Engineer  
Lafarge North America