HALLIBURTON

iCem® Service

LARAMIE ENERGY LLC-EBUS

For: Laramie

Date: Friday, September 01, 2017

BRUTON 30-03W Surface

API# 05-077-10446-00

Sincerely,

Grand Junction Cement Engineering

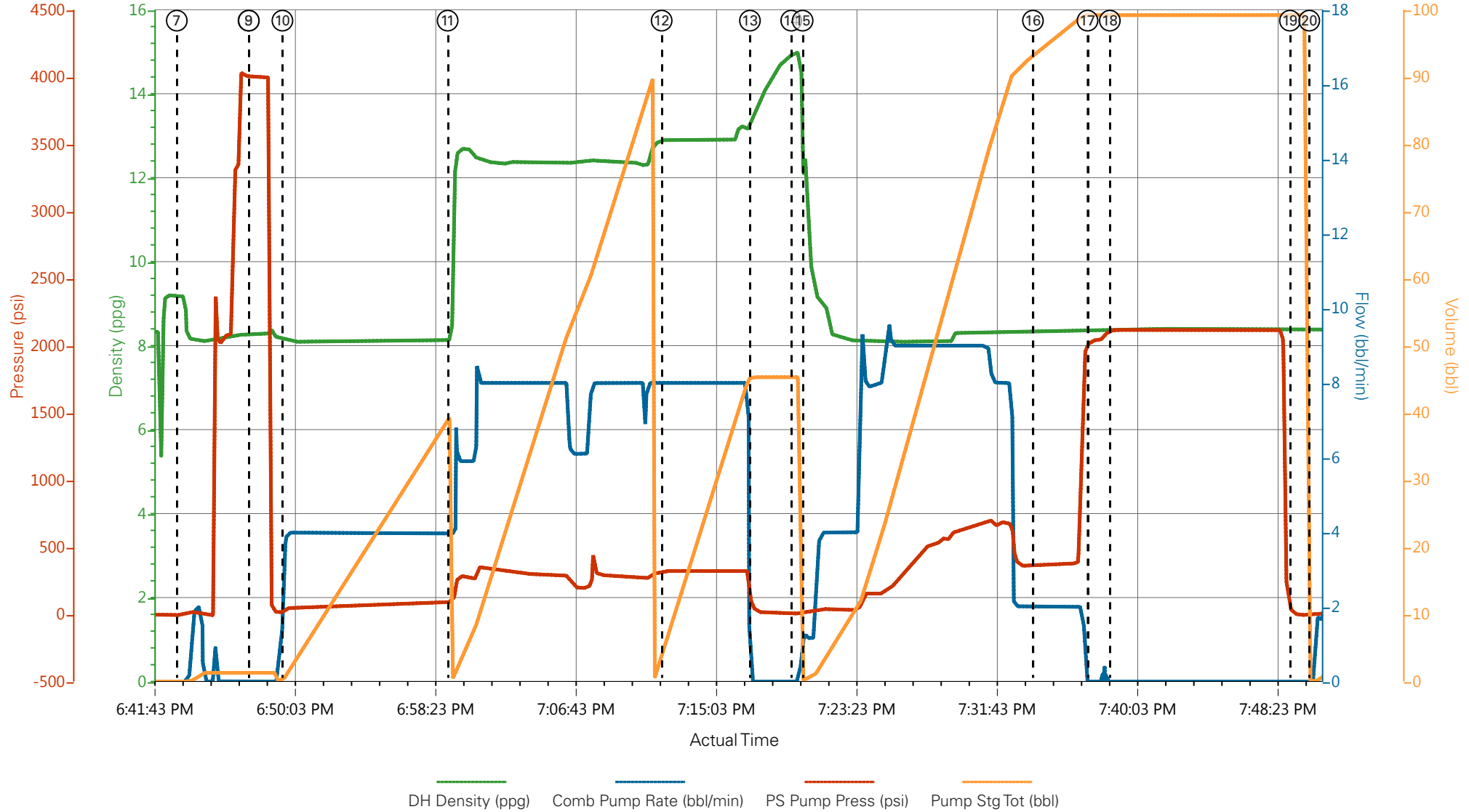
2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	CALL OUT	9/1/2017	13:00:00	USER					
Event	2	Pre-Convoy Safety Meeting	9/1/2017	15:30:00	USER					ALL HSE PERSONNEL
Event	3	Arrive At Loc	9/1/2017	17:00:00	USER					RIG RUNNING CASING THEN CIRCULATED FOR ABOUT 45 MINS.
Event	4	Assessment Of Location Safety Meeting	9/1/2017	17:20:00	USER					ALL HSE PERSONNEL
Event	5	Pre-Rig Up Safety Meeting	9/1/2017	17:30:00	USER					ALL HSE PERSONNEL
Event	6	Pre-Job Safety Meeting	9/1/2017	18:20:00	USER					
Event	7	Start Job	9/1/2017	18:43:13	COM5					TP-1555, TD 1565, S.J.-21.1, HOLE-11", MUD#-9.2, 8 5/8 24# J-55
Event	8	Test Lines	9/1/2017	18:47:29	COM5	8.33	0.00	4010.00	1.3	4010 PSI
Event	9	Drop Bottom Plug	9/1/2017	18:47:30	USER					AWAY
Event	10	Pump Spacer 1	9/1/2017	18:49:30	COM5	8.33	4	90	40	FRESH WATER, ESTABLISHED CIRCULATION
Event	11	Pump Lead Cement	9/1/2017	18:59:18	COM5	12.3	8	300	86.3	197 SKS , 12.3 PPG, 2.46 FT3/SK, 14.17 GAL/SK
Event	12	Pump Tail Cement	9/1/2017	19:12:00	USER	12.8	8.00	325.00	42.3	109 SKS, 2.18 FT3/SK, 12.11 GAL/SK
Event	13	SHUTDOWN	9/1/2017	19:17:15	USER					
Event	14	Drop Top Plug	9/1/2017	19:19:42	COM5					AWAY
Event	15	Pump Displacement	9/1/2017	19:20:22	COM5	8.33	9	680	96.1	FRESH WATER, 30 BBLS CMT TO SURFACE
Event	16	SLOW RATE	9/1/2017	19:34:03	COM5	8.33	2.00	370	86.1	SLOW RATE TO BUMP PLUG
Event	17	Bump Plug	9/1/2017	19:37:17	COM5	8.33	0.00	381	96.1	PLUG BUMPED

Event	18	PSI TEST CASING	9/1/2017	19:38:36	USER	2118	2100 PSI FOR 10 MIN.
Event	19	Check Floats	9/1/2017	19:49:18	USER		FLOATS HELD
Event	20	End Job	9/1/2017	19:50:27	COM5		1 BBLS BACK TO TRUCK, FULL RETURNS THROUGHOUT JOB, NO PIPE MOVEMENT
Event	21	Pre-Rig Down Safety Meeting	9/1/2017	20:00:00	USER		ALL HSE PERSONNEL
Event	22	Rig-Down Equipment	9/1/2017	20:10:00	USER		
Event	23	Pre-Convoy Safety Meeting	9/1/2017	21:00:00	USER		ALL HSE PERSONNEL
Event	24	Crew Leave Location	9/1/2017	21:30:00	USER		THANK YOU FOR USING HALLIBURTON CEMENT, JAMES LEIST AND CREW

LARAMIE ENERGY BRUTON 30-03W 8 5/8 SURFACE CASING



① CALL OUT
② Pre-Convoy Safety Meeting
③ Arrive At Loc
④ Assessment Of Location Safety Meeting
⑤ Pre-Rig Up Safety Meeting
⑥ Pre-Job Safety Meeting
⑦ Start Job
⑧ Test Lines
⑨ Drop Bottom Plug
⑩ Pump Spacer 1
⑪ Pump Lead Cement
⑫ Pump Tail Cement
⑬ SHUTDOWN
⑭ Drop Top Plug
⑮ Pump Displacement
⑯ SLOW RATE
⑰ Bump Plug
⑱ PSI TEST CASING
⑲ Check Floats
20 End Job
21 Pre-Rig Down Safety Meeting
22 Rig-Down Equipment
23 Pre-Convoy Safety Meeting
24 Crew Leave Location

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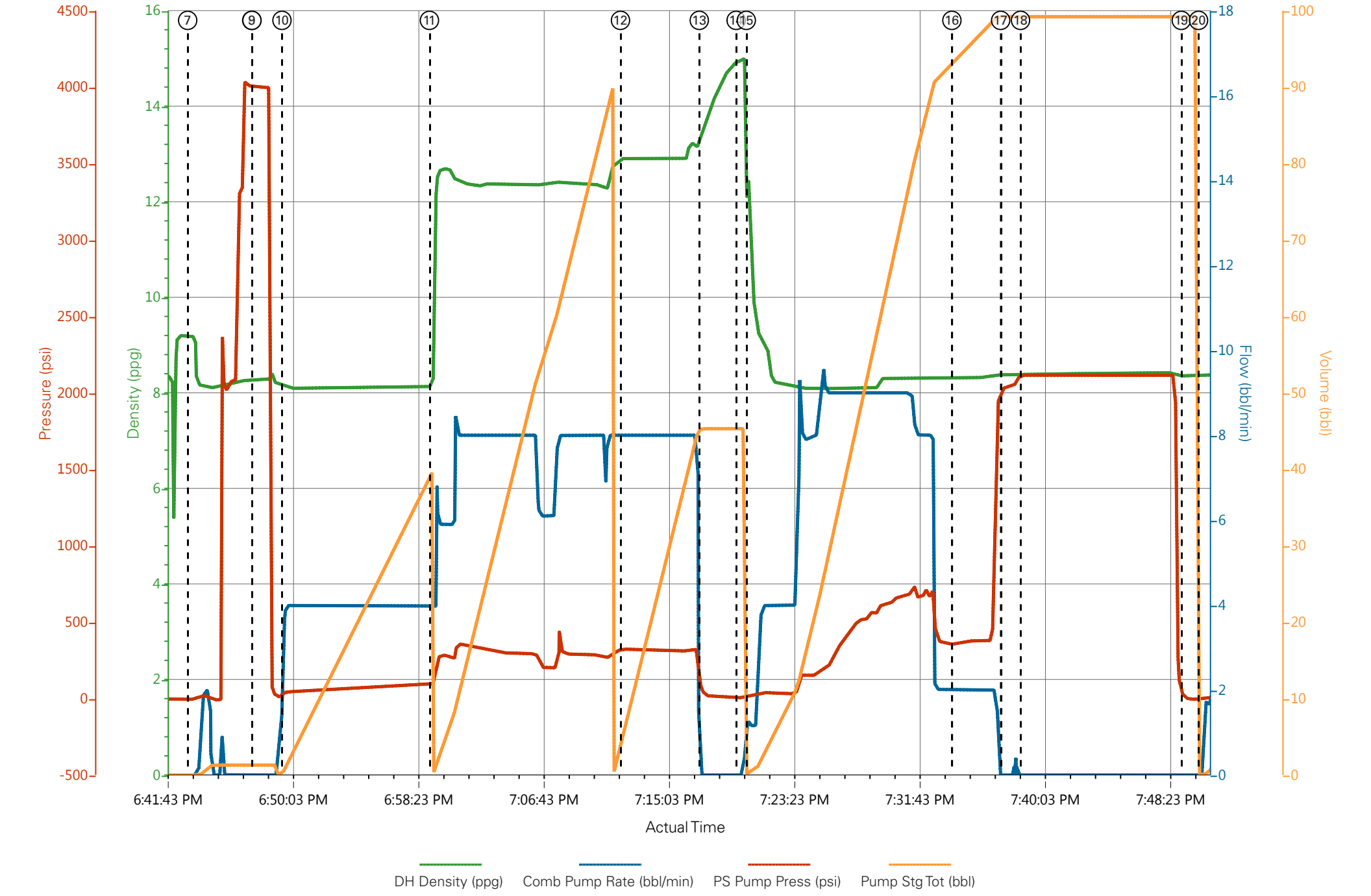
Created: 2017-09-01 14:40:17, Version: 4.2.393

Edit

Customer : LARAMIE ENERGY LLC-EBUS
Representative :
Job Date : 9/1/2017 5:44:06 PM
Sales Order # : 904268015
Well : BRUTON 30-03W
ELITE 4 : T. BROWN / J. LEIST

LARAMIE ENERGY BRUTON 30-03W 8 5/8 SURFACE CASING



HALLIBURTON | iCem® Service

Created: 2017-09-01 14:40:17, Version: 4.2.393 Edit

Customer : LARAMIE ENERGY LLC-EBUS
Representative :

Job Date : 9/1/2017 5:44:06 PM
Sales Order # : 904268015

Well : BRUTON 30-03W
ELITE 4 : T. BROWN / J. LEIST

HALLIBURTON

iCem® Service

LARAMIE ENERGY LLC

For: Laramie

Date: Tuesday, September 05, 2017

Burton 30-03W Production

API# 05-077-10446-00

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

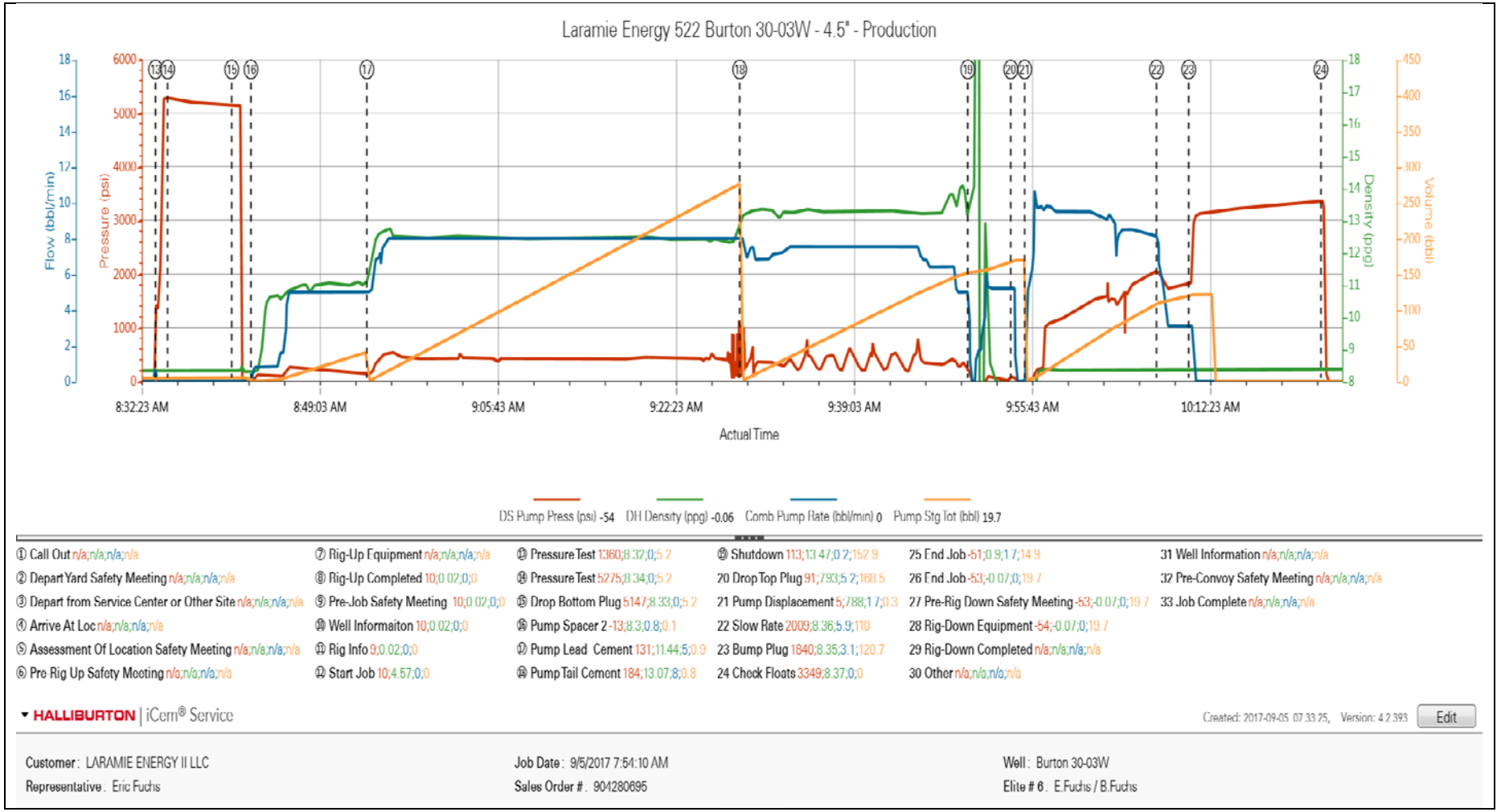
2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	Driv-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pump Stage Total (bbl)	Comments
Event	1	Call Out	9/5/2017	00:00:00	USER					HES crew called out at 0000 on 9/5/17, requested on location at 0700 9/5/17
Event	2	Depart Yard Safety Meeting	9/5/2017	01:20:00	USER					HES crew discuss the hazards of driving to location
Event	3	Depart from Service Center or Other Site	9/5/2017	01:30:00	USER					HES crew depart from yard to location
Event	4	Arrive At Loc	9/5/2017	07:00:00	USER					Rig running casing
Event	5	Assessment Of Location Safety Meeting	9/5/2017	07:05:00	USER					Customer was offered/received MSDS
Event	6	Pre-Rig Up Safety Meeting	9/5/2017	07:10:00	USER					Hes crew discuss the hazards of rigging up equipment
Event	7	Rig-Up Equipment	9/5/2017	07:15:00	USER					Rig up all iron and water hoses
Event	8	Rig-Up Completed	9/5/2017	07:55:00	USER	10.00	0.02	0.00	0.0	Rig-up Complete
Event	9	Pre-Job Safety Meeting	9/5/2017	08:00:00	USER	10.00	0.02	0.00	0.0	Hes and rig crew discuss the hazards of rigging up the rig floor and pumping the job
Event	10	Well Informaiton	9/5/2017	08:01:00	USER	10.00	0.02	0.00	0.0	TD: __7763__ , TP __7753___, SJ: ___89__, OH: __8.725___, Casing: Size/Weight/Grade: __4.5___11.6___HCP-110____, Previous Casing Shoe: ___1530___
Event	11	Rig Info	9/5/2017	08:02:00	USER	9.00	0.02	0.00	0.0	Rig Circulation: __1200__bbls, Rate__10__bbl/min, Pressure___400__PSI, MW___10__ ppg, Pipe Movment__No__, Rat Hole Length___10___
Event	12	Start Job	9/5/2017	08:29:00	USER	10.00	4.57	0.00	0.0	Start Job, pump 5 bbls ahead to fill pumps and lines
Event	13	Pressure Test	9/5/2017	08:33:52	USER	1360.00	8.32	0.00	5.2	500 psi low pressure kickout test
Event	14	Pressure Test	9/5/2017	08:35:00	USER	5275.00	8.34	0.00	5.2	Pressure test hes iron to 5000 psi

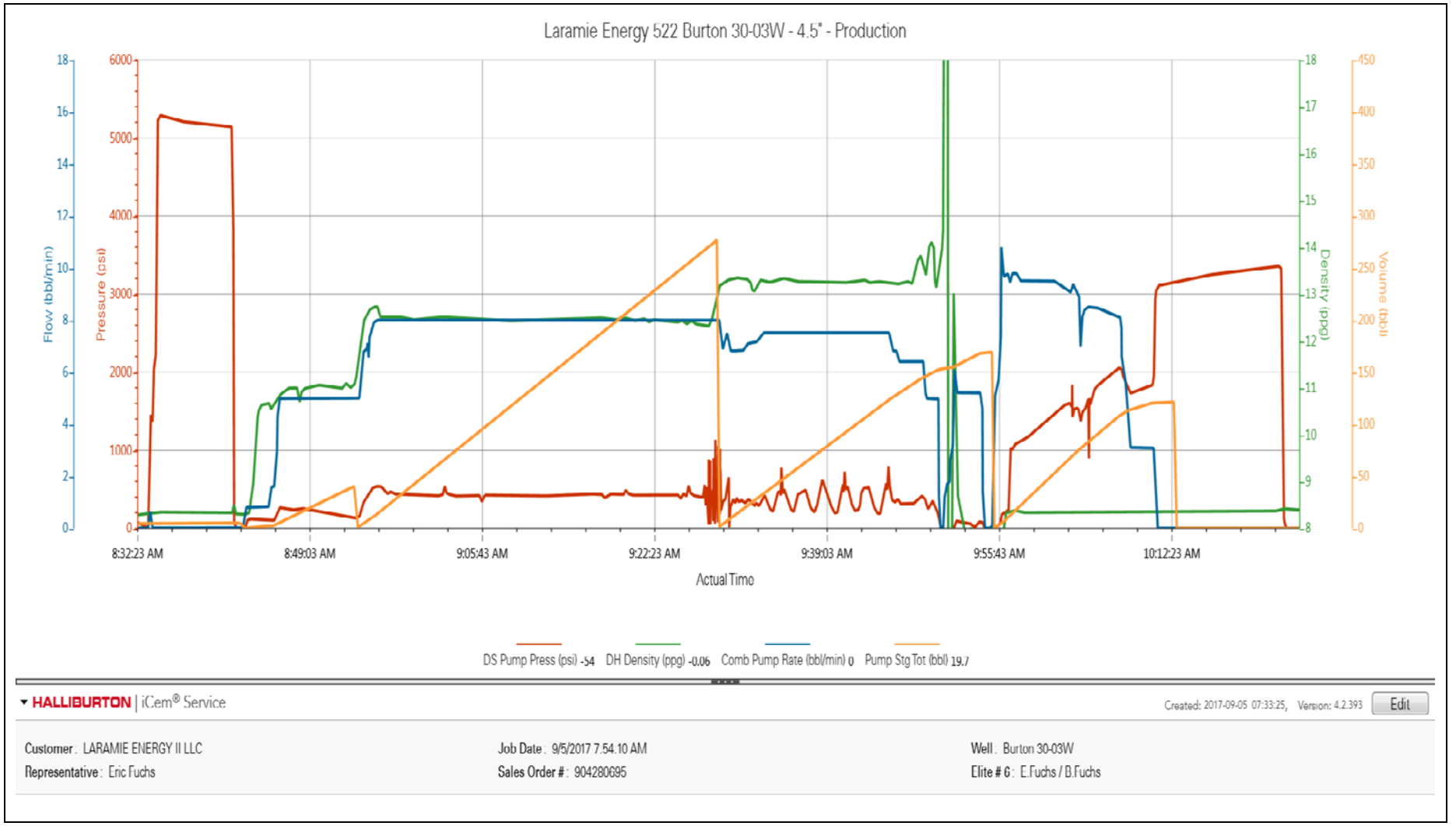
Event	15	Drop Bottom Plug	9/5/2017	08:41:00	USER	5147.00	8.33	0.00	5.2	Drop Bottom Plug
Event	16	Pump Spacer 2	9/5/2017	08:42:48	USER	-13.00	8.30	0.80	0.1	Pump 40 bbls Tuned Spacer III 11 #
Event	17	Pump Lead Cement	9/5/2017	08:53:38	USER	131.00	11.44	5.00	0.9	Pump 784 sks 270.8 bbls of Neocem Lead at 12.5 ppg, 1.94 ft3/sack, 9.6 gal/sack at 8 bpm
Event	18	Pump Tail Cement	9/5/2017	09:28:32	USER	184.00	13.07	8.00	0.8	Pump 461 sks 142 bbls of Neocem Tail at 13.3 ppg, 1.73 ft3/sack, 7.81 gal/sack at 8 bpm
Event	19	Shutdown	9/5/2017	09:49:52	USER	113.00	13.47	0.20	152.9	Shutdown
Event	20	Drop Top Plug	9/5/2017	09:53:54	USER	91.00	7.93	5.20	168.5	Drop HES top plug, customer witnessed
Event	21	Pump Displacement	9/5/2017	09:55:12	USER	5.00	7.88	1.70	0.3	Rig pump 119 bbls of KCL displacement, 9.0 #
Event	22	Slow Rate	9/5/2017	10:07:32	USER	2009.00	8.36	5.90	110.0	Slow Rate to 3 bpm last 10 bbls of H2O displacement.
Event	23	Bump Plug	9/5/2017	10:10:33	USER	1840.00	8.35	3.10	120.7	Bump Plug Final circulating Psi was 1700
Event	24	Check Floats	9/5/2017	10:22:56	USER	3349.00	8.37	0.00	0.0	Check Floats, 2 bbls back to HES cement pump
Event	25	End Job	9/5/2017	10:30:00	USER	-51.00	0.90	1.70	14.9	End Job, final circulating pressure was 1700 psi
Event	26	End Job	9/5/2017	10:32:16	COM6					
Event	27	Pre-Rig Down Safety Meeting	9/5/2017	10:35:00	USER	-53.00	-0.07	0.00	19.7	HES and rig crew discuss the hazards of rigging down equipment
Event	28	Rig-Down Equipment	9/5/2017	10:38:00	USER	-54.00	-0.07	0.00	19.7	Rig-Down equipment
Event	29	Rig-Down Completed	9/5/2017	11:15:00	USER					Rig-Down complete
Event	30	Other	9/5/2017	11:16:00	USER					Items being returned: 60 Pounds of Sugar
Event	31	Well Information	9/5/2017	11:17:00	USER					Spacer: __40__ bbl Lead Cement: __270.8__ bbl, __784__ sks, Tail Cement: __142__ bbl, __461__ sks, TOC__4287___ Displacement: __119__ bbl CMT left in Pipe 89
Event	32	Pre-Convoy Safety Meeting	9/5/2017	11:30:00	USER					HES crew discuss the hazards of driving
Event	33	Job Complete	9/5/2017	11:45:00	USER					Job complete, estimated top of tail at 4287 ft, 0 bbls of cmt back to surface, thank you for using Halliburton

3.0 Attachments

3.1 Laramie Energy 522 Burton 30-03W- With Events.png



3.2 Laramie Energy 522 Burton 30-03W- Without Events.png



HALLIBURTON

Rockies, Grand Junction

Lab Results- Lead

Job Information

Request/Slurry	2414418/1	**Rig Name**	H&P 522	**Date**	02/SEP/2017
Submitted By	Aaron Katz	**Job Type**	Production Casing	**Bulk Plant**	Grand Junction
Customer	Laramie Energy	**Location**	Garfield	**Well**	Bruton 30-03W

Well Information

Casing/Liner Size	4.5 in	**Depth MD**	7760 ft	**BHST**	115°C / 239°F
Hole Size	7.875 in	**Depth TVD**	7717 ft	**BHCT**	78°C / 172°F
Pressure	4720 psi				

Drilling Fluid Information

Mud Supplier Name	Baroid	**Mud Trade Name**	BARADRIL-N	**Density**	9.9 lbm/gal

Cement Information - Lead Design

Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.

Cement Properties

Slurry Density	12.5	lbm/gal
Slurry Yield	1.941	ft3/sack
Water Requirement	9.623	gal/sack
Total Mix Fluid	9.623	gal/sack
Water Source	Field (Fresh) Water	
Water Chloride		

Operation Test Results Request ID 2414418/1

Thickening Time - ON-OFF-ON 03/SEP/2017

Test Temp (ºF)	Pressure (psi)	Reached in (min)	30 Bc (hh:min)	50 Bc (hh:min)	70 Bc (hh:min)	100 Bc (hh:min)	Start Bc	Stirring before stop (mins)	Static Period (min)	Peak reading (BC)
172	4720	40	3:55	4:09	4:34	6:02	9	50	15	9

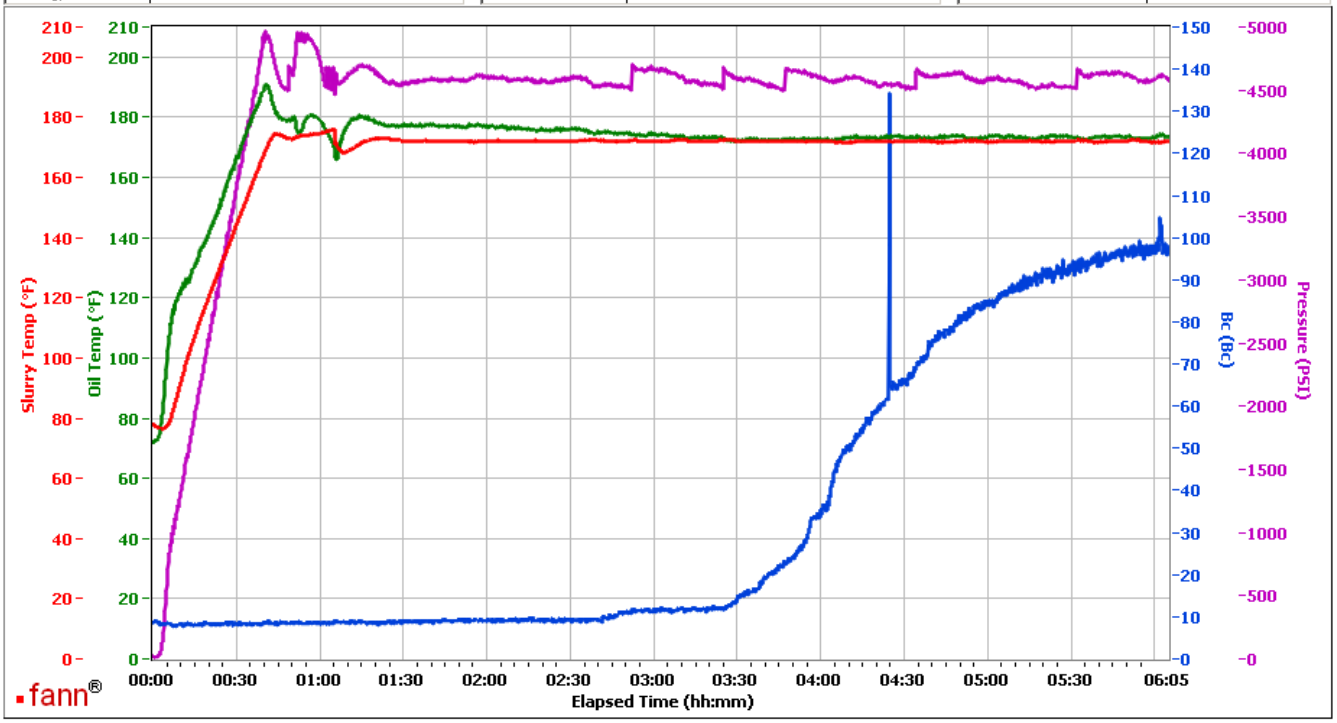
Total sks = 784
Composite:
CS2355, Trailer 1513, 392 sks
CS2356, Trailer 2878, 392 sks
No deflection was recorded in the graph. 9Bc--- > 9Bc

Grand Junction, Colorado

Fields	Values
Project Name	2414418-1 LARAMIE ENERGY BULK PRODUC
Test ID	34832449 - TT
Request ID	2414418-1
Tested by	CT
Customer	LARAMIE ENERGY
Well No	BRUTON 30-03W
Rig	H&P 522
Casing/Liner Size	4.5 INCH

Fields	Values
Job Type	PRODUCTION CASING
Cement Type	TYPE I-II
Cement Weight	Standard
Test Date	09/03/17
Test Time	03:14 AM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	03h:55m
40.00 Bc	04h:03m
50.00 Bc	04h:09m
70.00 Bc	04h:34m
100.00 Bc	06h:02m
00h:30m	8.18
01h:00m	8.28
01h:30m	8.73



Data File C:\Documents and Settings\M290\Local Settings\Temporary Internet Files\Content.IE5\K9YZ0P2R\GJ2414418-1 LARAMIE ENERGY BULK PRODUCTION LEAD[1].tdms

Comments CS2355, TRAILER 1513, 392 SKS - CS2356, TRAILER 2878, 392 SKS

HALLIBURTON

Rockies, Grand Junction

Lab Results- Tail

Job Information

Request/Slurry	2414419/2	**Rig Name**	H&P 522	**Date**	02/SEP/2017
Submitted By	Aaron Katz	**Job Type**	Production Casing	**Bulk Plant**	Grand Junction
Customer	Laramie Energy	**Location**	Garfield	**Well**	Bruton 30-03W

Well Information

Casing/Liner Size	4.5 in	**Depth MD**	7760 ft	**BHST**	115°C / 239°F
Hole Size	7.875 in	**Depth TVD**	7717 ft	**BHCT**	78°C / 172°F
Pressure	4720 psi				

Drilling Fluid Information

Mud Supplier Name	Baroid	**Mud Trade Name**	BARADRIL-N	**Density**	9.9 lbm/gal

Cement Information - Tail Design

Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.

Cement Properties

Slurry Density	13.3	lbm/gal
Slurry Yield	1.733	ft3/sack
Water Requirement	7.799	gal/sack
Total Mix Fluid	7.799	gal/sack
Water Source	Field (Fresh) Water	
Water Chloride		

Operation Test Results Request ID 2414419/2

Thickening Time - ON-OFF-ON 03/SEP/2017

Test Temp (°F)	Pressure (psi)	Reached in (min)	30 Bc (hh:min)	50 Bc (hh:min)	70 Bc (hh:min)	100 Bc (hh:min)	Start Bc	Stirring before stop (mins)	Static Period (min)	Peak reading (BC)
172	4720	40	2:52	3:06	3:48	4:16	17	50	15	14

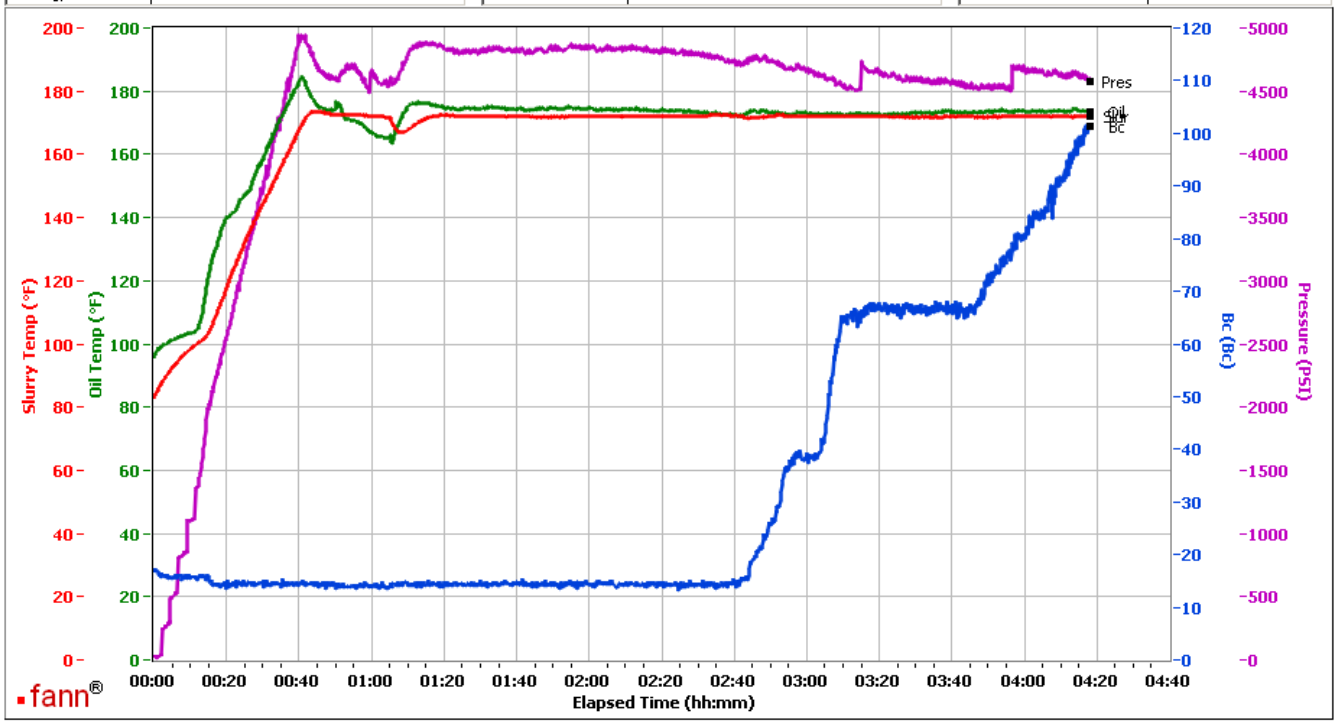
Total sks = 461
CS2363, Trailer 4053 Front 100 sks
No deflection 14Bc----- > 14Bc

Grand Junction, Colorado

Fields	Values
Project Name	GJ2414419-2 LARAMIE PRODUCTION BULK
Test ID	34833965
Request ID	GJ2414419-2
Tested by	DEBA
Customer	LARAMIE ENERGY
Well No	BRUTON 30-03W
Rig	H7P522
Casing/Liner Size	4.5 "

Fields	Values
Job Type	PRODUCTION CASING
Cement Type	MOUNTAIN G
Cement Weight	Standard
Test Date	09/03/17
Test Time	06:11 PM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	02h:52m
40.00 Bc	03h:04m
50.00 Bc	03h:06m
70.00 Bc	03h:48m
100.00 Bc	04h:16m
00h:30m	14.64
01h:00m	13.87
01h:30m	14.38



Data File C:\Documents and Settings\M290\Local Settings\Temporary Internet Files\Content.IE5\4TIJ89YN\GJ2414419-2 LARAMIE PRODUCTION BULK TAIL[1].tdms

Comments CS2363 TR#4053 FRONT 100 SKS

Operation Test Results Request ID 2414419/1

Thickening Time - ON-OFF-ON 03/SEP/2017

Test Temp (°F)	Pressure (psi)	Reached in (min)	30 Bc (hh:min)	50 Bc (hh:min)	70 Bc (hh:min)	100 Bc (hh:min)	Start Bc	Stirring before stop (mins)	Static Period (min)	Peak reading (BC)
172	4720	40	3:28	3:39	4:37	5:08	14	50	15	18

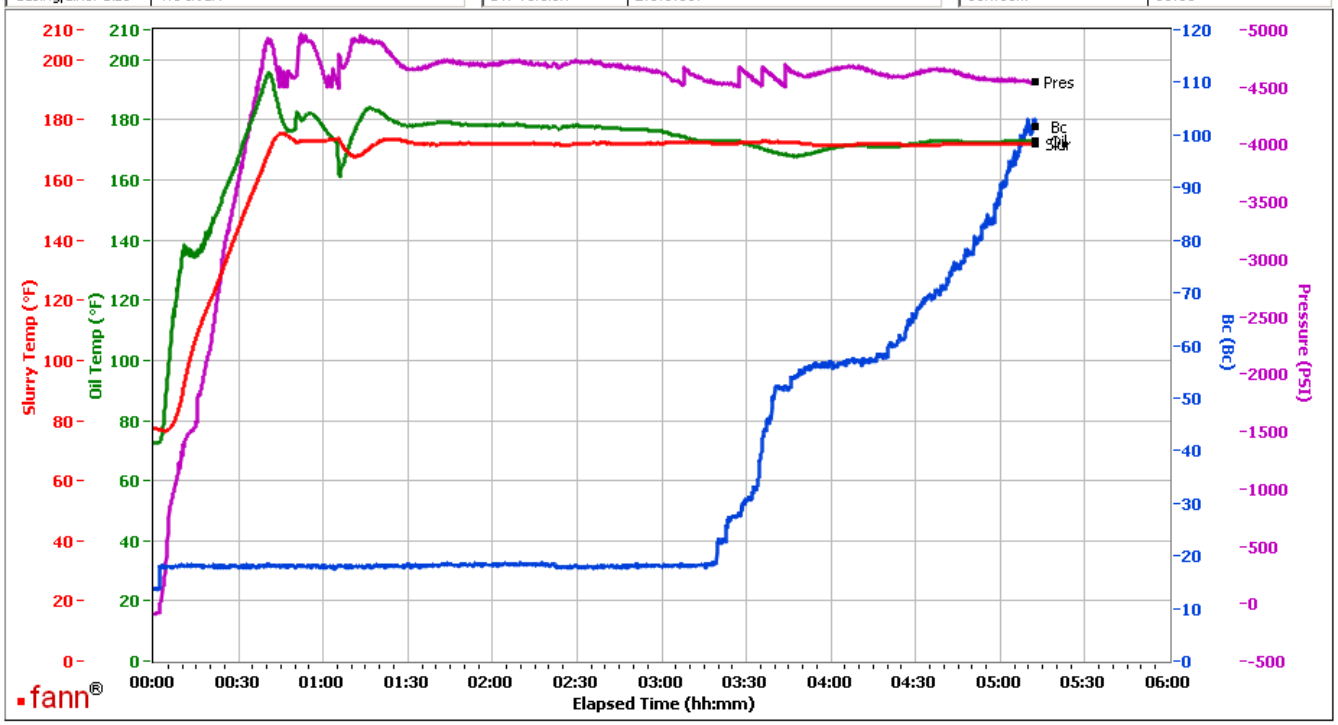
Total sks = 461
CS2354, Trailer 1658, 361 sks
no deflection was observed 18Bc--- > 18Bc

Grand Junction Colorado

Fields	Values
Project Name	2414419-1 LARAMIE ENERGY BULK PRODUC
Test ID	34832451 - TT
Request ID	2414419-1
Tested by	CT
Customer	LARAMIE ENERGY
Well No	BRUTON 30-03W
Rig	H&P 522
Casing/Liner Size	4.5 INCH

Fields	Values
Job Type	PRODUCTION CASING
Cement Type	MOUNTAIN G
Cement Weight	Standard
Test Date	09/02/17
Test Time	05:58 PM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	03h:28m
40.00 Bc	03h:35m
50.00 Bc	03h:39m
70.00 Bc	04h:37m
100.00 Bc	05h:08m
00h:30m	17.97
01h:00m	17.49
01h:30m	18.60



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Comments CS2354, TRAILER 1658, 361 SKS