

HALLIBURTON

LAB RESULTS - Primary

Cementing Gulf of Mexico, Broussard

Job Information

Request/Slurry	73909/1	Rig Name	TRANSOCEAN HORIZON	Date	April 12th 2010
Submitted By	Jesse Gagliano	Job Type	Production Casing	Bulk Plant	Fourchon-C-Port I, La, USA
Customer	BP	Location	Mississippi Cny	Well	Mississippi Canyon 252 OCS-G-32306 Macondo #1

Well Information

Casing/Liner Size	7"	Depth MD	5596 ft	BHST	99 F
Hole Size	9 7/8"	Depth TVD	5596 ft	BHCT	57 F

Drilling Fluid Information

Mud Company	Type	Density	1.7 PPG	PV/YP
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Cement Information - Primary Design

Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.	Cement Properties	
100.00	% BWOC	Lafarge Class H				Slurry Density	16.741 PPG
0.07	% BWOC	EZ-FLO	Rig	Apr 05, 2010		Slurry Yield	1.37 FT3
0.25	% BWOC	D-Air 3000	Rig	Apr 05, 2010		Water Requirement	4.94 GPS
1.88	lb/sk	KCl (Potassium Chloride) Salt	Rig	Apr 05, 2010		Total Mix Fluid	5.02 GPS
20.00	% BWOC	SSA-1 (Silica Flour) - PB	Rig	Apr 05, 2010		Foam Density	14.496 PPG
15.00	% BWOC	SSA-2 (100 Mesh) - PB	Rig	Apr 05, 2010		Foam Quality	12.98 %
0.20	% BWOC	SA-541	Rig	Apr 05, 2010		Water Source	Field (Fresh) Water
0.11	gps	ZoneSealant 2000	Lab	Mar 15, 2009		Water Chloride	N/A ppm
0.08	gps	SCR-100L	Lab	Oct 22, 2009	6264		
4.94	gps	Field (Fresh) Water					

Operation Test Results Request ID 73909-1

UCA Comp. Strength Request Test ID: 806068

End Temp (°F)	Pressure (psi)	50 psi (hh:mm)	500 psi (hh:mm)	12 hr CS (psi)	24 hr CS (psi)	48 hr CS (psi)
210	14,458	05:54	06:19	2,143	2,526	2,641

Circulate before pouring C.S. for 3 Hrs

Thickening Time Request Test ID: 806067

Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	70 Be (hh:mm)
135	14,458	83	8	05:30

Need 4 1/2 - 5 1/2 Hrs., SCR-100L Lot #6264

Non API Rheology Request Test ID: 806076

Test temp (°F)	600	300	200	100	60	30	20	10	6	3
135	130	56	40	20	12	8	6	4	4	2

Non API Rheology Request Test ID: 806075

Test temp (°F)	600	300	200	100	60	30	20	10	6	3
80	180	84	56	28	26	8	6	4	2	2

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Mud Balance Density, Request Test ID:806078

Density (ppg)

16.7

Mixability (0 - 5) 5= is not mixable, Request Test ID:806071

Mixability rating (0 - 5)

5

Foam Mix and Stability, Request Test ID:813693

Time to Foam [Sec]

SG top

SG bot.

Conditioning time (hrs:min)

8

1.8

1.8

03:00

FYSA Viscosity Profile & Gel Strength, Request Test ID:806074

Test Temp (°F)

80

600=14, 300=7, 200=5, 100=3, 60=1, 30=1, 6=1, 3=1.... 6D=1, 3D=1

Crush Compressive Strength, Request Test ID:806069

Curing Temp (°F)	Time 1 (hrs)	Strength 1	Time 2 (hrs)	Strength 2	Time 3 (hrs)	Strength 3	Foam Q (%)
180	12	0	24	0	48	1,590	0

Condition for 1.5 hrs

Additional Comments

Use location Blend and Rig water in lab Use SCR-100L LOT#:6264

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