

## **CERTIFICATE OF ANALYSIS**

## **STARCH LV**

Evaluation of Starch based on NISOC Standard										
Labratory Test Condition										
Lab Test Date	18 Jan 2024	Lab Temp	24	°C	Lab Humidity	30	%			
Batch No	SS-F-38	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		adding on 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					
pН		7.5		7.5	
Formation Water	ml			15 % by volume of mud 400 ml	
Physical Properti	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	70	65 ± 2	<b>63</b>
PV	Cps	65 + 2	61	58 ± 2	<b>59</b>
YP	lb/100ft2	18 + 2	18	15 ± 2	15
10 sec Gel Strength	lb/100ft2	5 ± 1	4	4 ± 1	4
10 min Gel Strength	lb/100ft2	7 ± 1	7	6 ± 1	7
API FL	cc/30min	≤1	0.7	≤ 1	0.8
рН		7 ± 0.5	7.5	7 ± 0.5	7.6
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

QUALITY CONTROL
SAVA ENERGY

**QC** Engineer

**Technical Manager**