

GCC of America

600 S. Cherry Street, Suite 1000, Glendale, CO 80246 Sales (303) 739-5900, Customer Service (800) 225-5422

MATERIAL CERTIFICATION REPORT OIL WELL API

Plant: Rapid City

Address: 501 N. St Onge st.
Rapid City, SD 57702

Contact: Gail Amicucci

Phone: (605) 721-7042

Cement Type: API Class G - MSR

Date Issued: 1-Oct-18 **Production Period:** 24-Sep-18

To: 30-Sep-18

Identification No: 59061

STANDARD REQUIREMENTS API (Spec 10A)

CHEMICAL			
Item	API 10A Spec. Limit	Test Result	
MgO (%)	6.0 max	1.1	
SO ₃ (%)	3.0 max	2.4	
Loss On Ignition (%)	3.0 max	1.5	
Insoluble Residue (%)	0.75 max	0.46	
Equivalent Alkalies (%)	0.75 max	0.60	

Potential Phase Composition			
C₃S (%)	48 min / 58 max	51	
C₃A (%)	8 max	5	
C ₄ AF + 2 C ₃ A (%)	24 max	22	

PHYSICAL		
ltem	API 10A Spec. Limit	Test Result
Blaine Fineness (m²/kg)	NR	325
Free-Fluid Content (%)	5.9 max	3.5

Compressive Strength			
8 h, 38 °C (100 °F), MPa (psi)	2.1 (300)	5.0 (730)	
8 h, 60 °C (140 °F), MPa (psi)	10.3 (1500)	15.4 (2230)	

Thickening Time, Schedule 5			
Maximum Consistency, 15 to 30 min	30 max	19	
Thickening Time @ 70 Bc (min)	Α	95	
Thickening Time @ 100 Bc (min)	90 min / 120 max	105	

NR: No Requirement

GCC of America Cement is warranted to conform at the time of shipment with current API 10A. No other warranty is made or implied. Having no control over the use of its cements, GCC of America does not guarantee finished work.

 $^{^{\}rm A}\,\mbox{Limit}$ not specified. Test results provided for informational purposes only.