

Evaluation of Starch based on NISOC Standard							
Laboratory Test Condition							
Lab Test Date	22 Nov 2023	Lab Temp	24	°C	Lab Humidity	30	%
Batch No	SS-F-36	Temp	200	°F	Time Duration	4	Hrs

Sampling procedure:

Take proper amount of Starch from each pallet and mix together (22 Samples) then run test.

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	72	65 ± 2	62
PV	Cps	65 ± 2	63	58 ± 2	55
YP	lb/100ft <sup>2</sup>	18 ± 2	18	15 ± 2	14
10 sec Gel Strength	lb/100ft <sup>2</sup>	5 ± 1	4	4 ± 1	4
10 min Gel Strength	lb/100ft <sup>2</sup>	7 ± 1	6	6 ± 1	7
API FL	cc/30min	≤ 1	0.8	≤ 1	0.9
pH		7 ± 0.5	7.7	7 ± 0.5	7.5
Settling		Nil	Nil	Nil	Nil

Note:

- 1- Test were run base on SAVA standard lab Additive
- 2- The rheology parameter was measured at 140 F.
- 2- The foaming on both sample was minor



Technical Manager

QC Engineer