



Cement

FLY ASH TEST REPORT

Analysis by: Lafarge Seattle Concrete Lab
Sample from : Centralia Power Plant
Average Analysis: June 2021
Test Report Number 7-21 F CSA

Chemical Analysis

| | |
|--|---------------|
| Silicon Dioxide (SiO ₂) | 47.9 % |
| Aluminum Oxide (Al ₂ O ₃) | 16.6 % |
| Iron Oxide (Fe ₂ O ₃) | 5.8 % |
| Sulphur Trioxide (SO ₃) | 1.0 % |
| Calcium Oxide (CaO) | 15 % |
| Magnesium Oxide | 5.6 % |
| Moisture Content | 0.15 % |
| Loss on Ignition | 0.29 % |
| Total Alkalies as Equivalent Na ₂ O | 3.90 % |

Physical Analysis

| | |
|--|------------------------------|
| Fineness Retained on 45 um (No. 325 Sieve) | 20.0 % |
| Strength Activity Index with Portland Cement | |
| % of Control at 28 Days (<i>previous month's result</i>) | 92% % |
| Water Requirement, Percent of Control | 93 % |
| Autoclave Expansion | 0.05 % |
| Density | 2.64 Mg/m³ |

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 _____

Rob Shogren
Technical Director

WESTERN REGION

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