Schlumberger

Laboratory Cement Test Report
15.4ppg Tail Field Blend
Weston District Laboratory
Service Order Number: 2193294

						Signatures
Fluid No	**: WESC15-238FT**	Client	: **Northeast Energy**	Location / Rig	: **Patterson 254**	
Date	: Sep-23-2015	Well Name	: **MIP 3H**	Field	: -	C. Mclaughlin

Job Type	**Production**	Depth	**13925.0 ft**	TVD	**7688.0 ft**
BHST	**145 degF**	BHCT	**143 degF**	BHP	**7000 psi**
Starting Temp.	80 degF	Time to Temp.	00:59 hr:mn	Heating Rate	1.07 degF/min
Starting Pressure	534 psi	Time to Pressure	00:59 hr:mn	Schedule	9.6-1

Composition

Slurry Density	**15.40 lb/gal**	**Yield**	**1.22 ft3/sk**	**Mix Fluid**	**5.497 gal/sk**
Solid Vol. Fraction	**39.9 %**	Porosity	60.1 %	Slurry type	**Conventional**

Code	Concentration	Sack Reference	Component	Blend Density	Lot Number
D901		**94 lb of CEMENT**	Blend	**197.27 lb/ft3**	08-27-15
Fresh water	**5.497 gal/sk**		Base Fluid		
D207	**0.400 %BWOC**		Fluid loss		2015204AC
D202	**0.100 %BWOC**		Dispersant		42477-6
D046	**0.200 %BWOC**		Antifoam		CW5G0367A1
D201	**0.380 %BWOC**		Retarder		G061415-03
D167	**0.200 %BWOC**		Fluid loss		DAFA006260
D208	**0.010 %BWOC**		Viscosifier		3J0983W
D208	**0.020 %BWOC**		Viscosifier		3J0983W

Rheology (R1/B1/F1) S/N: 1053

Temperature	80 degF			143 degF		
(rpm)	Up (deg)	Down (deg)	Average (deg)	Up (deg)	Down (deg)	Average (deg)
300	**234.0**	**234.0**	**234.0**	**192.0**	**192.0**	**192.0**
200	**176.0**	**177.0**	**176.5**	**155.0**	**145.0**	**150.0**
100	**109.0**	**111.0**	**110.0**	**99.0**	**91.0**	**95.0**
60	**78.0**	**80.0**	**79.0**	**71.0**	**65.0**	**68.0**
30	**51.0**	**54.0**	**52.5**	**46.0**	**42.0**	**44.0**
6	**24.0**	**26.0**	**25.0**	**18.0**	**17.0**	**17.5**
3	**18.0**	**22.0**	**20.0**	**12.0**	**12.0**	**12.0**

10 sec Gel	26 deg - 27.75 lbf/100ft2	13 deg - 13.88 lbf/100ft2
10 min Gel	111 deg - 118.47 lbf/100ft2	19 deg - 20.28 lbf/100ft2
Rheo. computed	Viscosity : 201.442 cP Yield Point : 38.01 lbf/100ft2	Viscosity : 165.683 cP Yield Point : 33.75 lbf/100ft2

Thickening Time S/N: 450
Set Conditions - Cement Set hard

Consistency	Time
30 Bc	**08:23 hr:mn**
50 Bc	**08:36 hr:mn**
70 Bc	**09:21 hr:mn**
100 Bc	**09:30 hr:mn**

Free Fluid

0.0 mL/100mL (**0.0%**) in 2 hrs
At 80 degF and 45 deg incl
Sedimentation : **None**

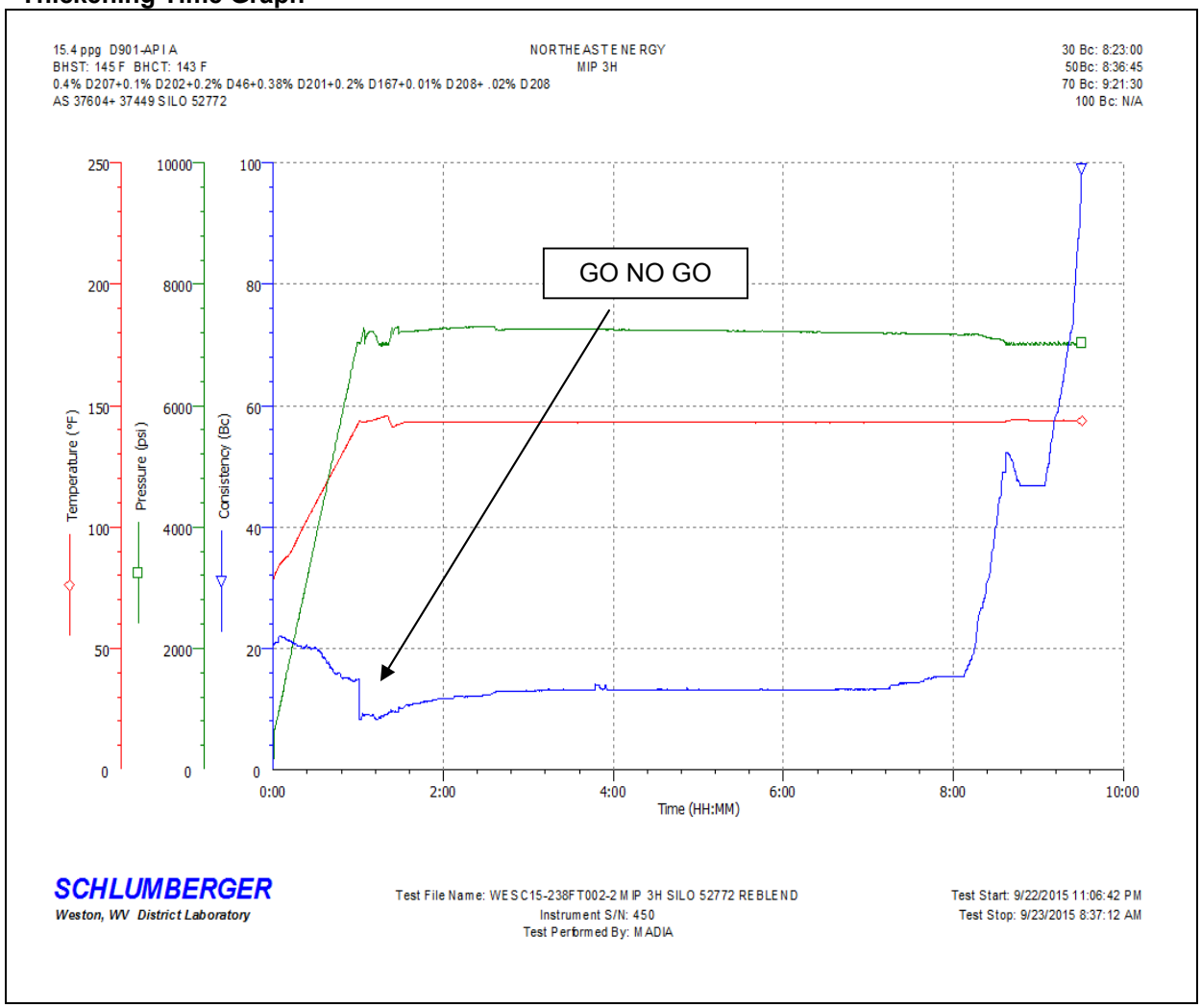
Comments

Meets Testing Requirements
Slurry Density by Pressurized Fluid Balance: 15.40 lb/gal (S/N 13-729)
Rheologies conditioned at atmospheric pressure for 30 minutes after reaching 143 degF
Passed 10 minute Go-NoGo
AS 37604 and 37449 (Silo 37261)

Schlumberger Private

Schlumberger

Thickening Time Graph



9/23/2015

X

Bradley Belcher
LT1
Signed by: Bradley Belcher 712914