Cement Lab Weigh-Up Sheet, Mar 7, 2010 - Req/Slurry: US-68156/1

00140934

Request Id	68156	Rig	TRANSOCEAN HORIZON	Engineer	Jesse Gagliano
Slurry No.	1	Customer	BP	Request Type	Operation
Job	Production Casing	Well	Mississippi Canyon 252	Request Date	04.03.2010
Pipe Size	9.625	Location	Mississippi Cny	Required By	06.03.2010
Hole Size	12.25	Slurry Type	Lead	TradeMark	
Plant Name	Fourchon-C-Port I, La,			Slurry Name	

Test Conditions

BHST	128 °C / 262 °F	Batch Mix	0 min	MD	5989 m / 19650	Pressure	1099 bar / 15945 psi
BHCT	106 °C / 223 °F	Heating time	89 min	TVD	5989 m / 19650	Mud Density	1.75 SG / 14.6 PPG

Slurry Details

Density	2.006 S.G.	Water Req.	42.94 L/100kg	Yield	90.95 L/100kg	Total liquid	44.72 L/100kg
	16.741 PPG		4.84 gal/sack		1.37 ft³/sack		5.04 gal/sack
Pychnometer	35.000 %	Chloride conc.	999 PPM	Blend Weight	907.27 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	~~659.74~~ g	TRANSOCEAN	LOCATION	23.02.10	63981
0.070 % BWOC	(US-LFT)	EZ-FLO	~~0.46~~ g	TRANSOCEAN	BLENDED	23.02.10	63981
0.250 % BWOC	(US-LFT)	D-Air 3000	~~1.65~~ g	TRANSOCEAN	BLENDED	23.02.10	63981
1.880 lb/sk	(US-LFT)	KCl (Potassium Chloride)	~~12.49~~ g	TRANSOCEAN	BLENDED	23.02.10	63981
20.000 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB	~~131.95~~ g	TRANSOCEAN	BLENDED	23.02.10	63981
15.000 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB	~~98.96~~ g	TRANSOCEAN	BLENDED	23.02.10	63981
0.200 % BWOC	(US-LFT)	SA-541	~~1.32~~ g	TRANSOCEAN	BLENDED	23.02.10	63981
0.110 gps	(US-LFT)	Foamer 760	6.70 g			15.02.10	63241
0.200 gps	(US-LFT)	SCR-100L	13.59 g		2117	18.01.09	37271
4.84 gps	(US-LFT)	Field (Fresh) Water	282.74 g	TRANSOCEAN		11.02.10	63002

Foam Details

Final Foam Density	1.737 S.G.	Calc. Downstream Density	1.996 S.G.	Blender volume	1170 ml	Quality	12.96 %
.	14.496 PPG	.	16.657 PPG	.		.	
Base Slurry Weight	2021.04 g	Base Slurry Total Weight	2032.29 g				
.		.					

Foam Mixing

Lab	Material	Unfoamed Slurry Prep.	Unfoamed Slurry
(US-LFT)	Lafarge Class H	~~1218.58~~ g	
(US-LFT)	EZ-FLO	~~0.85~~ g	
(US-LFT)	D-Air 3000	~~3.05~~ g	
(US-LFT)	KCl (Potassium Chloride) Salt	~~24.37~~ g	1675.8
(US-LFT)	SSA-1 (Silica Flour) - PB	~~243.72~~ g	
(US-LFT)	SSA-2 (100 Mesh) - PB	~~182.79~~ g	
(US-LFT)	SA-541	~~2.44~~ g	
(US-LFT)	Foamer 760		11.25 g
(US-LFT)	SCR-100L	25.10 g	
(US-LFT)	Field (Fresh) Water	522.25 g	

Test Results

Mixability (0 - 5) - 0 is not mixable	Mud Balance Density	
Mixability rating (0 - 5)	Density (SG)	Density (ppg)
5		16.6 F/pit 0

EXHIBIT # 810

WIT:

Foam Mix and Stability (Foamed to 14.5 ppg Condition for 2 hours before pouring) 7:30pm 3/9 CK						
Sink [mm]	Time to Foam	Average Mix	Foam Density [SG]	SG top	SG bot.	Conditioning time
	3SEC		14.5	1.980	2.046	

Thickening Time (REPEAT TT with given additives, SCR-100L Lot #2117) at 223 deg F New Cup - 3/10 9AM											
Temp (°F)	Pressure	Batch Mix	Reached	Start BC	30 Bc	40 Bc	50 Bc	70 Bc	100 Bc	Terminatio	Terminatio
223	15945		89	9			OK dly gave			4:46	26

Thickening Time (TT with given additives, SCR-100L Lot #2117) at 223 deg F											
Temp (°F)	Pressure	Batch Mix	Reached	Start BC	30 Bc	40 Bc	50 Bc	70 Bc	100 Bc	Terminatio	Terminatio
223	15945		89	5	Soft Ball						

UCA Comp. Strength (UCA for 12, 24, & 48 Hrs, Circulate before pouring C.S. for 3 Hrs) at 262 deg F (Cmd) on HpHt											
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
262	15945	3:46	4:02		1465		1523	1461			

Crush Compressive Strength (12, 24, 48, & 96 Hrs Crush, Foamed to 14.5 ppg) at 262 deg F 7:30pm 3/9 CK											
Conditioni	Curing	Curing	Time 1	Strength 1	Time 2	Strength 2	Time 3	Strength 3	Time 4	Strength 4	Foam
		262	12	0	24	0	48	From	96	2106	

Non API Rheology at 190 deg F (Cmd) on HpHt 4											
Test temp	600	300	200	100	60	30	20	10	6	3	Condition
190	—	—	—	—	—	—	—	—	—	—	
	200	122	88	54	42	30	24	22	20	18	

Non API Rheology at 130 deg F											
Test temp	600	300	200	100	60	30	20	10	6	3	Condition
130											
	70	62	40	24	16	10	8	6	4	4	TP

Non API Rheology at 80 deg F											
Test temp	600	300	200	100	60	30	20	10	6	3	Condition
80											
	132	60	42	22	14	10	8	6	4	2	DR

FYSA Viscosity Profile & Gel Strength at 80 deg F															
Test	600	300	200	100	60	30	6	3	3D - 3	6D - 6	Conditi	Gel 10	Gel 30	K1	K2
80	22	9	5	2	1	1	1	1	1	1					

Request/Project Comments

Use location Blend and Rig water in lab
Use SCR-100L LOT#:2117

Required Tests

Test Id	Test Type	Test Temp (F)	Conditions / Req. Properties
750846	Thickening Time	223	TT with given additives, SCR-100L Lot #2117
754442	Thickening Time	223	REPEAT TT with given additives, SCR-100L Lot #2117
750847	UCA Comp. Strength	262	UCA for 12, 24, & 48 Hrs, Circulate before pouring C.S. for 3 Hrs
750848	Crush Compressive Strength	262	12, 24, 48, & 96 Hrs Crush, Foamed to 14.5 ppg
750850	Mixability (0 - 5) - 0 is not mixable		
750852	Foam Mix and Stability		Foamed to 14.5 ppg Condition for 2 hours before pouring
750853	FYSA Viscosity Profile & Gel Strength	80	
750854	Non API Rheology	80	
750855	Non API Rheology	130	
750856	Non API Rheology	190	
750857	Mud Balance Density		

Slurry Specific Comments

Use location Blend and Rig water in lab
Use SCR-100L LOT#:2117