

Cement Lab Weigh-Up Sheet, Apr 17, 2010 - Req/Slurry: US-73909/1



Request Id	73909	Rig	TRANSOCEAN HORIZON	Engineer	Jesse Gagliano
Slurry No.	1	Customer	BP	Request Type	Operation
Job	Production Casing	Well	Mississippi Canyon 252	Request Date	12.04.2010
Pipe Size	7	Location	Mississippi Cny	Required By	13.04.2010
Hole Size	9.875	Slurry Type	Primary	TradeMark	
Plant Name	Fourchon-C-Port I, La,			Slurry Name	

Test Conditions

BHST	99 °C / 210 °F	Batch Mix	0 min	MD	5596 m / 18360	Pressure	997 bar / 14456 psi
BHCT	57 °C / 135 °F	Heating time	83 min	TVD	5596 m / 18360	Mud Density	1.89 SG / 14.1 PPG

Slurry Details

Density	2.006 S.G.	Water Req.	43.84 L/100kg	Yield	96.77 L/100kg	Total liquid	44.55 L/100kg
	16.741 PPG		4.94 gal/sack		1.37 ft ³ /sack		5.02 gal/sack
Pycnometer	35.000 %	Chloride conc.	N/A	Blend Weight	908.98 g	Sack Weight	94.00 lbs

Materials

Concentration	Lab	Material	Test Amount	Source	Lot No.	Date	Sample Id
100.00 % BWOC	(US-LFT)	Lafarge Class H	696.99 g	TRANSOCEAN	Tank # 8	05.04.10	67314
0.070 % BWOC	(US-LFT)	EZ-FLO	0.40 g	TRANSOCEAN		05.04.10	67314
0.250 % BWOC	(US-LFT)	D-Air 3000	1.85 g	TRANSOCEAN		05.04.10	67314
1.880 lb/sk	(US-LFT)	KCl (Potassium Chloride)	15.22 g	TRANSOCEAN		05.04.10	67314
20.000 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB	132.20 g	TRANSOCEAN		05.04.10	67314
15.000 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB	99.45 g	TRANSOCEAN		05.04.10	67314
0.200 % BWOC	(US-LFT)	SA-541	4.82 g	TRANSOCEAN		05.04.10	67314
0.110 gps	(US-LFT)	ZoneSealant 2000	6.88 g	Morgan City, La,		15.03.09	40395
0.080 gps	(US-LFT)	SCR-100L	5.45 g		6264	22.10.09	54573
4.94 gps	(US-LFT)	Fresh Water <i>By Water</i>	289.18 g				

Foam Details

Final Foam Density	1.737 S.G.	Calc. Downstream Density	1.996 S.G.	Blender volume	1170 ml	Quality	12.86 %
	14.496 PPG		16.657 PPG				
Base Slurry Weight	2020.74 g	Base Slurry Total Weight	2032.29 g				

Foam Mixing

Foam Stability Report

Lab	Material	Unfoamed Slurry Prep.	Unfoamed Slurry
(US-LFT)	Lafarge Class H	1220.70 g	
(US-LFT)	EZ-FLO	0.85 g	
(US-LFT)	D-Air 3000	3.05 g	
(US-LFT)	KCl (Potassium Chloride) Salt	24.41 g	
(US-LFT)	SSA-1 (Silica Flour) - PB	244.14 g	
(US-LFT)	SSA-2 (100 Mesh) - PB	183.10 g	
(US-LFT)	SA-541	2.44 g	
(US-LFT)	ZoneSealant 2000		11.55 g
(US-LFT)	SCR-100L	10.06 g	
(US-LFT)	Fresh Water	534.05 g	

1678.69

Test Results

Mixability (0 - 5) - 0 is not mixable	Mud Balance Density	
Mixability rating (0 - 5)	Density (SG)	Density (ppg)
5		16.7

4566
Exhibit No. _____
Worldwide Court Reporters, Inc.

Repeat

Foam Mix and Stability (Repeat Foamed to 14.5 ppg) at 180 deg F <i>Pour @ 180°F</i>															
Sink [mm]	Time to Foam	Average Mix	Foam Density [SG]	SG top	SG bot.	Conditioning time									
	<i>6 Secs</i>			<i>1.8</i>	<i>1.799</i>	<i>3 HRS</i>									
Foam Mix and Stability (Foamed to 14.5 ppg) <i>215° 4/18/10 Heat #1 @ 180</i>															
Sink [mm]	Time to Foam	Average Mix	Foam Density [SG]	SG top	SG bot.	Conditioning time									
				1.88	1.82	01:30									
Thickening Time (Need 4 1/2 - 5 1/2 Hrs., SCR-100L Lot #6264) at 135 deg F															
Temp (°F)	Pressure	Batch Mix	Reached	Start BC	30 Bc	40 Bc	50 Bc	70 Bc	100 Bc	Terminatio	Terminatio				
135	14458		83	8				05:30							
UCA Comp. Strength (Un-foamed UCA for 12, 24, & 48 Hrs, Circulate before pouring C.S. for 3 Hrs) at 210 deg F															
End Temp	Pressure	50 psi	500 psi	8 hr CS	12 hr CS	16 hr CS	24 hr CS	48 hr CS	End CS	End Time	Crush CS				
210	14458	05:54	06:19		2143		2526	2641							
Crush Compressive Strength (12, 24, & 48 Hrs Crush, Foamed to 14.5 ppg) at 210 deg F															
Conditioni	Curing	Curing	Time 1	Strength 1	Time 2	Strength 2	Time 3	Strength 3	Time 4	Strength 4	Foam				
	180		12	0	24	0	48	1590			0				
Non API Rheology at 80 deg F															
Test temp	600	300	200	100	60	30	20	10	6	3	Condition				
80	180	84	56	28	26	8	6	4	2	2					
Non API Rheology at 135 deg F															
Test temp	600	300	200	100	60	30	20	10	6	3	Condition				
135	130	56	40	20	12	8	6	4	4	2					
FYSA Viscosity Profile & Gel Strength (Foamed to 14.5 ppg) at 80 deg F															
Test	600	300	200	100	60	30	6	3	3D - 3	6D - 6	Condi	Gel 10	Gel 30	K1	K2
80															
Request/Project Comments															
Use location Blend and Rig water in lab Use SCR-100L LOT#:6264															
Required Tests															
Test Id	Test Type			Test Temp (F)	Conditions / Req. Properties										
806067	Thickening Time			135	Need 4 1/2 - 5 1/2 Hrs., SCR-100L Lot #6264										
806068	UCA Comp. Strength			210	Un-foamed UCA for 12, 24, & 48 Hrs, Circulate before pouring C.S. for										
806069	Crush Compressive Strength			210	12, 24, & 48 Hrs Crush, Foamed to 14.5 ppg										
806071	Mixability (0 - 5) - 0 is not mixable														
806072	Foam Mix and Stability				Foamed to 14.5 ppg										
813603	Foam Mix and Stability			180	Repeat Foamed to 14.5 ppg										
806074	FYSA Viscosity Profile & Gel Strength			80	Foamed to 14.5 ppg										
806075	Non API Rheology			80											
806076	Non API Rheology			135											
806078	Mud Balance Density														
Slurry Specific Comments															
Use location Blend and Rig water in lab Use SCR-100L LOT#:6264															

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