

**QUICKSILVER RESOURCES INC-EBUSINESS
DO NOT MAIL-801 CHERRY ST
FORT WORTH, Texas**

Simoes 12-30

DHS 6

Post Job Summary **Cement Multiple Stages**

Date Prepared: June 4, 2012
Version: 1

Service Supervisor: CARPENTER, LANCE

Submitted by: Charli A Brown

HALLIBURTON

HALLIBURTON

Wellbore Geometry

Job Tubulars					MD		Excess %	Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft		
Casing	Surface Casing	9.63	8.921	36.00	0.00	1,200.00		40.00
Open Hole Section	Intermediate Open Hole		8.750		1,200.00	6,700.00	15.00	0.00
Casing	Intermediate Casing	7.00	6.276	26.00	0.00	6,700.00		40.00
Cement Stage Tool	Multiple Stage Cementer		.000		2,800.00	2,800.00		0.00

Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Density lbm/gal	Avg Rate bbl/min	Volume
1	Spacer	TUNED SPACER III	10.00	4.00	20.0 bbl
2	Cement Slurry	EconoCem	12.20	6.00	345.0 sacks
3	Cement Slurry	EXTENDACEM	14.20	4.00	75.0 sacks
4	Mud	Displacement	8.40	6.00	247.0 bbl

Fluids Pumped

Stage/Plug # 1 Fluid 1: TUNED SPACER III
TUNED SPACER III - SBM (483826)
65.5 lbm/bbl BAROID 41
1 lbm/bbl D-AIR 5000

Fluid Density: 10.00 lbm/gal
Fluid Volume: 20.00 bbl
Pump Rate: 4.00 bbl/min

Stage/Plug # 1 Fluid 2: EconoCem
ECONOCEM (TM) SYSTEM
0.4 % Halad(R)-344
0.125 lbm Poly-E-Flake
0.9 % HR-5

Fluid Weight: 12.20 lbm/gal
Slurry Yield: 2.23 ft³/sack
Total Mixing Fluid: 12.11 Gal
Volume: 345.0 sacks
Calculated Fill: 3,400.00 ft
Calculated Top of Fluid: 2,800.00 ft
Pump Rate: 6.00 bbl/min

Stage/Plug # 1 Fluid 3: EXTENDACEM
EXTENDACEM (TM) SYSTEM
0.2 % Halad(R)-344
0.4 % HR-5
0.125 lbm Poly-E-Flake

Fluid Weight: 14.20 lbm/gal
Slurry Yield: 1.28 ft³/sack
Total Mixing Fluid: 5.60 Gal
Volume: 75.0 sacks
Calculated Fill: 500.00 ft
Calculated Top of Fluid: 6,200.00 ft
Pump Rate: 4.00 bbl/min

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Stage/Plug # 1 Fluid 4: Displacement

Fluid Density: 8.40 lbm/gal
Fluid Volume: 247.00 bbl
Pump Rate: 6.00 bbl/min

Job Summary

Job Information

Job Start Date	5/18/2012 7:00:00 AM
Job MD	6,500.0 ft
Job TVD	6,500.0 ft
Height of Plug Container/Swage Above Rig Floor	3.0 ft
Surface Temperature at Time of Job	65 degF
Mud Type	INTEGRADE
Actual Mud Density	9 lbm/gal
Time Circulated before job	12.00 hour(s)
Rate at Which Well was Circulated	6.000 bbl/min
Pipe Movement During Hole Circulation	Reciprocated
Time From End Mud Circ. to Job Start	10.00 minute
Pipe Movement During Cementing	None
Calculated Displacement	247.00 bbl
Job Displaced by (rig/halco)	Cement Unit HP Pumps
Annular flow Before Job? (Water/Gas)	Unknown
Annular flow After Job? (Water/Gas)	No
Length of Rat Hole	10.00 ft

Cementing Equipment

Number of Centralizers Used	45
Did Float Equipment Hold?	Yes
Plug set used?	No
Did Plugs Bump?	Yes
Calculated Pressure to Bump Plugs	1,150.0 psig

Service Supervisor Reports

Job Log

Date/Time	Activity Code	Pump Rate	Volume	Pressure (psig)	Comments
05/24/2012 12:30	Call Out				CREW CALLED OUT
05/24/2012 14:00	Pre-Convoy Safety Meeting				CREW HAS JOURNEY MANAGEMENT SAFETY MEETING
05/24/2012 14:15	Depart from Service Center or Other Site				CREW DEPARTS FOR LOCATION
05/24/2012 17:00	Arrive At Loc				CREW ARRIVES AT LOCATION. CHECKING BLEND DATA AND NOTICED NO SURFACTANT. CALLED COORDINATOR AND ENGINEER.
05/24/2012 17:10	Assessment Of Location Safety Meeting				CREW ASSESSES LOCATION FOR HAZARDS AND EQUIPMENT LAYOUT
05/24/2012 17:20	Pre-Rig Up Safety Meeting				CREW HAS PRE RIG UP SAFETY MEETING.
05/24/2012 18:00	Casing on Bottom				CASING ON BOTTOM. CASING CREW BEGINS RIGGING DOWN
05/24/2012 19:00	Comment				CASING CREW PULLS OFF LOCATION. CREW CAN SPOT EQUIPMENT.
05/24/2012 20:00	Rig-Up Completed				CREW RIGGED UP.
05/24/2012 22:30	Comment				SURFACTANT ARRIVES ON LOCATION. ONLY HALF OF WHAT WE NEED.
05/25/2012 06:30	Comment				ALL CHEMICALS ARRIVE ON LOCATION.
05/25/2012 06:45	Pre-Job Safety Meeting				CREW, COMPANY REP AND RIG CREW HAVE PRE JOB SAFETY MEETING
05/25/2012 07:12	Pressure Test				PRESSURE TEST LINES TO 5000 PSI. WELL CIRCULATING WHEN FILLING LINES.
05/25/2012 07:19	Pump Spacer	4	20	265.0	PUMP 10# TUNED SPACER WITH CHEMICALS

HALLIBURTON

Date/Time	Activity Code	Pump Rate	Volume	Pressure (psig)	Comments
05/25/2012 07:26	Pump Lead Cement	6	135	200.0	PUMP 345 SKS LEAD 12.2# 2.23 YIELD 12.11 GAL
05/25/2012 07:48	Pump Tail Cement	4	20	100.0	PUMP 75 SKS TAIL 14.2# 1.28 YIELD 5.6 GAL
05/25/2012 07:53	Shutdown				SHUTDOWN
05/25/2012 07:55	Drop Top Plug				DROP TOP PLUG
05/25/2012 07:57	Pump Displacement	6	247	1150.0	PUMP MUD DISPLACEMENT. FINAL CIRC PSI 1150. FIRST 155 BBL ABOUT 75% RETURNS, THEN 100% ON THE LAST 90.
05/25/2012 08:36	Slow Rate				SLOW RATE TO 2.5 BBL/MIN ON LAST 10 BBL
05/25/2012 08:40	Bump Plug				BUMP PLUG. TOOK TO 1750 PSI
05/25/2012 08:42	Check Floats				CHECK FLOATS. GOT 2 BBL BACK.
05/25/2012 08:45	Post-Job Safety Meeting (Pre Rig-Down)				CREW HAS PRE RIG DOWN SAFETY MEETING
05/25/2012 08:50	Rig-Down Equipment				CREW BEGINS RIGGING DOWN EQUIPMENT
05/25/2012 09:45	Rig-Down Completed				CREW IS RIGGED DOWN
05/25/2012 09:50	Pre-Convoy Safety Meeting				CREW HAS JOURNEY MANAGEMENT SAFETY MEETING
05/25/2012 10:00	Depart Location for Service Center or Other Site				CREW DEPARTS FROM LOCATION

The Road to Excellence Starts with Safety

Sold To #: 346707	Ship To #: 2927520	Quote #:	Sales Order #: 9530526
Customer: QUICKSILVER RESOURCES INC-EBUSINESS		Customer Rep:	
Well Name: Simoes		Well #: 12-30	API/UWI #:
Field:	City (SAP): CRAIG	County/Parish: Moffat	State: Colorado
Contractor: DHS		Rig/Platform Name/Num: 6	
Job Purpose: Cement Multiple Stages			
Well Type: Exploratory / Wildcat		Job Type: Cement Multiple Stages	
Sales Person: SPENCER, WESTON		Srv Supervisor: CARPENTER, LANCE	MBU ID Emp #: 461737

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BROWN, CHRISTOPHER Paul	7.0	491062	CARPENTER, LANCE S	7.0	461737	GAMBLES, BRAYDEN Kade	7.0	469413
JUTSUM, TIMOTHY	7.0	510127						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours

TOTAL	Total is the sum of each column separately							
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Job

Formation Name					Job Times			
Formation Depth (MD)	Top	Bottom			Called Out	Date	Time	Time Zone
Form Type	BHST				On Location	17 - May - 2012	12:30	MST
Job depth MD	6500. ft				Job Started	17 - May - 2012	17:00	MST
Water Depth	Wk Ht Above Floor 3. ft				Job Completed	18 - May - 2012	07:00	MST
Perforation Depth (MD)	From	To			Departed Loc	18 - May - 2012	09:00	GMT
						18 - May - 2012	10:00	MST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Intermediate Open Hole				8.75				1200.	6700.		
Multiple Stage Cementer	Unknown			.				2800.	2800.		
Intermediate Casing	Unknown		7.	6.276	26.		N-80	.	6700.		
Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1200.		

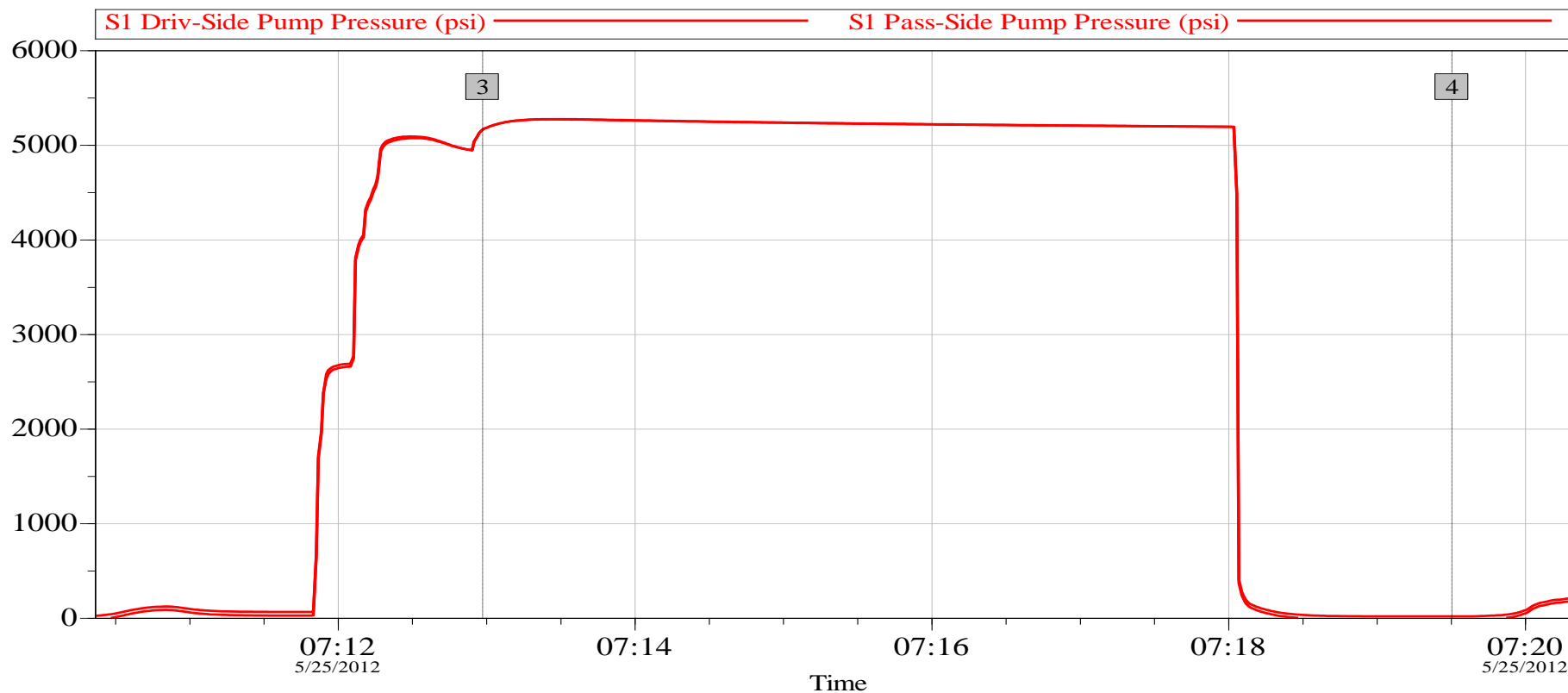
Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
MILEAGE FOR CEMENTING CREW,ZI	160	MI		
ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON	160	MI		
CLAMP - LIMIT - 7 - HINGED -	1	EA		
CTRZR ASSY,API,7 CSG X 8 3/4HOLE,HNGD	45	EA		
KIT,HALL WELD-A	1	EA		

Tools and Accessories													
Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			
Miscellaneous Materials													
Gelling Agt			Conc		Surfactant			Conc		Acid Type		Qty	Conc %
Treatment Fld			Conc		Inhibitor			Conc		Sand Type		Size	Qty
Fluid Data													
Stage/Plug #: 1													
Fluid #	Stage Type	Fluid Name			Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk		
1	TUNED SPACER III	TUNED SPACER III - SBM (483826)			20.00	bbl	10.	6.6	45.23	5.0			
	38.45 gal/bbl	FRESH WATER											
	65.5 lbm/bbl	BAROID 41 - 100 LB BAG (478096)											
	1 lbm/bbl	D-AIR 5000, 50 LB SACK (102068797)											
2	EconoCem	ECONOCEM (TM) SYSTEM (452992)			345.0	sacks	12.2	2.23	12.11	5.0	12.11		
	0.4 %	HALAD(R)-344, 50 LB (100003670)											
	0.125 lbm	POLY-E-FLAKE (101216940)											
	0.9 %	HR-5, 50 LB SK (100005050)											
	12.11 Gal	FRESH WATER											
3	EXTENDACEM	EXTENDACEM (TM) SYSTEM (452981)			75.0	sacks	14.2	1.28	5.6	5.0	5.6		
	0.2 %	HALAD(R)-344, 50 LB (100003670)											
	0.4 %	HR-5, 50 LB SK (100005050)											
	0.125 lbm	POLY-E-FLAKE (101216940)											
	5.6 Gal	FRESH WATER											
4	Displacement				247.00	bbl	8.4			5.0			
Calculated Values		Pressures		Volumes									
Displacement		Shut In: Instant			Lost Returns			Cement Slurry			Pad		
Top Of Cement		5 Min			Cement Returns			Actual Displacement			Treatment		
Frac Gradient		15 Min			Spacers			Load and Breakdown			Total Job		
Rates													
Circulating		Mixing			Displacement			Avg. Job					
Cement Left In Pipe	Amount	40 ft	Reason	Shoe Joint									
Frac Ring # 1 @	ID		Frac ring # 2 @	ID		Frac Ring # 3 @	ID		Frac Ring # 4 @	ID			
The Information Stated Herein Is Correct					Customer Representative Signature								

Data Acquisition

Quicksilver Simoes 12-30 Intermediate Pressure Test

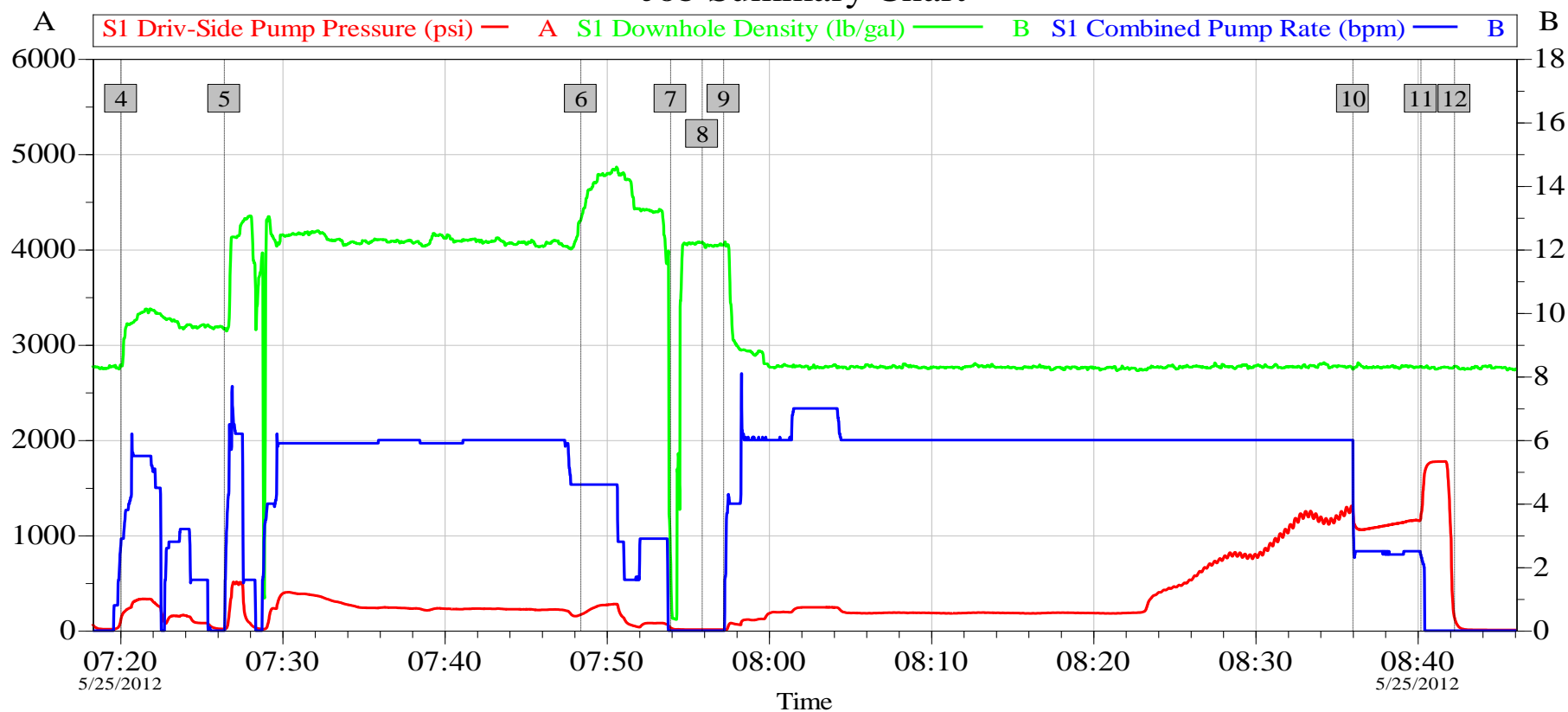


Global Event Log					
Intersection		DPP	PPP	Intersection	DPP PPP
3	Test Lines	07:12:59	5161 5161	4	Pump Spacer 1 07:19:30 16.00 -19.00

Customer: Quicksilver	Job Date: 24-May-2012	Sales Order #: 9530526
Job Description: 7" Intermediate	UWI:	Elite #: 10872113
Service Supervisor: Lance Carpenter	Service Operator: Braydon Gambles	Service Leader: N/A

OptiCem v6.4.9
04-Jun-12 10:20

Quicksilver Simoes 12-30 Intermediate Job Summary Chart



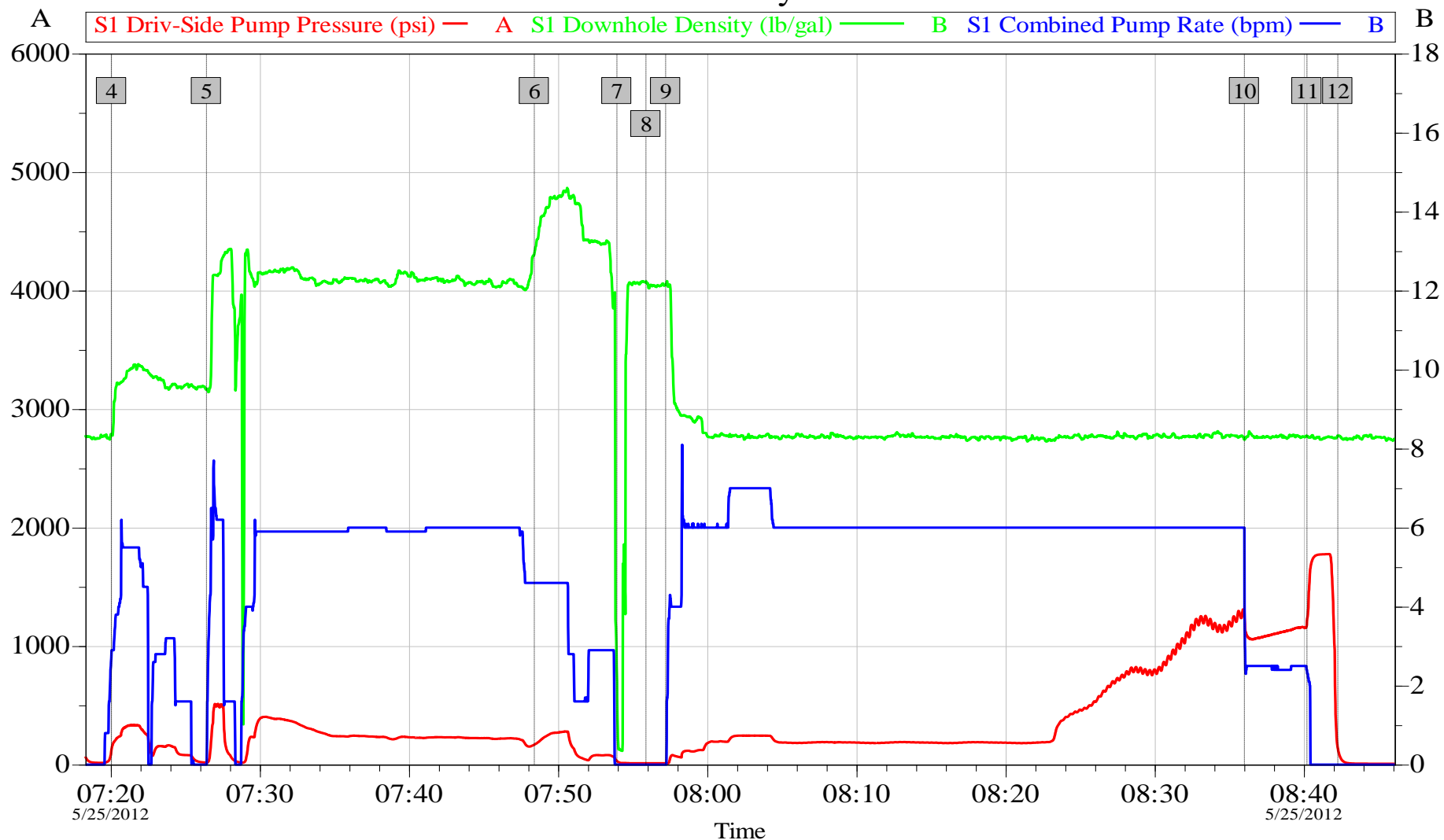
Global Event Log

4 Pump Spacer 1	07:20:03	5 Pump Lead Cement	07:26:25	6 Pump Tail Cement	07:48:24
7 Shutdown	07:53:56	8 Drop Top Plug	07:55:53	9 Pump Displacement	07:57:12
10 Slow Rate	08:36:01	11 Bump Plug	08:40:12	12 Check Floats	08:42:17

Customer: Quicksilver	Job Date: 24-May-2012	Sales Order #: 9530526
Job Description: 7" Intermediate	UWI:	Elite #: 10872113
Service Supervisor: Lance Carpenter	Service Operator: Braydon Gambles	Service Leader: N/A

OptiCem v6.4.9
04-Jun-12 10:21

Quicksilver Simoes 12-30 Intermediate Job Summary Chart



Customer: Quicksilver
Job Description: 7" Intermediate
Service Supervisor: Lance Carpenter

Job Date: 24-May-2012
UWI:
Service Operator: Braydon Gambles

Sales Order #: 9530526
Elite #: 10872113
Service Leader: N/A

OptiCem v6.4.9
04-Jun-12 10:21

Cementing Rockies, Vernal

Job Information

Request/Slurry	240761/1	Rig Name	DHS DRILLING #6	Date	23/MAY/2012
Submitted By	Laura Burnett	Job Type	Intermediate Casing	Bulk Plant	Vernal
Customer	Quicksilver Resources Inc.	Location	Moffat	Well	Simoes 12-30

Well Information

Casing/Liner Size	7"	Depth MD	6700 ft	BHST	167 F
Hole Size	8 3/4"	Depth TVD	0 ft	BHCT	123 F

Cement Information - Lead Design

Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.	Cement Properties	
		EconoCem				Slurry Density	12.20 PPG
						Slurry Yield	2.22 ft3/sk
100.00	% BWOC	Cement Blend	Bulk	May 22, 2012		Water Requirement	12.14 GPS
0.125	lb/sk	Pol-E-Flake	Bulk	May 22, 2012	4/10/2012	Total Mix Fluid	12.14 GPS
0.900	% BWOC	HR-5 (PB)	Lab	May 23, 2012	SXC03B - 2G53TH		
12.14	gal/sack	Fresh Water	Lab	Mar 08, 2012	3/8/12		

Operation Test Results Request ID 240761/1

Thickening Time, Request Test ID:2529202

Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)
123	3,990	36	3	03:49	04:03	04:10	04:40

Added hr-5 to the blend.

Mixability (0 - 5) - 0 is not mixable, Request Test ID:2529203

Mixability rating (0 - 5)

5

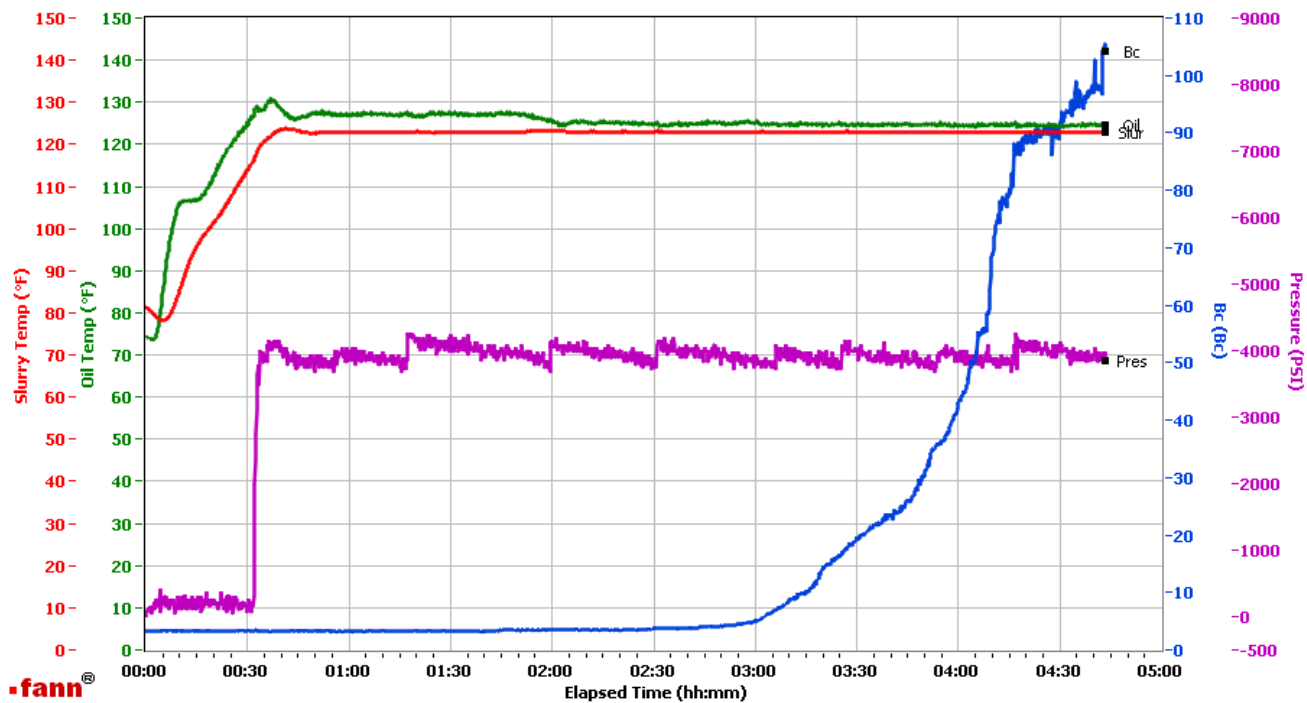
HALLIBURTON

Vernal

Fields	Values
Project Name	Quicksilver
Test ID	240761-1
Request ID	HPHT 2
Tested by	ADF
Customer	Quicksilver
Well No	Simoes 12-30
Rig	6
Casing/Liner Size	7

Fields	Values
Job Type	Inter Lead
Cement Type	III
Cement Weight	Light Weight
Test Date	05/24/12
Test Time	02:36 AM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.0.2.206

Events	Results
30.00 Bc	03h:49m
50.00 Bc	04h:03m
70.00 Bc	04h:10m
100.00 Bc	04h:40m
00h:30m	3.37
01h:00m	3.26
01h:30m	3.29
02h:00m	3.48



Data File Z:\HPHT Data Files\Vernal Consistometer #2\QUICKSILVER 240761-1.tdms

Comments 12.2 d, 2.22 y

Cementing Rockies, Vernal

Job Information

Request/Slurry	239862/1	Rig Name	DHS DRILLING #6	Date	21/MAY/2012
Submitted By	Laura Burnett	Job Type	Intermediate Casing	Bulk Plant	Vernal
Customer	Quicksilver Resources Inc.	Location	Moffat	Well	Simoes 12-30

Well Information

Casing/Liner Size	7"	Depth MD	6700 ft	BHST	167 F
Hole Size	8 3/4"	Depth TVD	0 ft	BHCT	123 F

Cement Information - Tail Design

<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	<u>Cement Properties</u>		
		ExtendaCem				Slurry Density	14.20	PPG
						Slurry Yield	1.28	ft3/sk
100.00	% BWOC	Cement Blend				Water Requirement	5.6	GPS
0.200	% BWOC	HALAD-344 (PB)	Bulk	May 21, 2012	B2-058B	Total Mix Fluid	5.6	GPS
0.400	% BWOC	HR-5 (PB)	Bulk	May 21, 2012	SXC04B -			
0.125	lb/sk	Pol-E-Flake	Bulk	May 21, 2012	05S3SM 4/10/2012			
5.60	gal/sack	Fresh Water	Lab	Mar 08, 2012	3/8/12			

Operation Test Results Request ID 239862/1

Thickening Time, Request Test ID:2518835

Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)
123	3,990	36	4	03:38	03:41	03:41	03:41

Mixability (0 - 5) - 0 is not mixable, Request Test ID:2518836

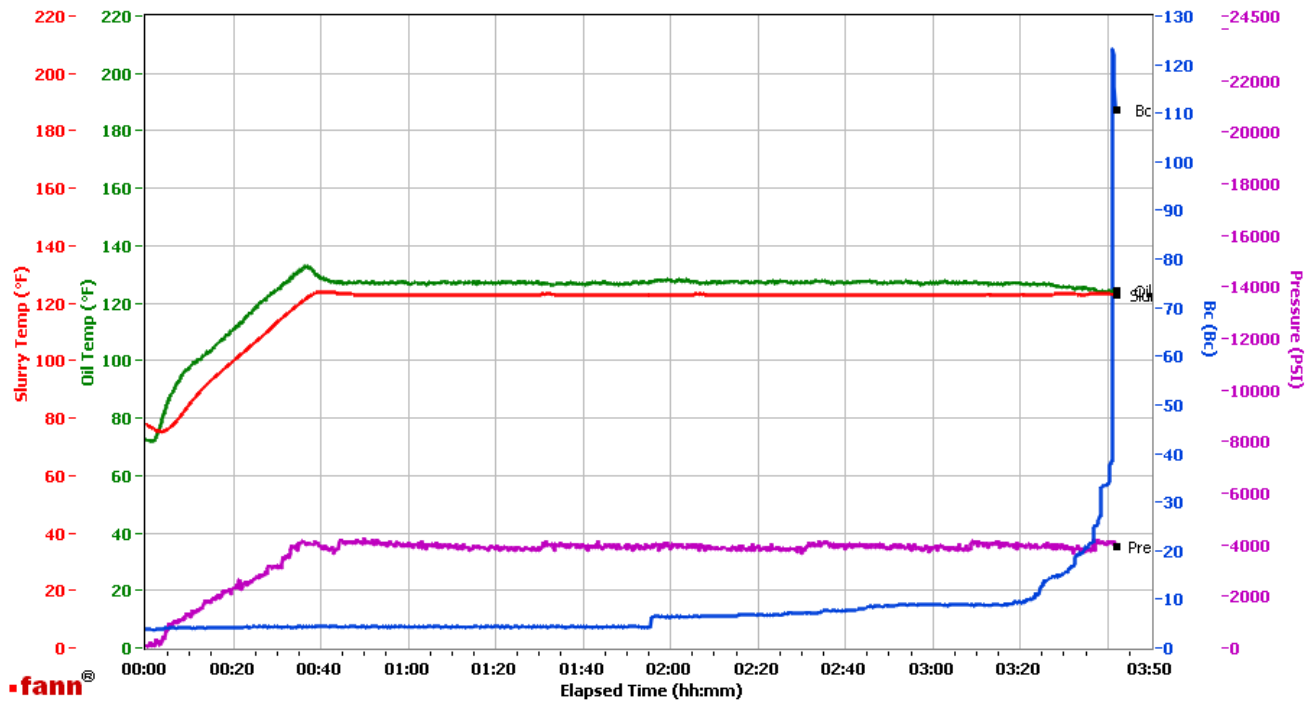
Mixability rating (0 - 5)

5

HALLIBURTON

Vernal

Fields	Values	Fields	Values	Events	Results
Project Name	Quicksilver	Job Type	Inter Tail 2	30.00 Bc	03h:38m
Test ID	239862-1	Cement Type	G	50.00 Bc	03h:41m
Request ID	HPHT 2	Cement Weight	Standard	70.00 Bc	03h:41m
Tested by	Adf	Test Date	05/21/12	100.00 Bc	03h:41m
Customer	Quicksilver	Test Time	04:29 PM	00h:30m	4.37
Well No	Simoes 12-30	Temp. Units	degF	01h:00m	4.33
Rig	6	Pressure Units	PSI	01h:30m	4.38
Casing/Liner Size	7	SW Version	2.0.2.206	02h:00m	6.23



Data File Z:\HPHT Data Files\Vernal Consistometer #2\Quicksilver 239862-1.tdms

Comments 14.2 d, 1.2 y