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

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

Signatures

Belcher

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: 971

Temperature	80 degF			143 degF		
(rpm)	Up (deg)	Down (deg)	Average (deg)	Up (deg)	Down (deg)	Average (deg)
300	**250.0**	**250.0**	**250.0**	**219.0**	**219.0**	**219.0**
200	**189.0**	**188.0**	**188.5**	**169.0**	**164.0**	**166.5**
100	**114.0**	**116.0**	**115.0**	**108.0**	**100.0**	**104.0**
60	**79.0**	**82.0**	**80.5**	**77.0**	**70.0**	**73.5**
30	**52.0**	**53.0**	**52.5**	**49.0**	**44.0**	**46.5**
6	**23.0**	**23.0**	**23.0**	**17.0**	**16.0**	**16.5**
3	**16.0**	**19.0**	**17.5**	**11.0**	**11.0**	**11.0**

10 sec Gel	23 deg - 24.55 lbf/100ft2	12 deg - 12.81 lbf/100ft2
10 min Gel	140 deg - 149.43 lbf/100ft2	16 deg - 17.08 lbf/100ft2
Rheo. computed	Viscosity : 219.292 cP Yield Point : 36.22 lbf/100ft2	Viscosity : 191.730 cP Yield Point : 34.00 lbf/100ft2

Thickening Time S/N: 334

Set Conditions - Cement Set hard

Consistency	Time
30 Bc	**06:07 hr:mn**
50 Bc	**06:12 hr:mn**
70 Bc	**07:09 hr:mn**
100 Bc	**07:20 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 Verified 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 20 minute Go-NoGo
AS 35869+53261 Silo 34608

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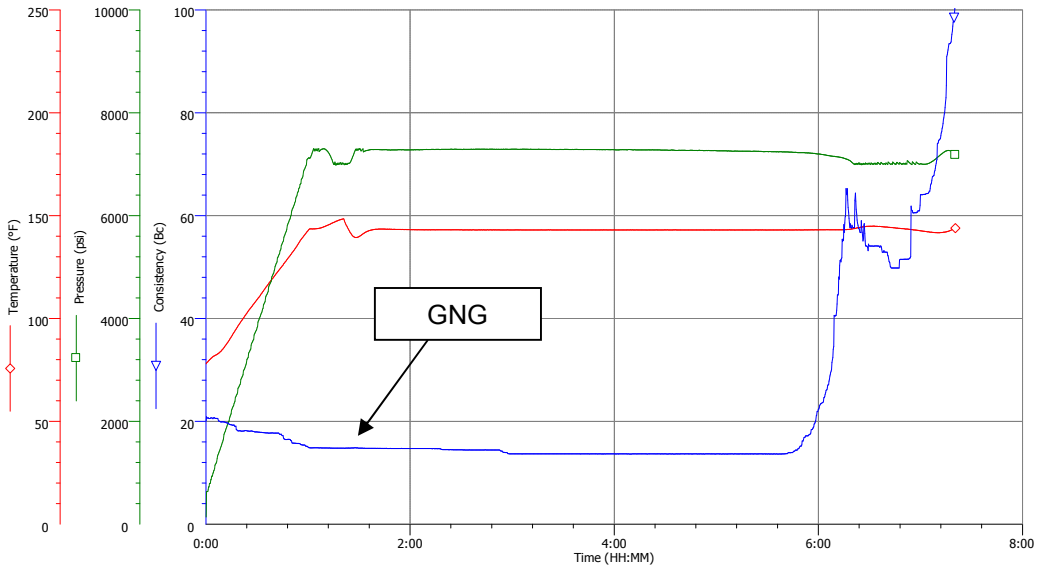
Thickening Time Graph

15.4 ppg D901-API A
BHST: 145 F BHCT: 143 F
0.4% D207+0.1% D202+0.2% D46+0.38% D201+0.2% D167+0.01% D208+ .02% D208
AS 35869+ 53261 SILO 34608

NORTHEAST ENERGY
MIP 3H

30 Bc: 6:07:45
50Bc: 6:12:30
70 Bc: 7:09:15
100 Bc: 7:20:15



SCHLUMBERGER
Weston, WV District Laboratory

Test File Name: WESC15-238FT001-2 MIP 3H SILO 34608 REBLEND
Instrument S/N: 334-1
Test Performed By: MADIA

Test Start: 9/22/2015 10:56:28 PM
Test Stop: 9/23/2015 6:16:58 AM

9/23/2015

X

Cody Mclaughlin
LT II
Signed by: Cody McLaughlin 573571