# MILL TEST REPORT

1601 Rockwell Road LaSalle, IL 61301
(815)224-2112

**Cement Type:** ILHE(12)
**Production Period:** April 1 - 30, 2023
**Report Date:** June 14, 2023

| Chemical Data | | Spec Limit | Test Result |
|---|---|---|---|
| $Al_2O_3$ (C 114) | % | +/- 2 | 4.7 |
| $Fe_2O_3$ (C 114) | % | | 2.24 |
| $SiO_2$ (C 114) | % | +/- 3 | 17.4 |
| CaO (C 114) | % | +/- 3 | 62.42 |
| $SO_3$ (C 114) | % | | 4.27 |
| MgO (C114) | % | | 3.01 |
| Ignition Loss (LOI) (C 114) | % | 10.0 max | 6.4 |
| Equivalent Alkalies (C 150) | % | | 0.88 |
| Limestone (C 150) | % | 12.0 target | 12.5 |
| $CaCO_3$ in Limestone (C 150) | % | 70 min | 90 |

| Physical Data | | Spec Limit | Test Result |
|---|---|---|---|
| Air Content (C185) | % | 12 max | 6.7 |
| Blaine Fineness (C204) | $m^2/kg$ | | 663 |
| 325 Fineness (C430) | % < | | 99.9 |
| Specific Gravity (C188) | $g/cm^3$ | | |
| Expansion, Autoclave (C 151) | % | -0.020 -0.80 max | 0.04 |
| Expansion, Mortar Bar (C 1038) | % | 0.020 max | 0.004 |
| Compressive Strength (C109) | | | |
| 1 day | psi | | 4735 |
| 3 days | psi | | 5599 |
| 7 days | psi | | 5920 |
| 28 days | psi | | 7005 |
| Time of Setting (Vicat) (C191) | | | |
| Initial | min | 45 min | 60 |
| Final | min | 420 max | 115 |

**Notes:**

We certify that the above described cement at the time of shipment meets the chemical and physical requirements of the ASTM C 595, and AASHTO M 240 specifications. The above data represents the average for above stated production period. When subjected to the autoclave expansion test the specimens remained firm and hard and showed no signs of distortion, cracking, checking, pitting, or disintegration.

Kevin Jensen
Quality Control Manager

Date 6/14/2023