

HALLIBURTON

iCem[®] Service

LARAMIE ENERGY LLC

For: Laramie Energy

Date: Friday, April 28, 2017

Piceance Federal 29-20E Surface PJR

API/UWI #: 05-077-09989-00

Sincerely,

Grand Junction Cement Engineering

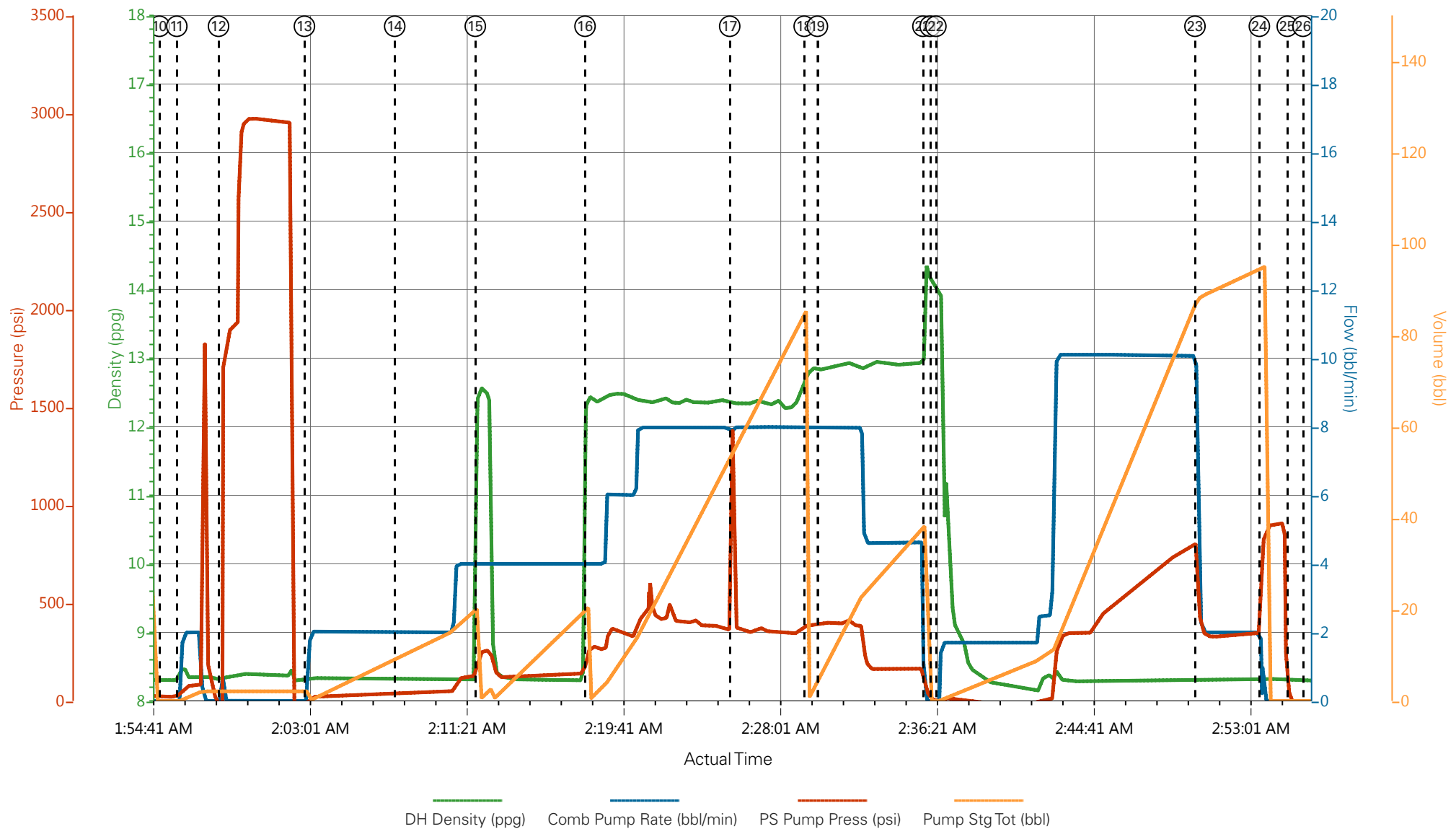
1.0 Real-Time Job Summary

1.1 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	4/27/2017	17:00:00	USER					Requested on Location @ 23:00
Event	2	Pre-Convoy Safety Meeting	4/27/2017	18:45:00	USER					
Event	3	Crew Leave Yard	4/27/2017	19:00:00	USER					1 Elite, 1 660, 1 pickup
Event	4	Arrive at Location	4/27/2017	21:30:00	USER					
Event	5	Assessment Of Location Safety Meeting	4/27/2017	21:45:00	USER					JSA completed - Customer offered/received SDS - water test pH 7.5, Cl <200, temp 43 degrees
Event	6	Pre-Rig Up Safety Meeting	4/27/2017	21:55:00	USER					All HES personnel, Rig Crew, and Company Rep.
Event	7	Rig-Up Equipment	4/27/2017	22:00:00	USER					1 hardline to standpipe, water hoses to upright and day tank, bulk hoses to 660.
Event	8	Other	4/28/2017	01:00:00	USER					Rig Circulated 1 hour prior to cement job at 10 bpm 250 psi. Mud report 8.8 ppg.
Event	9	Pre-Job Safety Meeting	4/28/2017	01:30:00	USER					All HES personnel, Rig Crew, and Company Rep.
Event	10	Start Job	4/28/2017	01:55:10	USER					TD 1562', TP 1552', SJ 41', OH 11'', Csg. 8.625" 24 lb/ft J-55
Event	11	Fill Lines	4/28/2017	01:56:06	COM6	8.4	2	80	2	Fresh water
Event	12	Test Lines	4/28/2017	01:58:19	COM6	8.4	.5	2975	.5	Held pressure 2 minutes no leaks
Event	13	Pump H2O Spacer	4/28/2017	02:02:53	COM6	8.4	4	230	40	Fresh water, drop bottom plug ahead of spacer.

Event	14	Check weight	4/28/2017	02:07:41	COM6					Density verified via mud scales
Event	15	Pump Lead Cement	4/28/2017	02:11:58	COM6					Operator swapped to cement at 20 bbls on H2O spacer when we needed to pump 40.
Event	16	Pump Lead Cement	4/28/2017	02:17:48	COM6	12.3	8	500	86.3	197 Sks 12.3 ppg 2.46 yield 14.17 gal/sk
Event	17	Bump Bottom Plug	4/28/2017	02:25:29	USER					Plug burst at 1380 psi
Event	18	Pump Tail Cement	4/28/2017	02:29:27	COM6	12.8	8	385	42.3	109 Sks 12.8 ppg 2.18 yield 12.11 gal/sk
Event	19	Check weight	4/28/2017	02:30:09	COM6					Density verified via mud scales
Event	20	Shutdown	4/28/2017	02:35:46	USER					Wash up on top of plug
Event	21	Drop Plug	4/28/2017	02:36:09	USER					Verify plug launched
Event	22	Pump Displacement	4/28/2017	02:36:27	COM6	8.4	10	810	96	Fresh water
Event	23	Slow Rate	4/28/2017	02:50:13	USER	8.4	2	340	86	Slow Rate 10 bbls prior to Calculated Displacement
Event	24	Bump Plug	4/28/2017	02:53:39	USER	8.4	10	850	96	Plug Bumped at 380 psi, Brought up to 850 psi
Event	25	Check Floats	4/28/2017	02:55:08	USER			908		Floats held – ½ bbl back to the truck
Event	26	End Job	4/28/2017	02:55:58	USER					Good returns throughout job, pipe was not reciprocated during cement, 36 bbls of cement to surface.
Event	27	Pre-Rig Down Safety Meeting	4/28/2017	18:17:12	USER					20 lbs sugar, No add hours
Event	28	Rig-Down Equipment	4/28/2017	18:17:15	USER					
Event	29	Pre-Convoy Safety Meeting	4/28/2017	18:17:17	USER					
Event	30	Crew Leave Location	4/28/2017	18:17:49	USER					Thank you for using Halliburton – Ryan Muhlestein and crew.

Laramie Energy - Piceance 29-20E - Surface Casing



- | | | | | |
|---|--------------------------|--------------------|----------------------|--------------------------------|
| ① Call Out | ⑦ Rig-Up Equipment | ⑬ Pump H2O Spacer | ⑰ Check weight | 25 Check Floats |
| ② Pre-Convoy Safety Meeting | ⑧ Other | ⑭ Check weight | 20 Shutdown | 26 End Job |
| ③ Crew Leave Yard | ⑨ Pre-Job Safety Meeting | ⑮ Pump Lead Cement | 21 Drop Plug | 27 Pre-Rig Down Safety Meeting |
| ④ Arrive at Location | ⑩ Start Job | ⑯ Pump Lead Cement | 22 Pump Displacement | 28 Rig-Down Equipment |
| ⑤ Assessment Of Location Safety Meeting | ⑪ Fill Lines | ⑰ Bump Bottom Plug | 23 Slow Rate | 29 Pre-Convoy Safety Meeting |
| ⑥ Pre-Rig Up Safety Meeting | ⑫ Test Lines | ⑱ Pump Tail Cement | 24 Bump Plug | 30 Crew Leave Location |

▼ **HALLIBURTON** | iCem® Service

Created: 2017-04-27 18:13:31, Version: 4.2.393

Edit

Customer : LARAMIE ENERGY II LLC

Job Date : 4/28/2017

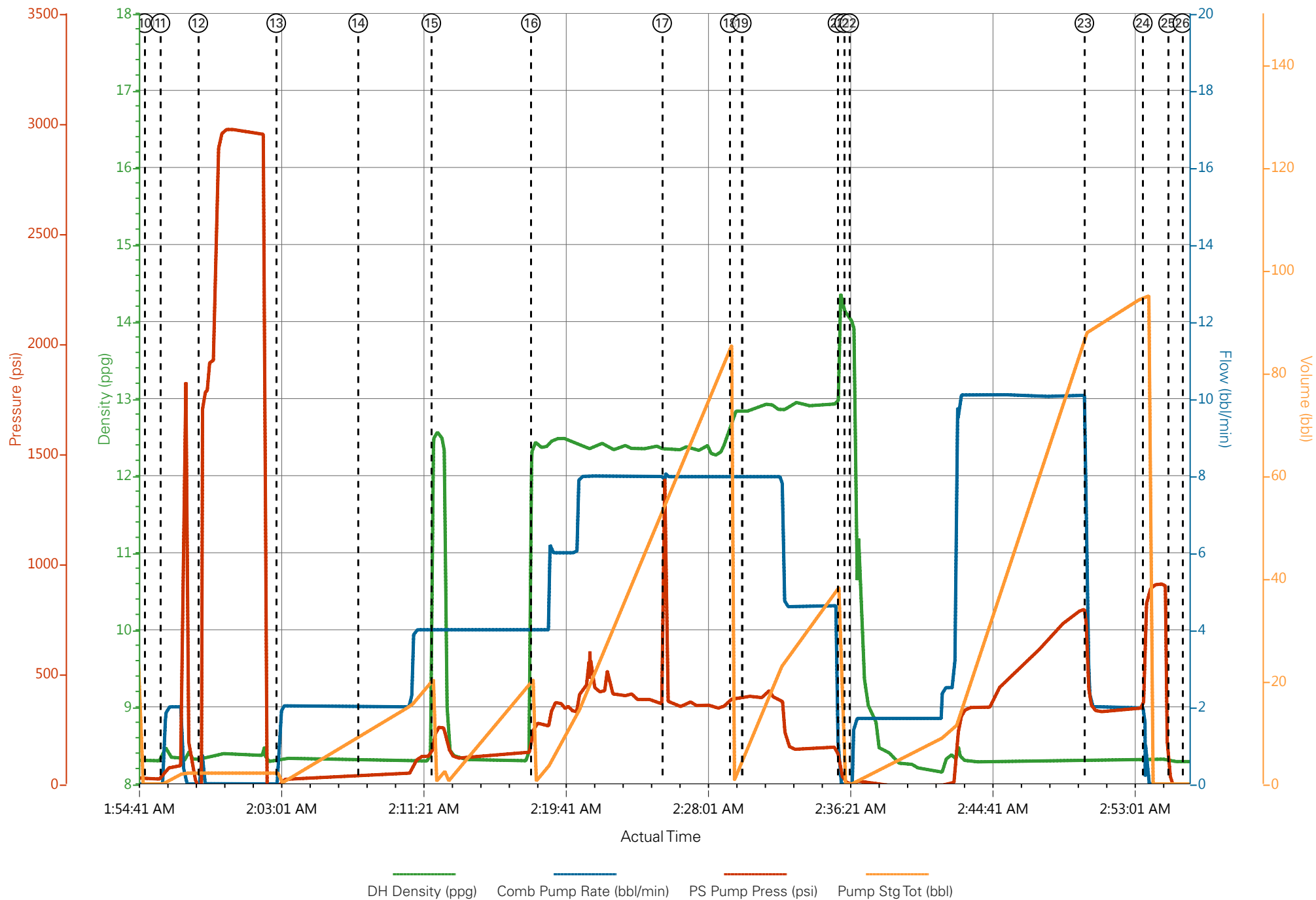
Well : Piceance 29-20E

Representative : Roger Foster

Sales Order # : 903991990

Elite 1 : Muhlestein/Angelo

Laramie Energy - Piceance 29-20E - Surface Casing



HALLIBURTON

iCem[®] Service

LARAMIE ENERGYLLC

For: Laramie

Date: Monday, May 01, 2017

Piceance Fed 29-20E Production

API/UWI #: 05-077-10363-00

Sincerely,

Grand Junction Cement Engineering

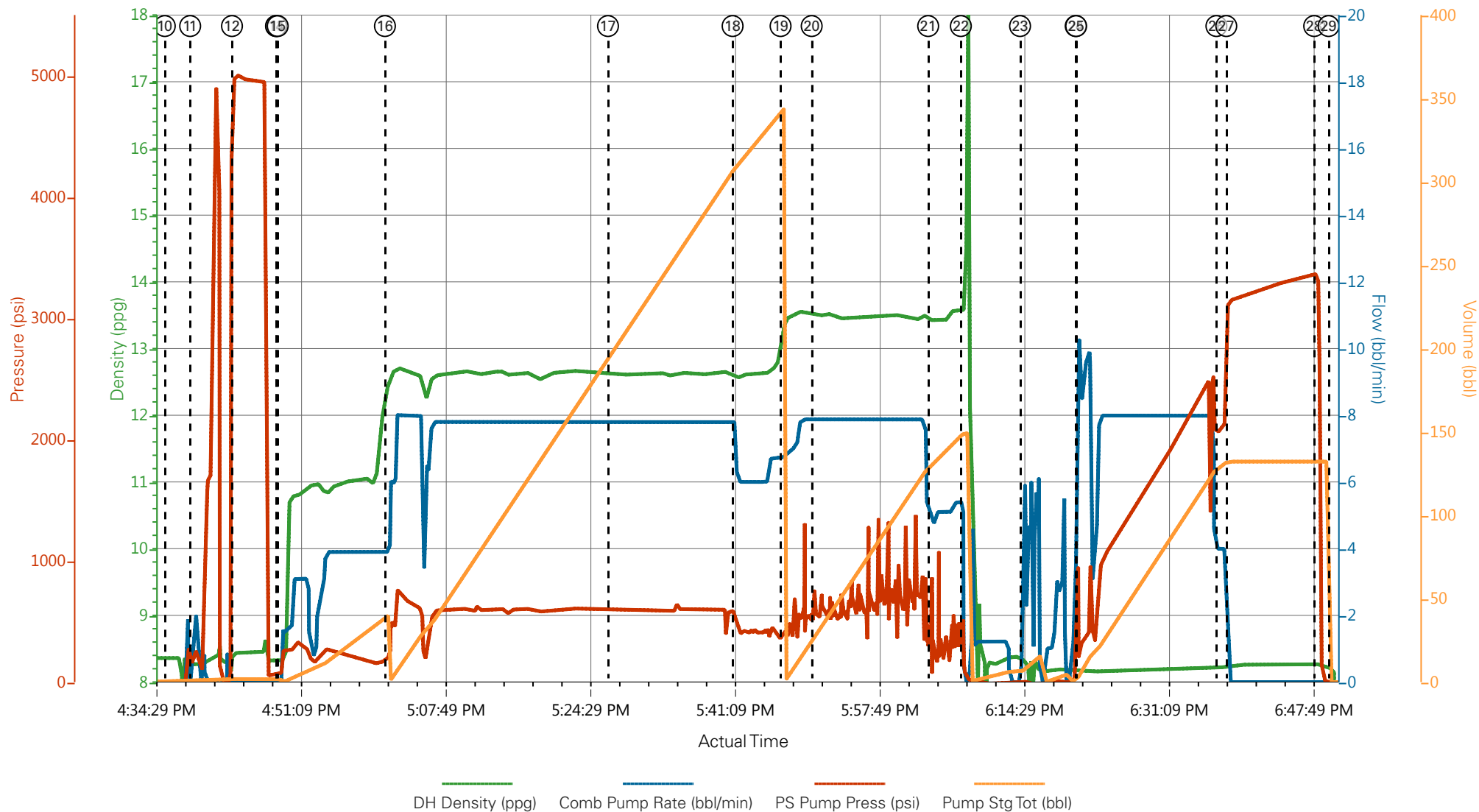
1.0 Real-Time Job Summary

1.1 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	5/1/2017	06:00:00	USER					Crew Requested on Location at 1200
Event	2	Pre-Convoy Safety Meeting	5/1/2017	09:00:00	USER					With All HES Personnel
Event	3	Crew Leave Yard	5/1/2017	09:15:00	USER					1 Elite, 1 660, 1 pickup
Event	4	Arrive At Loc	5/1/2017	11:00:00	USER					Rig Running Casing Upon HES Arrival
Event	5	Assessment Of Location Safety Meeting	5/1/2017	11:10:00	USER					JSA completed - Customer offered/received SDS - Water test pH 7.0, CI <200, temp 52 degrees
Event	6	Spot Equipment	5/1/2017	11:20:00	USER					1 Elite, 1 660, 1 pickup
Event	7	Pre-Rig Up Safety Meeting	5/1/2017	12:00:00	USER					With All HES Personnel
Event	8	Rig-Up Equipment	5/1/2017	12:15:00	USER					Iron to ground manifold, standpipe, wash up to cellar. Water hoses to upright and day tank, bulk hoses to silos and 660.
Event	9	Pre-Job Safety Meeting	5/1/2017	16:20:00	USER					With All Personnel
Event	10	Start Job	5/1/2017	16:35:49	COM6					TD 8132', TP 8121.17', SJ 87.44', SFC CSG 8 5/8" 24 LB/FT Set @ 1552', CSG 4 1/2" 11.6 LB/FT I-80, OH 7 7/8", Mud 9.3 PPG 39 Visc,
Event	11	Prime Lines	5/1/2017	16:38:45	USER	8.4	2.0	270.0	2.0	Fresh Water
Event	12	Test Lines	5/1/2017	16:43:34	COM6			5070.0		Tested Lines to 5070 PSI, Pressure Holding
Event	13	Check weight	5/1/2017	16:48:38	COM6					Density verified via mud cup
Event	14	Drop Bottom Plug	5/1/2017	16:48:40	USER					Verify Plug Launched
Event	15	Pump Tuned Spacer	5/1/2017	16:48:50	COM6	11.0	4.0	200.0	40.0	Tuned Spacer III @ 11 ppg, drop bottom plug ahead of spacer

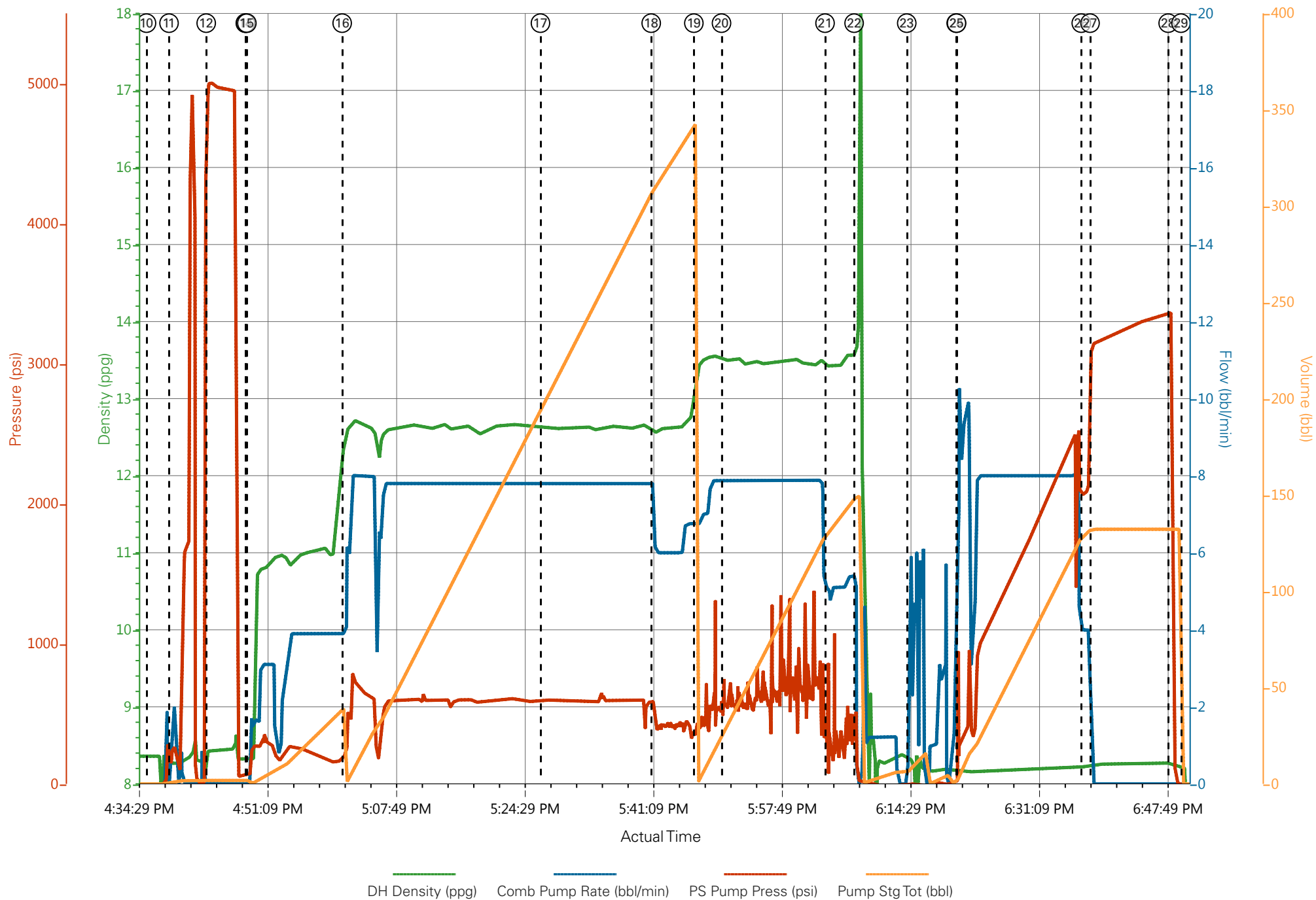
Event	16	Pump Lead Cement	5/1/2017	17:01:11	COM6	12.5	8.0	600.0	309.6	896 sks 12.5 ppg 1.94 yield 9.6 gal/sk
Event	17	Check weight	5/1/2017	17:26:53	COM6					Density verified via mud cup
Event	18	Slow Rate	5/1/2017	17:41:14	USER	12.5	6.0	513.00	280.0	Slowed Rate to Finish Lead Cement
Event	19	Pump Tail Cement	5/1/2017	17:46:46	COM6	13.3	8.0	700.0	126.3	410 Sks 13.3 ppg 1.73 yield 7.81 gal/sk
Event	20	Check weight	5/1/2017	17:50:21	COM6					Density verified via mud cup
Event	21	Slow Rate	5/1/2017	18:03:46	USER	13.3	5.0	265.00	110.0	Slowed Rate to Finish Tail Cement
Event	22	Shutdown	5/1/2017	18:07:32	USER					
Event	23	Clean Lines	5/1/2017	18:14:22	USER					Cleaned Pumps and Lines to Cellar
Event	24	Pump Displacement	5/1/2017	18:20:46	COM6	8.4	8.0	2502.0	124.5	Fresh Water with 1 gal MMCR, 5 gals Clay-Web II
Event	25	Drop Top Plug	5/1/2017	18:20:50	USER					Verify Plug Launched
Event	26	Slow Rate	5/1/2017	18:36:59	USER	8.4	4.00	2073.00	114.0	Slow Rate 10 bbls prior to Calculated Displacement
Event	27	Bump Plug	5/1/2017	18:38:07	COM6					Plug Bumped at 2502 psi, Brought up to 3365 psi
Event	28	Check Floats	5/1/2017	18:48:15	USER			3365.0		Floats Holding Returned 1 BBL to Pump
Event	29	End Job	5/1/2017	18:49:54	COM6					Good Returns Throughout job, Pipe was Static During Job. 35 BBLS Tuned Spacer to surface. 40 Lbs Sugar Used, No Add Hours.
Event	30	Pre-Rig Down Safety Meeting	5/1/2017	19:00:00	USER					With all HES Personnel
Event	31	Rig-Down Equipment	5/1/2017	19:10:00	USER					
Event	32	Pre-Convoy Safety Meeting	5/1/2017	20:30:00	USER					With all HES Personnel
Event	33	Crew Leave Location	5/1/2017	20:40:00	USER					
Event	34	Comment	5/1/2017	21:00:00	USER					Thank You for Using Halliburton Cement Department, Steven Wardell and Crew.

Laramie Energy II LLC - Piceance Fed 29-20E - Production



- | | | | | |
|---|--------------------------|---------------------|----------------------|--------------------------------|
| ① Call Out | ⑧ Rig-Up Equipment | ⑮ Pump Tuned Spacer | 22 Shutdown | 29 End Job |
| ② Pre-Convoy Safety Meeting | ⑨ Pre-Job Safety Meeting | ⑯ Pump Lead Cement | 23 Clean Lines | 30 Pre-Rig Down Safety Meeting |
| ③ Crew Leave Yard | ⑩ Start Job | ⑰ Check weight | 24 Pump Displacement | 31 Rig-Down Equipment |
| ④ Arrive At Loc | ⑪ Prime Lines | ⑱ Slow Rate | 25 Drop Top Plug | 32 Pre-Convoy Safety Meeting |
| ⑤ Assessment Of Location Safety Meeting | ⑫ Test Lines | ⑲ Pump Tail Cement | 26 Slow Rate | 33 Crew Leave Location |
| ⑥ Spot Equipment | ⑬ Check weight | 20 Check weight | 27 Bump Plug | 34 Comment |
| ⑦ Pre-Rig Up Safety Meeting | ⑭ Drop Bottom Plug | 21 Slow Rate | 28 Check Floats | |

Laramie Energy II LLC - Piceance Fed 29-20E - Production



Job Information

Request/Slurry	2385018/2	Rig Name	H&P 522	Date	29/APR/2017
Submitted By	Aaron Katz	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Laramie Energy	Location	Garfield	Well	Piceance Federal 29-20E

Well Information

Casing/Liner Size	4.5 in	Depth MD	8126 ft	BHST	114°C / 238°F
Hole Size	7.875 in	Depth TVD	7671 ft	BHCT	77°C / 171°F
Pressure	4670 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	

These are draft results and have not been approved for final use.

This report is the property of Halliburton Energy Services and neither it nor any part thereof, nor a copy thereof, is to be published or disclosed without first securing the expressed written approval of Halliburton. It may however be used in the course of regular business operations by any person or concern receiving such report from Halliburton. This report is for information purposes only and the content is limited to the sample described. Halliburton makes no warranties, expressed or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage regardless of cause, including any act or omission of Halliburton, resulting from the use hereof.

Operation Test Results Request ID 2385018/2

Thickening Time - ON-OFF-ON

01/MAY/2017

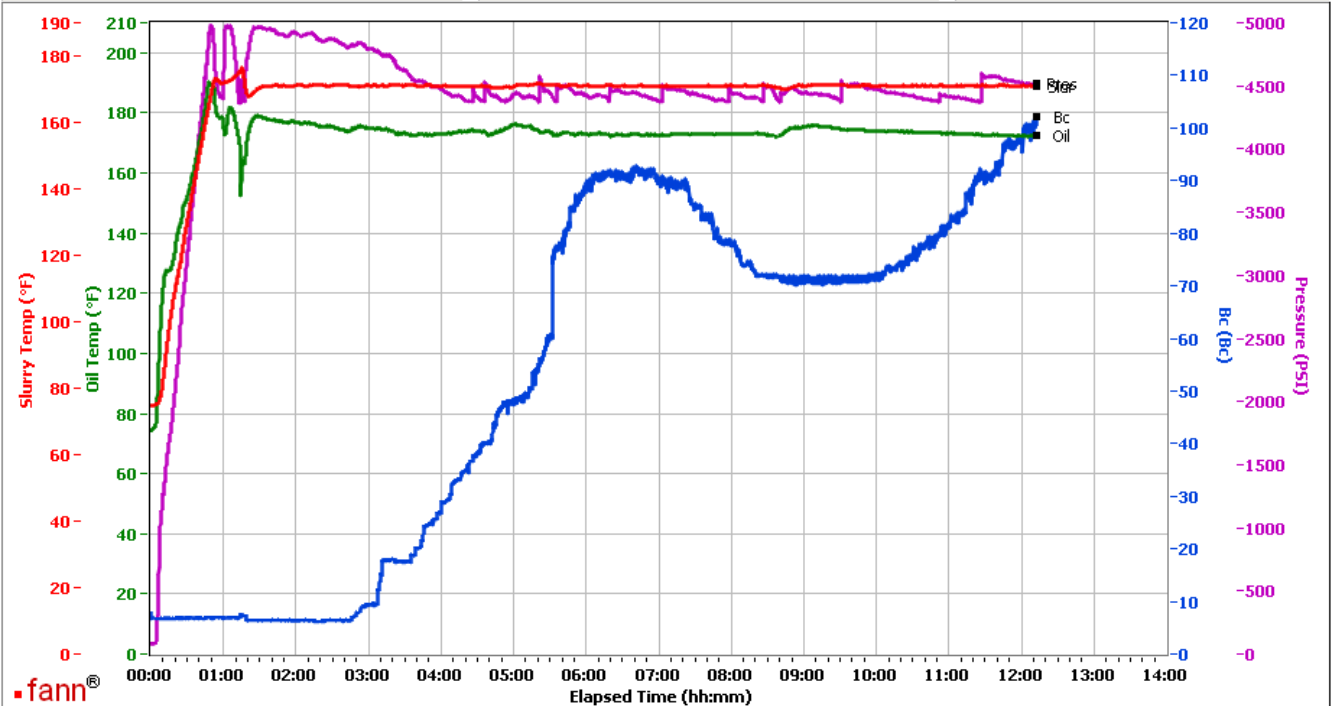
Test Temp (°F) Pressure (psi) Reached in (min) 50 Bc (hh:mm) 70 Bc (hh:mm) 100 Bc (hh:mm)
171 4670 49 5:12 5:32 12:02

Total sks=896

CS0942 Trailer 4080 96 sks

Grand Junction Colorado

Fields	Values	Fields	Values	Events	Results
Project Name	GJ2385018-2	Job Type		30.00 Bc	04h:07m
Test ID	GJ2385018-2 LARAMIE BULK LEAD TT	Cement Type		40.00 Bc	04h:33m
Request ID		Cement Weight	Standard	50.00 Bc	05h:12m
Tested by	DEBA	Test Date	04/30/17	70.00 Bc	05h:32m
Customer	LARAMIE ENERGY	Test Time	06:31 PM	100.00 Bc	12h:02m
Well No	PICEANCE FED 29-20E	Temp. Units	degF	00h:30m	6.84
Rig		Pressure Units	PSI	01h:00m	6.88
Casing/Liner Size		SW Version	2.1.0.507	01h:30m	6.57



Data File C:\Documents and Settings\M290\Desktop\Test Data\GJ2385018-2 LARAMIE BULK LEAD TT.tdms

Comments CS0942 TR#4080 96 SKS

These are draft results and have not been approved for final use.

This report is the property of Halliburton Energy Services and neither it nor any part thereof, nor a copy thereof, is to be published or disclosed without first securing the expressed written approval of Halliburton. It may however be used in the course of regular business operations by any person or concern receiving such report from Halliburton. This report is for information purposes only and the content is limited to the sample described. Halliburton makes no warranties, expressed or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage regardless of cause, including any act or omission of Halliburton, resulting from the use hereof.

Operation Test Results Request ID 2385018/1

Thickening Time - ON-OFF-ON

30/APR/2017

Test Temp (°F)	Pressure (psi)	Reached in (min)	30 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)	Start Bc	Stirring before stop (mins)	Static Period (min)	Peak reading (BC)
171	4670	49	3:31	4:03	4:35	5:16	2	59	15	8

Total sks=896

Composite sample from:

CS0932 Trailer 8678 400 sks

CS0934 Trailer 2878 400 sks

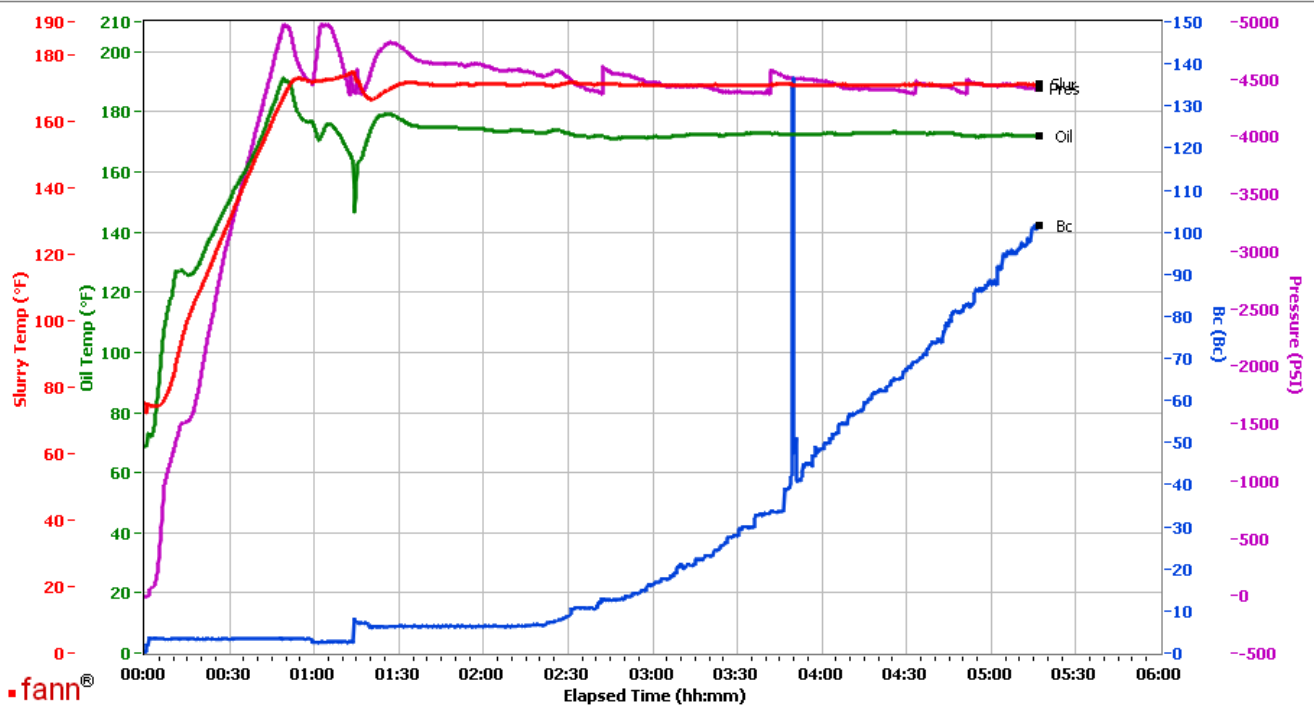
deflected from 2Bc to 8 Bc when the stirring was resumes from the graph

Grand Junction Colorado

Fields	Values
Project Name	2385018-1 LARAMIE ENERGY PRODUCTION
Test ID	2385018-1 TT
Request ID	2385018-1
Tested by	CT
Customer	LARAMIE ENERGY
Well No	PICEANCE FEDERAL 29-20E
Rig	H&P522
Casing/Liner Size	4.5 INCH

Fields	Values
Job Type	PRODUCTION CASING
Cement Type	HOLCIM TYPE I-II
Cement Weight	Standard
Test Date	04/30/17
Test Time	01:36 AM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	03h:31m
40.00 Bc	03h:48m
50.00 Bc	04h:03m
70.00 Bc	04h:35m
100.00 Bc	05h:16m
00h:30m	3.42
01h:00m	2.63
01h:30m	6.34



Data File C:\Documents and Settings\M290\Local Settings\Temporary Internet Files\Content.IE5\CDER4HUV\GJ2385018-1 LARAMIE BULK LEAD TT[1].tdms

Comments BULK SAMPLE CS0932 TRAILER 8678 400 SKS, CS0934 TRAILER 2878 400 SKS

These are draft results and have not been approved for final use.

This report is the property of Halliburton Energy Services and neither it nor any part thereof, nor a copy thereof, is to be published or disclosed without first securing the expressed written approval of Halliburton. It may however be used in the course of regular business operations by any person or concern receiving such report from Halliburton. This report is for information purposes only and the content is limited to the sample described. Halliburton makes no warranties, expressed or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage regardless of cause, including any act or omission of Halliburton, resulting from the use hereof.

HALLIBURTON

Rockies, Grand Junction

Lab Results- Tail

Job Information

Request/Slurry	2385019/1	Rig Name	H&P 522	Date	29/APR/2017
Submitted By	Aaron Katz	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Laramie Energy	Location	Garfield	Well	Piceance Federal 29-20E

Well Information

Casing/Liner Size	4.5 in	Depth MD	8126 ft	BHST	114°C / 238°F
Hole Size	7.875 in	Depth TVD	7671 ft	BHCT	77°C / 171°F
Pressure	4670 psi				

Drilling Fluid Information

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

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>		
						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		

These are draft results and have not been approved for final use.

This report is the property of Halliburton Energy Services and neither it nor any part thereof, nor a copy thereof, is to be published or disclosed without first securing the expressed written approval of Halliburton. It may however be used in the course of regular business operations by any person or concern receiving such report from Halliburton. This report is for information purposes only and the content is limited to the sample described. Halliburton makes no warranties, expressed or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage regardless of cause, including any act or omission of Halliburton, resulting from the use hereof.

Operation Test Results Request ID 2385019/1

Thickening Time - ON-OFF-ON

30/APR/2017

Test Temp (°F)	Pressure (psi)	Reached in (min)	30 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)	Start Bc	Stirring before stop (mins)	Static Period (min)	Peak reading (BC)
171	4670	49	3:15	3:55	3:58	4:00	15	59	15	19

Total sks = 410

CS0935, Trailer 1656, 410sks

no deflection was recorded on the graph.

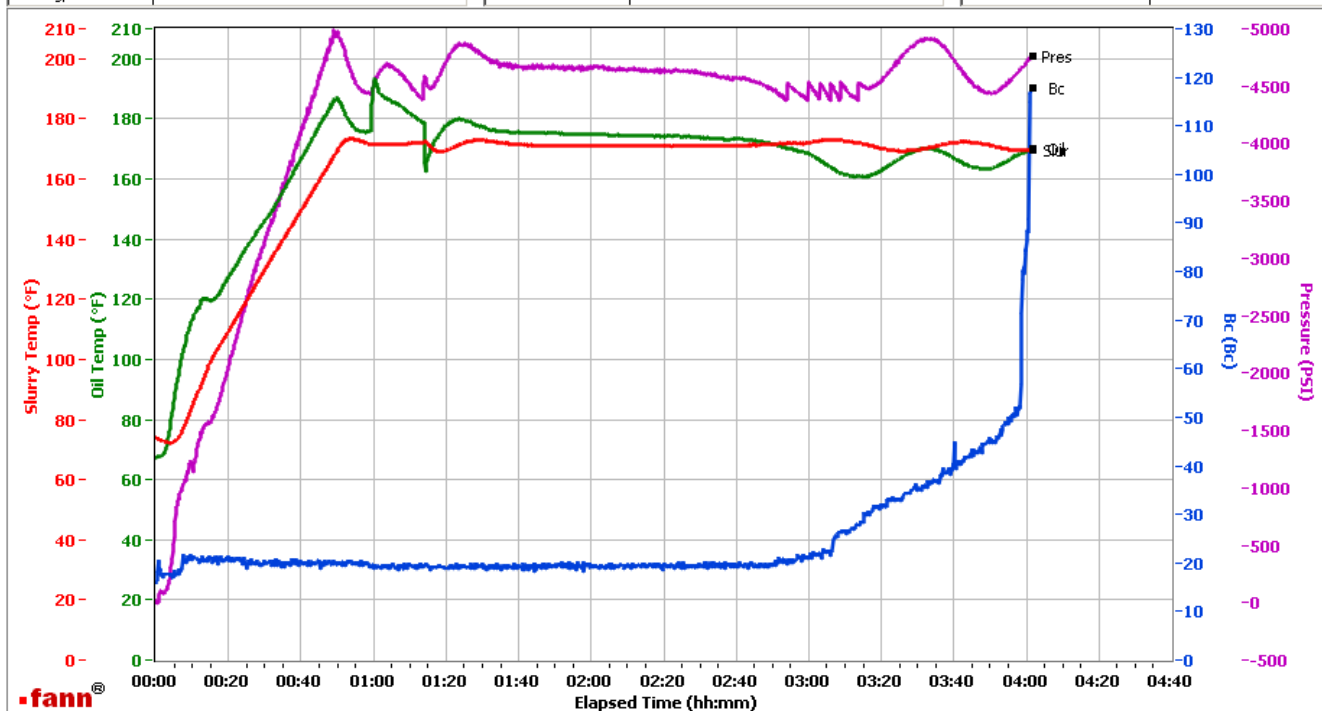
heat of hydration around 2:57

Grand Junction Colorado

Fields	Values
Project Name	2385019-1 LARAMIE ENERGY PRODUCTION
Test ID	2385019-1 TT
Request ID	2385019-1
Tested by	CT
Customer	LARAMIE ENERGY
Well No	PICEANCE FEDERAL 29-20E
Rig	H&P 522
Casing/Liner Size	4.5 INCH

Fields	Values
Job Type	PRODUCTION CASING
Cement Type	TYPE G
Cement Weight	Standard
Test Date	04/30/17
Test Time	03:59 AM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	03h:15m
40.00 Bc	03h:39m
50.00 Bc	03h:55m
70.00 Bc	03h:58m
100.00 Bc	04h:00m
00h:30m	19.51
01h:00m	19.61
01h:30m	19.01



Data File C:\Documents and Settings\Administrator\Local Settings\Temporary Internet Files\Content.IE5\OTUB09Y7\GJ2385019-1 LARAMIE BULK TAIL TT[1].tdms

Comments BULK SAMPLE CS0935 TRAILER 1656 410 SKS

These are draft results and have not been approved for final use.

This report is the property of Halliburton Energy Services and neither it nor any part thereof, nor a copy thereof, is to be published or disclosed without first securing the expressed written approval of Halliburton. It may however be used in the course of regular business operations by any person or concern receiving such report from Halliburton. This report is for information purposes only and the content is limited to the sample described. Halliburton makes no warranties, expressed or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage regardless of cause, including any act or omission of Halliburton, resulting from the use hereof.