

## **Cement Mill Test Report**

Plant: Product: Mill Test Report # Manufactured: Kamloops, British Columbia Portland Cement Type GUL Kamloops\_Type GUL\_1\_25 December 2024

## CSA A3001-23 Standard Requirements

| CHEMICAL ANALYSIS   |               |                       | PHYSICAL ANALYSIS                        |               |            |
|---|---------------|-----------------------|--|---------------|------------|
| Item  | Spec limit    | Test Result           | Item                                     | Spec limit    | Test Resul |
| Rapid Method, X-Ray   |               |                       | Air content of mortar (%) (C 185)        |               | 7.1        |
| SiO2 (%)  |               | 19.8                  |  |               |            |
| AI2O3 (%)   |               | 4.6                   | Blaine Fineness (m2/kg)                  |               | 521        |
| Fe2O3 (%)   |               | 3.2                   |  |               |            |
| CaO (%)   |               | 61.9                  | Passing 45 um (%)                        | 72 min        | 2.7        |
| MgO (%)   |               | 0.9                   |  |               |            |
| SO3 (%)   | 3.0 max*      | 3.3                   |  |               |            |
| Loss on ignition @ 950 (%)  | 10.0 max      | 2.9                   |  |               |            |
|   |               |                       | Compressive strength (MPa)               |               |            |
| Insoluble residue (%)   |               | 0.89                  |  |               |            |
| Free Lime (%)   |               | 1.0                   | 3 days                                   | 14.5 min      | 32.5       |
|   |               |                       | 7 days                                   | 20.0 min      | 40.7       |
| Inorganic Process Addition (%)  |               | 0.0                   | 28 days (Reflects previous month's data) | 26.5 min      | 49.8       |
|   |               |                       | Time of setting (minutes)                |               |            |
| Potential Phase Composition   |               |                       | Vicat Initial                            | 45-375        | 114        |
| C3A%  |               | 7                     |  |               |            |
|   |               |                       | Sulphate Resistance (C6)                 |               | 0.05       |
|   |               |                       | A30004-C5                                | 0.020 Max     | 0.003      |
|   |               |                       | Cement Density                           |               | 3.14       |
| CSA A3001-18 Optional Chemical  | Requirements: |                       |  |               |            |
| NaEq (Alkali) (%)   | -             | 0.50                  |  |               |            |
| * May exceed 3.0% SO3 maximum<br>We certify that the above describe<br>of CSAS A3001 Type GUL |               |                       | wexpansion at 14 days.                   |               |            |
|   |               |                       |  | Certified By: |            |
|   | Outestie      | na ay angululaa aan k | be directed to Paul Deram                | Polita She    |            |

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