Cement Lab Weigh-Up Sheet, Feb 12, 2010 - Req/Slurry: US-65112/2

00135799

Request Id	65112	Rig	TRANSOCEAN HORIZON	Engineer	Jesse Gagliano
Slurry No.	2	Customer	BP	Request Type	Operation
Job	Production Casing	Well	Mississippi Canyon 252	Request Date	10.02.2010
Pipe Size	9.625	Location	Mississippi Cny	Required By	12.02.2010
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.	43.39 L/100kg	Yield	90.86 L/100kg	Total liquid	44.63 L/100kg
	16.741 PPG		4.89 gal/sack		1.37 ft³/sack		5.03 gal/sack
Pychnometer	N/A	Chloride conc.	N/A	Blend Weight	908.12 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	~~668.36~~ g				59335
0.070 % BWOC	(US-LFT)	EZ-FLO	~~0.46~~ g				
0.250 % BWOC	(US-LFT)	D-Air 3000	~~1.65~~ g				
1.880 lb/sk	(US-LFT)	KCl (Potassium Chloride)	~~12.41~~ g	Blend			
20.000 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB	~~132.07~~ g				
15.000 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB	~~99.05~~ g				
0.200 % BWOC	(US-LFT)	SA-541	~~1.32~~ g				
0.110 gps	(US-LFT)	ZoneSealant 2000	6.87 g				
0.140 gps	(US-LFT)	SCR-100L	9.52 g		2117		
4.89 gps	(US-LFT)	[redacted] Fresh) Water	285.96 g				

Test Results

Use city H2O as per Jesse

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

Foam Mix and Stability at 180 deg F

Sink [mm]	Time to Foam	Average Mix	Foam Density [SG]	SG top	SG bot.	Conditioning time

#8

Thickening Time (Need 5 - 6 Hrs., SCR-100L Lot #2117) at 223 deg F 3:05 am 2-12-10 BB

Temp (°F)	Pressure	Batch Mix	Reached	Start BC	30 Bc	40 Bc	50 Bc	70 Bc	100 Bc	Terminatio	Terminatio
223	15945		89	9	3:35	3:37	3:39	3:42		DS	

Good Test

Temperature Did not control

- Circ 3hrs

UCA Comp. Strength (UCA for 12, 24, & 48 Hrs, Circulate before pouring C.S. for 3 Hrs) at 262 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

- Foam to 14.5

Crush Compressive Strength (12, 24, & 48 Hrs Crush, Foamed to 14.5 ppg) at 262 deg F

Conditioni	Curing	Curing	Time 1	Strength 1	Time 2	Strength 2	Time 3	Strength 3	Time 4	Strength 4	Foam
		262	12		24		48				

Non API Rheology at 190 deg F

Test temp	600	300	200	100	60	30	20	10	6	3	Condition
190											

Non API Rheology at 80 deg F

Test temp	600	300	200	100	60	30	20	10	6	3	Condition
80											

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Non API Rheology at 130 deg F

Test temp	600	300	200	100	60	30	20	10	6	3	Condition
130											

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															

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
721785	Thickening Time	223	Need 5 - 6 Hrs., SCR-100L Lot #2117
721786	UCA Comp. Strength	262	UCA for 12, 24, & 48 Hrs, Circulate before pouring C.S. for 3 Hrs
721787	Crush Compressive Strength	262	12, 24, & 48 Hrs Crush, Foamed to 14.5 ppg
721788	Mixability (0 - 5) - 0 is not mixable		
721789	Foam Mix and Stability	180	
721790	FYSA Viscosity Profile & Gel Strength	80	
721791	Non API Rheology	80	
721792	Non API Rheology	130	
721793	Non API Rheology	190	
721794	Mud Balance Density		

Slurry Specific Comments

(2)

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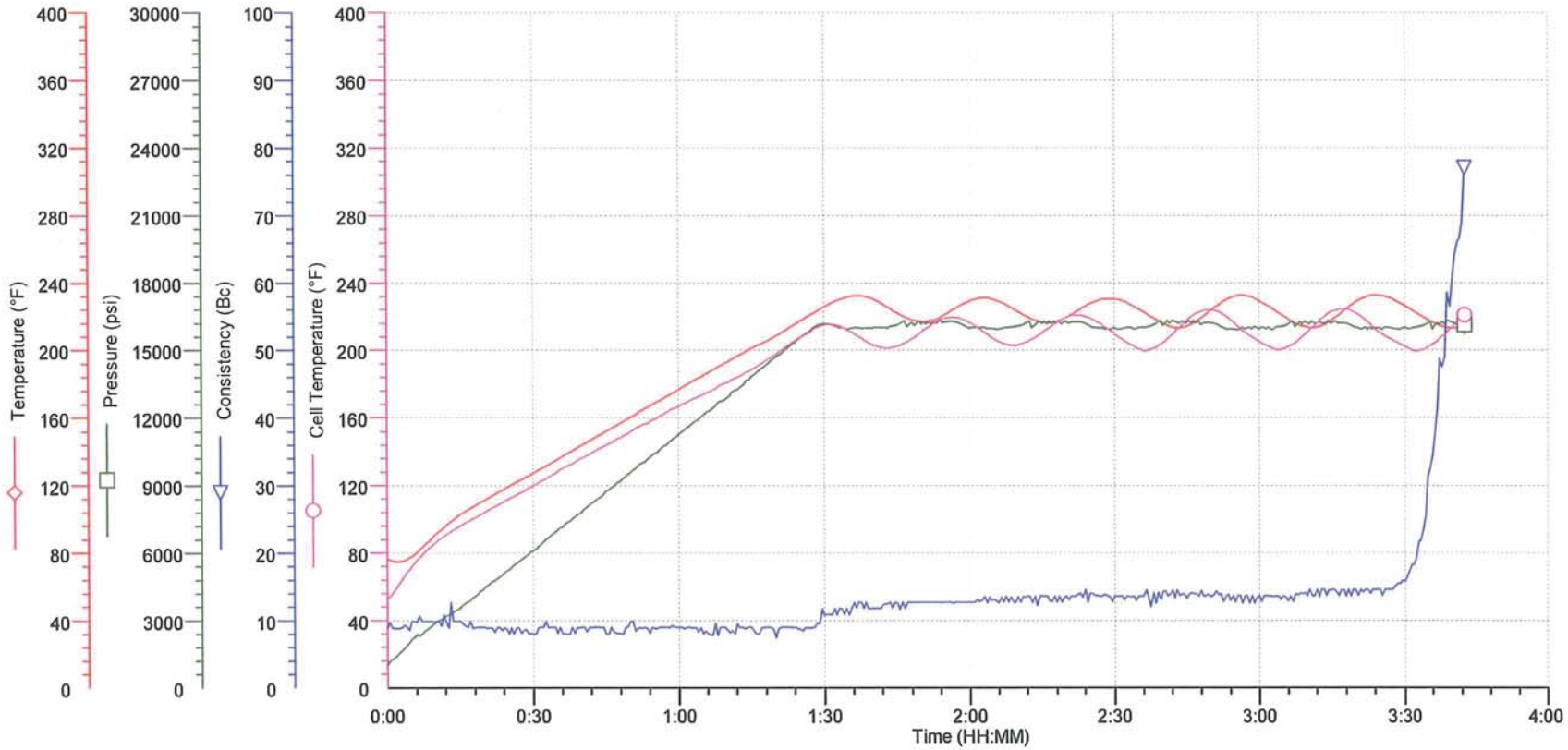
Company:
Job Type:
Well Info:
Project Number: 65112[1].2.tst
Slurry:

Slurry Density (ppg):
BHCT ('F):
N/A



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Project Code: 65112[1].2.tst

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IGH-UP COMPLETE. SCAN NEW WEIGH-UP ID TO START

ry Id	00135799	Restart Weigh-up	Out of Stock	Stock Count	Database Connected	Barcode Open	Scale Open
iest Id	65112	Rig	TRANSOCEAN	Engineer	Jesse Gagliano		
y No	2	Customer	BP	Request Type	Operation		
	Production Casing	Well	Mississippi Canyon 252	Request Date	10.02.2010		
Size (in)	9.625	Field		Required By	12.02.2010		
Size (in)	12.25	Slurry Type	Lead	Trademark			
				Slurry Name			

centration	Lab	Material	Test Amount	Actual Amount	Source	Lot No	Date	Sample Id
00 % BWOC	(US-LFT)	Lafarge Class H	908.12 g	908.11 g	TRANSOCEAN H	LOCATION	29. DEC 2009	0000059335
% BWOC	(US-LFT)	EZ-FLO			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
% BWOC	(US-LFT)	D-Air 3000			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
lb/sk	(US-LFT)	KCl (Potassium Chloride) Salt			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
0 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
0 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
% BWOC	(US-LFT)	SA-541			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
gps	(US-LFT)	ZoneSealant 2000	6.87 g	6.85 g	Morgan City, La.		15. MAR 2009	0000040395
gps	(US-LFT)	SCR-100L	9.52 g	9.51 g	Morgan City, La.	2117	23. DEC 2008	0000036204
gps	(US-LFT)	Fresh Water	285.96 g	285.98 g			18. JAN 2010	0000060731

TTT...CMB

it program | About | PC ID ENAUS00038575 | Scale Id 100000000054 | Manual Barcode Entry

Cement Lab Weigh-Up Sheet, Feb 12, 2010 - Req/Slurry: US-65112/3

00135836

Request Id	65112	Rig	TRANSOCEAN HORIZON	Engineer	Jesse Gagliano
Slurry No.	3	Customer	BP	Request Type	Operation
Job	Production Casing	Well	Mississippi Canyon 252	Request Date	10.02.2010
Pipe Size	9.625	Location	Mississippi Cny	Required By	12.02.2010
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	N/A	Chloride conc.	N/A	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	~~650.74~~ g				59335
0.070 % BWOC	(US-LFT)	EZ-FLO	~~0.46~~ g 7				
0.250 % BWOC	(US-LFT)	D-Air 3000	~~4.65~~ g				
1.880 lb/sk	(US-LFT)	KCl (Potassium Chloride)	~~13.19~~ g				
20.000 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB	~~131.95~~ g				
15.000 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB	~~98.96~~ g				
0.200 % BWOC	(US-LFT)	SA-541	~~1.32~~ g				
0.110 gps	(US-LFT)	ZoneSealant 2000	6.87 g				
0.200 gps	(US-LFT)	SCR-100L	13.59 g		2117		
4.84 gps	(US-LFT)	Fresh Water	282.74 g				

Test Results

Mixability (0 - 5) - 0 is not mixable

Mixability rating (0 - 5)
5 SB

Mud Balance Density

Density (SG)	Density (ppg)
	16.5

Foam Mix and Stability at 180 deg F

Sink [mm]	Time to Foam	Average Mix	Foam Density [SG]	SG top	SG bot.	Conditioning time

#8 Thickening Time (Need 5 - 6 Hrs., SCR-100L Lot #2117) at 223 deg F 8:56 am 2/12/10 SB

Temp (°F)	Pressure	Batch Mix	Reached	Start BC	30 Bc	40 Bc	50 Bc	70 Bc	100 Bc	Terminatio	Terminatio
223	15945		89	9:56	4:57	4:58	4:59	5:00			

Cond 3hr

UCA Comp. Strength (UCA for 12, 24, & 48 Hrs, Circulate before pouring C.S. for 3 Hrs) at 262 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
262	15,945										

Crush Compressive Strength (12, 24, & 48 Hrs Crush, Foamed to 14.5 ppg) at 262 deg F

Conditioni	Curing	Curing	Time 1	Strength 1	Time 2	Strength 2	Time 3	Strength 3	Time 4	Strength 4	Foam
262			12		24		48				

Non API Rheology at 80 deg F

Test temp	600	300	200	100	60	30	20	10	6	3	Condition
80											

Non API Rheology at 130 deg F

Test temp	600	300	200	100	60	30	20	10	6	3	Condition
130											

190° & FYSA on pg. 2

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Non API Rheology at 190 deg F											
Test temp	600	300	200	100	60	30	20	10	6	3	Condition
190											

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															

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
722097	Thickening Time	223	Need 5 - 6 Hrs., SCR-100L Lot #2117
722098	UCA Comp. Strength	262	UCA for 12, 24, & 48 Hrs. Circulate before pouring C.S. for 3 Hrs
722099	Crush Compressive Strength	262	12, 24, & 48 Hrs Crush, Foamed to 14.5 ppg
722100	Mixability (0 - 5) - 0 is not mixable		
722101	Foam Mix and Stability	180	
722102	FYSA Viscosity Profile & Gel Strength	80	
722103	Non API Rheology	80	
722104	Non API Rheology	130	
722105	Non API Rheology	190	
722106	Mud Balance Density		

Slurry Specific Comments

(3)

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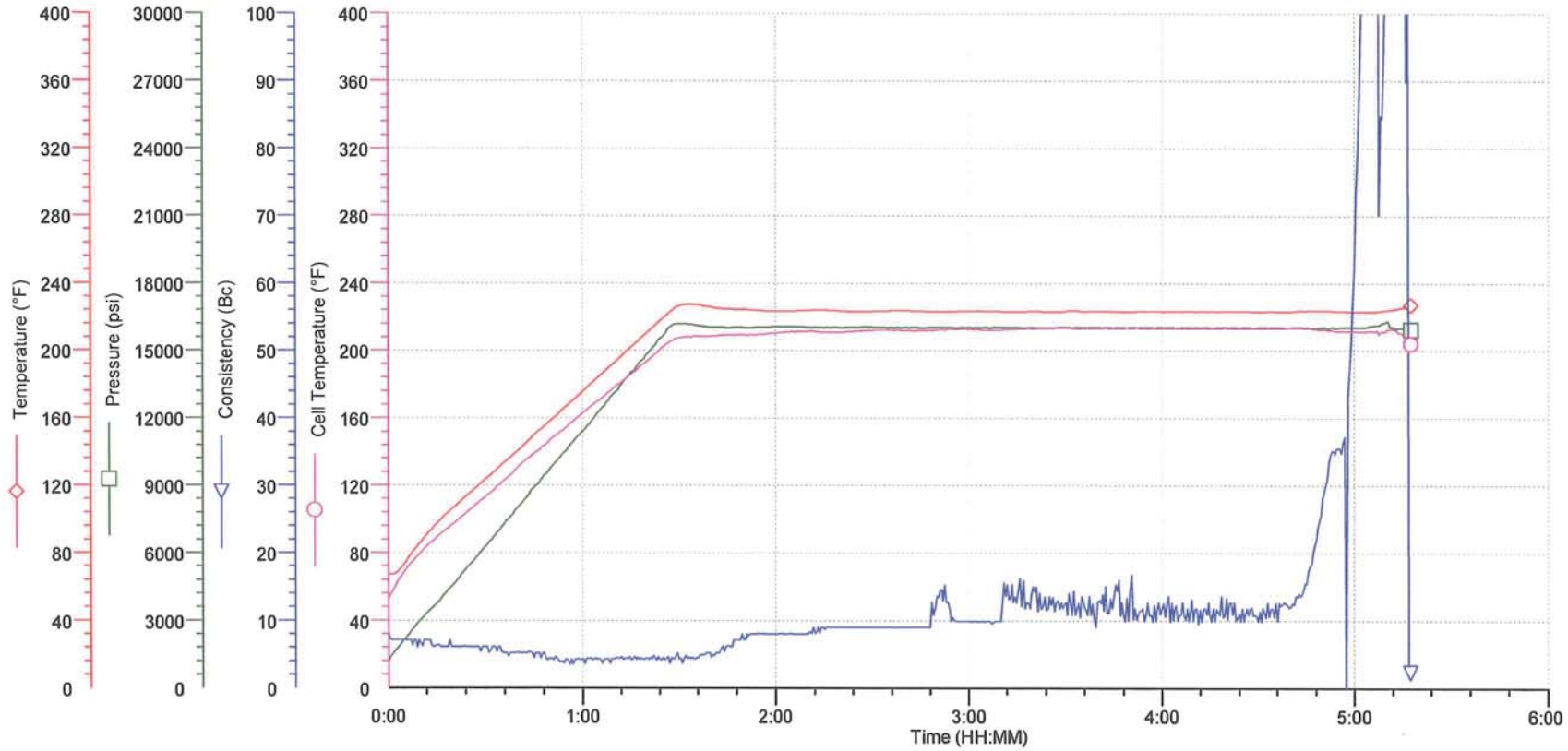
Company:
Job Type:
Well Info:
Project Number: 65112[1].3.tst
Slurry:

Slurry Density (ppg):
BHCT ('F): 223
5:00:30



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Gulf Coast NWA Laboratory

Project Code: 65112[1].3.tst

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SCAN SAMPLES (Scan Weigh-up sheet to finish)

Slurry Id	00135836	Restart Weigh-up	Out of Stock	Stock Count	Database Connected	Barcode Open	Scale Open
Request Id	65112	Rig	TRANSOCEAN	Engineer	Jesse Gagliano		
Slurry No	3	Customer	BP	Request Type	Operation		
Job	Production Casing	Well	Mississippi Canyon 252	Request Date	10.02.2010		
Pipe Size (in)	9.625	Field		Required By	12.02.2010		
Hole Size (in)	12.25	Slurry Type	Lead	Trademark			
				Slurry Name			

Concentration	Lab	Material	Test Amount	Actual Amount	Source	Lot No	Date	Sample Id
100.00 % BWOC	(US-LFT)	Lafarge Class H	907.27 g	907.29 g	TRANSOCEAN H	LOCATIOI	29. DEC 2009	0000059335
0.07 % BWOC	(US-LFT)	EZ-FLO			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
0.25 % BWOC	(US-LFT)	D-Air 3000			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
1.88 lb/sk	(US-LFT)	KCl (Potassium Chloride) Salt			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
20.00 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
15.00 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
0.20 % BWOC	(US-LFT)	SA-541			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
0.11 gps	(US-LFT)	ZoneSealant 2000	6.87 g	6.87 g	Morgan City, La.		15. MAR 2009	0000040395
0.20 gps	(US-LFT)	SCR-100L	13.59 g	13.59 g	Morgan City, La.	2117	23. DEC 2008	0000036204
4.84 gps	(US-LFT)	Fresh Water	282.74 g	282.75 g			18. JAN 2010	0000060731

SB

CCM TTT

Exit program | About | PC ID ENAUS00040470 | Scale Id 100000000057 | Manual Barcode Entry

Cement Lab Weigh-Up Sheet, Feb 12, 2010 - Req/Slurry: US-65112/3

00135836

Request Id	65112	Rig	TRANSOCEAN HORIZON	Engineer	Jesse Gagliano
Slurry No.	3	Customer	BP	Request Type	Operation
Job	Production Casing	Well	Mississippi Canyon 252	Request Date	10.02.2010
Pipe Size	9.625	Location	Mississippi Cny	Required By	12.02.2010
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.	N/A	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	~~859.74~~ g	TRANSOCEAN	LOCATION	29.12.09	59335
0.070 % BWOC	(US-LFT)	EZ-FLO	~~0.46~~ g	TRANSOCEAN	BLENDED	29.12.09	59335
0.250 % BWOC	(US-LFT)	D-Air 3000	~~1.65~~ g	TRANSOCEAN	BLENDED	29.12.09	59335
1.880 lb/sk	(US-LFT)	KCl (Potassium Chloride)	~~13.19~~ g	TRANSOCEAN	BLENDED	29.12.09	59335
20.000 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB	~~131.95~~ g	TRANSOCEAN	BLENDED	29.12.09	59335
15.000 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB	~~98.96~~ g	TRANSOCEAN	BLENDED	29.12.09	59335
0.200 % BWOC	(US-LFT)	SA-541	~~1.32~~ g	TRANSOCEAN	BLENDED	29.12.09	59335
0.110 gps	(US-LFT)	ZoneSealant 2000	6.87 g	Morgan City, La,		15.03.09	40395
0.200 gps	(US-LFT)	SCR-100L	13.59 g	Morgan City, La,	2117	23.12.08	36204
4.84 gps	(US-LFT)	Fresh Water	282.74 g			18.01.10	60731

Foam Details

Final Foam Density	1.737 S.G.	Calc. Downstream Density	1.996 S.G.	Blender volume	1170 ml	Quality	12.98 %
.	14.496 PPG	.	16.657 PPG	.		.	
Base Slurry Weight	2020.76 g	Base Slurry Total Weight	2032.29 g				
.		.					

Foam Mixing

Lab	Material	Unfoamed Slurry Prep.	Unfoamed Slurry
(US-LFT)	Lafarge Class H	1218.41 g	16 75.56
(US-LFT)	EZ-FLO	~~0.85~~ g	
(US-LFT)	D-Air 3000	~~3.05~~ g	Blend
(US-LFT)	KCl (Potassium Chloride) Salt	~~24.37~~ g	
(US-LFT)	SSA-1 (Silica Flour) - PB	~~243.68~~ g	
(US-LFT)	SSA-2 (100 Mesh) - PB	~~182.76~~ g	
(US-LFT)	SA-541	~~2.44~~ g	
(US-LFT)	ZoneSealant 2000		11.53 g
(US-LFT)	SCR-100L	25.10 g	
(US-LFT)	Fresh Water	522.18 g	

Test Results

Mixability (0 - 5) - 0 is not mixable	Mud Balance Density	
Mixability rating (0 - 5)	Density (SG)	Density (ppg)
5		16.5

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A-4

Foam Mix and Stability at 180 deg F 5:00p 2-13-10 (BD)

Sink [mm]	Time to Foam	Average Mix	Foam Density [SG]	SG top	SG bot.	Conditioning time
				2.02	2.11	

Thickening Time (Need 5 - 6 Hrs., SCR-100L Lot #2117) at 223 deg F 16.8 17.6

Temp (°F)	Pressure	Batch Mix	Reached	Start BC	30 Bc	40 Bc	50 Bc	70 Bc	100 Bc	Terminatio	Terminatio
223	15945	0	89	7	04:57	04:58	04:59	05:00			

UCA Comp. Strength (UCA for 12, 24, & 48 Hrs, Circulate before pouring C.S. for 3 Hrs) at 262 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
262	15,945	2:28	2:42		1829		1872	1946			

Crush Compressive Strength (12, 24, & 48 Hrs Crush, Foamed to 14.5 ppg) at deg F 180 MAX 2:45 p 2/15 (JB)

Conditioni	Curing	Curing	Time 1	Strength 1	Time 2	Strength 2	Time 3	Strength 3	Time 4	Strength 4	Foam

Slurry is Settling will Repeat Heat

Non API Rheology at 80 deg F

Test temp	600	300	200	100	60	30	20	10	6	3	Condition
80	60	29	18	8	4	2	1	0	0	0	
	120	58	36	16	8	4	2	2	2	2	

Non API Rheology at 130 deg F

Test temp	600	300	200	100	60	30	20	10	6	3	Condition
130	28	14	9	4	2	1	1	0	0	0	
	56	28	18	8	4	2	2	2	2	2	

Non API Rheology at 190 deg F

Test temp	600	300	200	100	60	30	20	10	6	3	Condition
190	96	54	33	17	10	5	3	1	0	0	
	192	108	66	34	20	10	6	2	2	2	

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								1							
	22	8	5	3	2	2	1	1	0	0					

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
722097	Thickening Time	223	Need 5 - 6 Hrs., SCR-100L Lot #2117
722098	UCA Comp. Strength	262	UCA for 12, 24, & 48 Hrs, Circulate before pouring C.S. for 3 Hrs
722099	Crush Compressive Strength	262	12, 24, & 48 Hrs Crush, Foamed to 14.5 ppg
722100	Mixability (0 - 5) - 0 is not mixable		
722101	Foam Mix and Stability	180	
722102	FYSA Viscosity Profile & Gel Strength	80	
722103	Non API Rheology	80	
722104	Non API Rheology	130	
722105	Non API Rheology	190	
722106	Mud Balance Density		

Slurry Specific Comments

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burton Lab Scanner

AN SAMPLES (Scan Weigh-up sheet to finish)

ry Id	00135836	Restart Weigh-up	Out of Stock	Stock Count	Database Connected	Barcode Open	Scale Open
iest Id	65112	Rig	TRANSOCEAN	Engineer	Jesse Gagliano		
y No	3	Customer	BP	Request Type	Operation		
	Production Casing	Well	Mississippi Canyon 252	Request Date	10.02.2010		
Size (in)	9.625	Field		Required By	12.02.2010		
Size (in)	12.25	Slurry Type	Lead	Trademark			
				Slurry Name			

centration	Lab	Material	Test Amount	Actual Amount	Source	Lot No	Date	Sample Id
00 % BWOC	(US-LFT)	Lafarge Class H	907.27 g	2032.29 g	TRANSOCEAN H	LOCATION	29. DEC 2009	0000059335
% BWOC	(US-LFT)	EZ-FLO			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
% BWOC	(US-LFT)	D-Air 3000			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
lb/sk	(US-LFT)	KCl (Potassium Chloride) Salt			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
10 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
10 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
% BWOC	(US-LFT)	SA-541			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
gps	(US-LFT)	ZoneSealant 2000	6.87 g	11.54 g	Morgan City, La.		15. MAR 2009	0000040395
gps	(US-LFT)	SCR-100L	13.59 g	25.11 g	Morgan City, La.	2117	23. DEC 2008	0000036204
gps	(US-LFT)	Fresh Water	282.74 g	522.23 g			18. JAN 2010	0000060731

FOAMED FYSAM,CS AND STABILITY

it program | About | PC ID ENAUS00038575 | Scale Id 100000000054 | Manual Barcode Entry

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alliburton Lab Scanner

/EIGH-UP COMPLETE. SCAN NEW WEIGH-UP ID TO START

lurry Id	00135836	Restart Weigh-up	Out of Stock	Stock Count	Database Connected	Barcode Open	Scale Open	
equest Id	65112	Rig	TRANSOCEAN	Engineer	Jesse Gagliano			
urry No	3	Customer	BP	Request Type	Operation			
b	Production Casing	Well	Mississippi Canyon 252	Request Date	10.02.2010			
pe Size (in)	9.625	Field		Required By	12.02.2010			
ole Size (in)	12.25	Slurry Type	Lead	Trademark				
				Slurry Name				

oncentration	Lab	Material	Test Amount	Actual Amount	Source	Lot No	Date	Sample Id
00.00 % BWOC	(US-LFT)	Lafarge Class H	907.27 g	1675.68 g	TRANSOCEAN H	LOCATIO	29. DEC 2009	0000059335
.07 % BWOC	(US-LFT)	EZ-FLO			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
.25 % BWOC	(US-LFT)	D-Air 3000			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
.88 lb/sk	(US-LFT)	KCl (Potassium Chloride) Salt			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
0.00 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
5.00 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
.20 % BWOC	(US-LFT)	SA-541			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
.11 gps	(US-LFT)	ZoneSealant 2000	6.87 g	11.16 g	Morgan City, La.		15. MAR 2009	0000040395
.20 gps	(US-LFT)	SCR-100L	13.59 g	25.11 g	Morgan City, La.	2117	23. DEC 2008	0000036204
.84 gps	(US-LFT)	Fresh Water	282.74 g	522.19 g			18. JAN 2010	0000060731

FOAM CS FYSA - JACK

Exit program | About | PC ID | ENAUS00040470 | Scale Id | 100000000057 | Manual Barcode Entry

HAL_DOJ_0000064

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AN SAMPLES (Scan Weigh-up sheet to finish)

ry Id	00135836	Restart Weigh-up	Out of Stock	Stock Count	Database Connected	Barcode Open	Scale Open	
uest Id	65112	Rig	TRANSOCEAN	Engineer	Jesse Gagliano			
y No	3	Customer	BP	Request Type	Operation			
	Production Casing	Well	Mississippi Canyon 252	Request Date	10.02.2010			
Size (in)	9.625	Field		Required By	12.02.2010			
Size (in)	12.25	Slurry Type	Lead	Trademark				
				Slurry Name				

centration	Lab	Material	Test Amount	Actual Amount	Source	Lot No	Date	Sample Id
00 % BWOC	(US-LFT)	Lafarge Class H	907.27 g	907.28 g	TRANSOCEAN H	LOCATION	29. DEC 2009	0000059335
% BWOC	(US-LFT)	EZ-FLO			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
% BWOC	(US-LFT)	D-Air 3000			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
lb/sk	(US-LFT)	KCl (Potassium Chloride) Salt			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
10 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
10 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
% BWOC	(US-LFT)	SA-541			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
gps	(US-LFT)	ZoneSealant 2000	6.87 g	6.88 g	Morgan City, La.		15. MAR 2009	0000040395
gps	(US-LFT)	SCR-100L	13.59 g	13.61 g	Morgan City, La.	2117	23. DEC 2008	0000036204
gps	(US-LFT)	Fresh Water	282.74 g	282.75 g			18. JAN 2010	0000060731

CS JPS

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AN SAMPLES (Scan Weigh-up sheet to finish)

ry Id	00135836	Restart Weigh-up	Out of Stock	Stock Count	Database Connected	Barcode Open	Scale Open	
iest Id	65112	Rig	TRANSOCEAN	Engineer	Jesse Gagliano			
y No	3	Customer	BP	Request Type	Operation			
	Production Casing	Well	Mississippi Canyon 252	Request Date	10.02.2010			
Size (in)	9.625	Field		Required By	12.02.2010			
Size (in)	12.25	Slurry Type	Lead	Trademark				
				Slurry Name				

centration	Lab	Material	Test Amount	Actual Amount	Source	Lot No	Date	Sample Id
00 % BWOC	(US-LFT)	Lafarge Class H	907.27 g	907.25 g	TRANSOCEAN H	LOCATION	29. DEC 2009	0000059335
% BWOC	(US-LFT)	EZ-FLO			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
% BWOC	(US-LFT)	D-Air 3000			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
lb/sk	(US-LFT)	KCl (Potassium Chloride) Salt			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
0 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
0 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
% BWOC	(US-LFT)	SA-541			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
gps	(US-LFT)	ZoneSealant 2000	6.87 g	6.86 g	Morgan City, La.		15. MAR 2009	0000040395
gps	(US-LFT)	SCR-100L	13.59 g	13.59 g	Morgan City, La.	2117	23. DEC 2008	0000036204
gps	(US-LFT)	Fresh Water	282.74 g	282.75 g			18. JAN 2010	0000060731

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it program | About | PC ID ENAUS00038575 | Scale Id 100000000054 | Manual Barcode Entry

HAL_DOJ_0000066

Cement Lab Weigh-Up Sheet, Feb 16, 2010 - Req/Slurry: US-65112/3

00135836

Request Id	65112	Rig	TRANSOCEAN HORIZON	Engineer	Jesse Gagliano
Slurry No.	3	Customer	BP	Request Type	Operation
Job	Production Casing	Well	Mississippi Canyon 252	Request Date	10.02.2010
Pipe Size	9.625	Location	Mississippi Cny	Required By	12.02.2010
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.	N/A	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	29.12.09	59335
0.070 % BWOC	(US-LFT)	EZ-FLO	0.46 g	TRANSOCEAN	BLENDED	29.12.09	59335
0.250 % BWOC	(US-LFT)	D-Air 3000	1.65 g	TRANSOCEAN	BLENDED	29.12.09	59335
1.880 lb/sk	(US-LFT)	KCl (Potassium Chloride)	13.19 g	TRANSOCEAN	BLENDED	29.12.09	59335
20.000 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB	131.95 g	TRANSOCEAN	BLENDED	29.12.09	59335
15.000 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB	98.96 g	TRANSOCEAN	BLENDED	29.12.09	59335
0.200 % BWOC	(US-LFT)	SA-541	1.32 g	TRANSOCEAN	BLENDED	29.12.09	59335
0.110 gps	(US-LFT)	ZoneSealant 2000	6.87 g	Morgan City, La,		15.03.09	40395
0.200 gps	(US-LFT)	SCR-100L	13.59 g	Morgan City, La,	2117	23.12.08	36204
4.84 gps	(US-LFT)	Fresh Water	282.74 g			18.01.10	60731

Foam Details

Final Foam Density	1.737 S.G.	Calc. Downstream Density	1.996 S.G.	Blender volume	1170 ml	Quality	12.98 %
.	14.496 PPG	.	16.657 PPG	.		.	
Base Slurry Weight	2020.76 g	Base Slurry Total Weight	2032.29 g				
.		.					

Foam Mixing

Lab	Material	Unfoamed Slurry Prep.	Unfoamed Slurry
(US-LFT)	Lafarge Class H	1218.41 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	
(US-LFT)	SSA-1 (Silica Flour) - PB	243.68 g	
(US-LFT)	SSA-2 (100 Mesh) - PB	182.76 g	
(US-LFT)	SA-541	2.44 g	
(US-LFT)	ZoneSealant 2000		11.53 g
(US-LFT)	SCR-100L	25.10 g	
(US-LFT)	Fresh Water	522.18 g	

Test Results

Mixability (0 - 5) - 0 is not mixable	Mud Balance Density	
Mixability rating (0 - 5)	Density (SG)	Density (ppg)
5		16.5

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Use half Zone Seal to condition Fluid Foam and pour Cubes & Foam Stability

Foam Mix and Stability at 180 deg F

Sink [mm]	Time to Foam	Average Mix	Foam Density [SG]	SG top	SG bot.	Conditioning time
				2.02	2.11	00:00

Foam Mix and Stability (Foamed to 14.5 ppg Condition for 2 hours before pouring) at 180 deg F 4:00A 2/17/10 KO

Sink [mm]	Time to Foam	Average Mix	Foam Density [SG]	SG top	SG bot.	Conditioning time
				1.91	1.91	

Thickening Time (Need 5 - 6 Hrs., 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	0	89	7	04:57	04:58	04:59	05:00			

UCA Comp. Strength (UCA for 12, 24, & 48 Hrs, Circulate before pouring C.S. for 3 Hrs) at 262 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

Crush Compressive Strength (12, 24, & 48 Hrs Crush, Foamed to 14.5 ppg) at 262 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	0.0					0

Crush Compressive Strength (Foamed to 14.5 ppg Condition for 2 hours before pouring) at 180 deg F 4:00A 2/17/10 KO

Conditioni	Curing	Curing	Time 1	Strength 1	Time 2	Strength 2	Time 3	Strength 3	Time 4	Strength 4	Foam
			12	Ø	24	Ø	36	Ø	48	Film	60 Hard on bottom Soft on top

Non API Rheology at 190 deg F 96hr CS = 1145 84 Hard on bottom from on top

Test temp	600	300	200	100	60	30	20	10	6	3	Condition
190	192	108	66	34	20	10	6	2	2	2	

Non API Rheology at 80 deg F

Test temp	600	300	200	100	60	30	20	10	6	3	Condition
80	120	58	36	16	8	4	2	2	2	2	

Non API Rheology at 130 deg F

Test temp	600	300	200	100	60	30	20	10	6	3	Condition
130	56	28	18	8	4	2	2	2	2	2	

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															

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
722097	Thickening Time	223	Need 5 - 6 Hrs., SCR-100L Lot #2117
722098	UCA Comp. Strength	262	UCA for 12, 24, & 48 Hrs, Circulate before pouring C.S. for 3 Hrs
722099	Crush Compressive Strength	262	12, 24, & 48 Hrs Crush, Foamed to 14.5 ppg
727535	Crush Compressive Strength	180	Foamed to 14.5 ppg Condition for 2 hours before pouring
722100	Mixability (0 - 5) - 0 is not mixable		
722101	Foam Mix and Stability	180	
727534	Foam Mix and Stability	180	Foamed to 14.5 ppg Condition for 2 hours before pouring
722102	FYSA Viscosity Profile & Gel Strength	80	
722103	Non API Rheology	80	
722104	Non API Rheology	130	
722105	Non API Rheology	190	
722106	Mud Balance Density		

Slurry Specific Comments

3

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AN SAMPLES (Scan Weigh-up sheet to finish)

ry Id	00135836	Restart Weigh-up	Out of Stock	Stock Count	Database Connected	Barcode Open	Scale Open
iest Id	65112	Rig	TRANSOCEAN	Engineer	Jesse Gagliano		
y No	3	Customer	BP	Request Type	Operation		
	Production Casing	Well	Mississippi Canyon 252	Request Date	10.02.2010		
Size (in)	9.625	Field		Required By	12.02.2010		
Size (in)	12.25	Slurry Type	Lead	Trademark			
				Slurry Name			

centration	Lab	Material	Test Amount	Actual Amount	Source	Lot No	Date	Sample Id
00 % BWOC	(US-LFT)	Lafarge Class H	907.27 g	1675.61 g	TRANSOCEAN H	LOCATION	29. DEC 2009	0000059335
% BWOC	(US-LFT)	EZ-FLO			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
% BWOC	(US-LFT)	D-Air 3000			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
lb/sk	(US-LFT)	KCl (Potassium Chloride) Salt			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
0 % BWOC	(US-LFT)	SSA-1 (Silica Flour) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
0 % BWOC	(US-LFT)	SSA-2 (100 Mesh) - PB			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
% BWOC	(US-LFT)	SA-541			TRANSOCEAN H	BLENDED	29. DEC 2009	0000059335
gps	(US-LFT)	ZoneSealant 2000	6.87 g	11.55 g	Morgan City, La.		15. MAR 2009	0000040395
gps	(US-LFT)	SCR-100L	13.59 g	25.11 g		2117	18. JAN 2009	0000037271
gps	(US-LFT)	Fresh Water	282.74 g	522.17 g			18. JAN 2010	0000060731

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it program | About | PC ID ENAUS00038575 | Scale Id 100000000054 | Manual Barcode Entry

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