



TEXAS-LEHIGH CEMENT COMPANY



Evaluation tests for:
TLC API Class A Well Cement - Buda, Texas Plant

Typical Performance Data: Grind # 201001 Prod date: 1 - 31 October 2020 Silo No. 14, 9

Chemical Analysis(%) (ASTM C114)

<u>SiO2</u>	<u>Al2O3</u>	<u>Fe2O3</u>	<u>CaO</u>	<u>MgO</u>	<u>SO3</u>	<u>LOI</u>	<u>Na2O</u>	<u>K2O</u>	<u>Na2O Equiv.</u>	<u>Insol. Residue</u>	
20.2	5.6	2.4	64.9	1.1	3.4	1.4	0.2	1.0	0.9	0.48	
API 10A Spec., max.,				6.0	3.5	3.5					1.5

Calculated Compounds(%) (API Spec. 10A, Table 1)

<u>C₃S</u>	<u>C₂S</u>	<u>C₃A</u>	<u>C₄AF</u>
60	12	11	7

Physical Parameters

Fineness

Blaine-m²/kg (ASTM C204) 285 API 10A Spec. -- 280 min.
M-325(% Passing) (ASTM C430) 78.0

Thickening Time and Compressive Strength(46% H2O - neat slurry)

API Schedule				Depth ft.		Bottom Hole Circulation Temp		H2O	
4-Csg				6000		113 Deg F		5.19 gal/sk	
Consistency Bc				Thickening Time		Compressive Strength			
Initial	15 Min.	30 Min	60 Min	70 Bc	100 Bc	8 hr/24hr - atmos. press. PSI			
8	8	9	21	92	103	100 °F (8 hr)	100 °F (24 hr)		
						1530	3310		

API Spec. 30 Bc max. in 15-30 min. stirring period >= 90 min 250 PSI min. 1800 PSI min.

The above Class A cement meets all API specifications for current API Class A (O)

All well cement tests are performed according to current API Spec. 10A

V Gonzalez-Torres

QC Manager

Phone: Lab (512) 295-9241, Sales (512) 295-9202, Shipping (512) 295-9222
PO Box 610, Buda, Texas 78610 : 701 Cement Plant Road