TEXAS LEHIGH CEMENT Co. LP

P.O. Box 610 Buda, Texas 78610
Sales (512) 295-6111 Customer Service (800) 252 - 5408

Plant: Buda
701 Cement Plant Road
Buda, Texas, 78610
Contact: Patrick E. Hoffman
Phone: (512) 295-9241

Cement Type: Type I
Report Date: 04/08/24
Production Period: Star 03/01/24
Ends 03/31/24
Tracking No. TLCBU 0000094

MILL TEST REPORT
AASHTO ACCREDITED

Chemical analysis % - ASTM C-114

Item	Spec. Limit	Test Results
MgO (%)	6.0 max.	**1.0**
SO_3(%)	3.5 max. [E]	**3.1**
Loss on Ignition (%)	3.5 max.	**1.9**
Insoluble Residue (%)	1.5 max.	**0.54**
CO_2 (%)	[A]	**1.1**
Limestone (%)	5.0 max.	**2.7**
$CaCO_3$ in Limestone (%)	70 min	**80.7**
Total Alkali as Na_2O	[A]	**0.72**
	Minimum	**0.77**
	Maximum	**0.89**

Physical Test ASTM C-150

Item		Spec. Limit	Test Result	
Air content of mortar (volume %)	ASTM C-185	12 max	**6**	
Blaine fineness (m^2/kg)	ASTM C-204	260 min.	**369**	
Mesh 325 (45 microns) % through	ASTM C-430	A - B	**92.8**	
Time of setting - Vicat test (minutes)				
Initial - Not less than or More than	ASTM C - 191	45 - 375	**116**	
Compressive strength				
1 day, Minimum MPa (psi)	ASTM C-109	A - B	**14.8**	**(2150)**
3 day, Minimum MPa (psi)	ASTM C-109	12 (1740)	**23.6**	**(3430)**
7 day, Minimum MPa (psi)	ASTM C -109	19 (2760)	**30.9**	**(4480)**
28 day, Minimum MPa (psi) **(OPTIONAL)**	ASTM C-109	A - B - D	**41.7**	**(6050)**
False Set **(OPTIONAL)**	ASTM - C451	50 min.	**76**	
Mortar Expansion Bars	ASTM C-1038	0.020% Max [E]	**A**	

Limestone Additions			
Type			Limestone
% Addition	5% Max		**2.7**
SiO_2(%)	[A]		10.47
Al_2O_3(%)	[A]		2.86
Fe_2O_3(%)	[A]		0.95
CaO (%)	[A]		46.90
SO_3(%)	[A]		1.86

Potential Compounds (%) [C]

ASTM C - 150 Annex A1		Finished cement	Base cement	
C_3S	[A]	**54**	C_3S	**56**
C_2S	[A]	**17**	C_2S	**18**
C_3A	[A]	**10**	C_3A	**10**
C_4AF	[A]	**7**	C_4AF	**7**
$C_3S + 4.75 \times C_3A$	[A]	**102**	-----	-----

A Not Applicable
B Limit not specified by purchaser. Test result provided for information only.
C Adjusted (ASTM Annex A, point A 1.6)
D Test Result of prior Month
E ASTM C-150 Table 1 Note D permits to exceed SO3 content provided it has been demonstrated to meet what is established under the Test Method ASTM C-1038 at 14 days

We certify that the above described cement, at the time of shipment, meets the chemical and physical requirements of the current applicable specifications ASTM C150 and AASHTO M85. Cement analysis are reported as oxides, in accordance with ASTM Test Method C114. Silicon dioxide (SiO2) is present in the combined state as the compounds Tricalcium silicate and dicalcium silicate, and not crystalline silica. The above data represents the average of mill samples from the production stream. Inorganic processing additions have been interground in accordance with ASTM C-465. The average composition of this processing addition can be found listed above. Compliance documents for this processing addition are available upon request. We are not responsible for improper use or workmanship.

QC Manager: Patrick E. Hoffman