

API Laboratory Test Condition							
Lab Test Date	29 Nov 2021	Lab Temp	24	°C	Lab Humidity	30	%
Batch No	SS-F-02	Temp		°F	Time Duration	24	Hrs

Sampling procedure:

Take proper amount of Starch from each pallet and mix together (20 Samples) then run test

Laboratory Test Result				
Test Description	Reference	Standard	Result	Unit
Viscometer dial reading at 600 r/min in 40 g/L salt water	API 13 A	Max 18	17	-
Viscometer dial reading at 600 r/min in saturated salt water	API 13 A	Max 20	14	-
Filtrate volume in 40 g/L salt water	API 13 A	Max 10	8.5	ml
Filtrate volume in Saturated salt water	API 13 A	Max 10	9.6	ml

Evaluation of Starch based on NISOC Standard							
Laboratory Test Condition							
Lab Test Date	20 Nov 2021	Lab Temp	24	°C	Lab Humidity	30	%
Batch No	SS-F-02	Temp	200	°F	Time Duration	4	Hrs

Properties		Before adding formation water		After adding formation water	
MW	pcf	150			
S.S.W	ml	350			
Starch	gr	14			
Barite (sg=4.2)	gr	903		123	
FOB (sg=4.7)	gr	70		40	
Lime					
pH		7.5		7.5	
Formation Water	ml			15 % by volume of mud 400 ml	
Physical Properties		Result after 4 hr's rolling at 200 F		Result after adding formation water and 4 hr's rolling at 200 F	
		Standard	Result	Standard	Result
APP. Vis	cps	72 ± 2	66	65 ± 2	61
PV	Cps	65 ± 2	60	58 ± 2	55
YP	lb/100ft ²	18 ± 2	13	15 ± 2	11
10 sec Gel Strength	lb/100ft ²	5 ± 1	4	4 ± 1	3
10 min Gel Strength	lb/100ft ²	7 ± 1	6	6 ± 1	4
API FL	cc/30min	≤1	0.8	≤ 1	0.9
pH		7 ± 0.5	6.5	7 ± 0.5	6.5
Settling		Nil	Nil	Nil	Nil

Note:

- 1- The rheology parameter was measured at 140 F.
- 2- The foaming on both sample was minor



Technical Manager

QC Engineer