

HALLIBURTON

iCem[®] Service

LARAMIE ENERGY LLC EBUSINESS

For: Laramie

Date: Tuesday, September 12, 2017

BRUTON 30-05W Surface

API#05-077-10462

Sincerely,
Grand Junction Cement Engineering

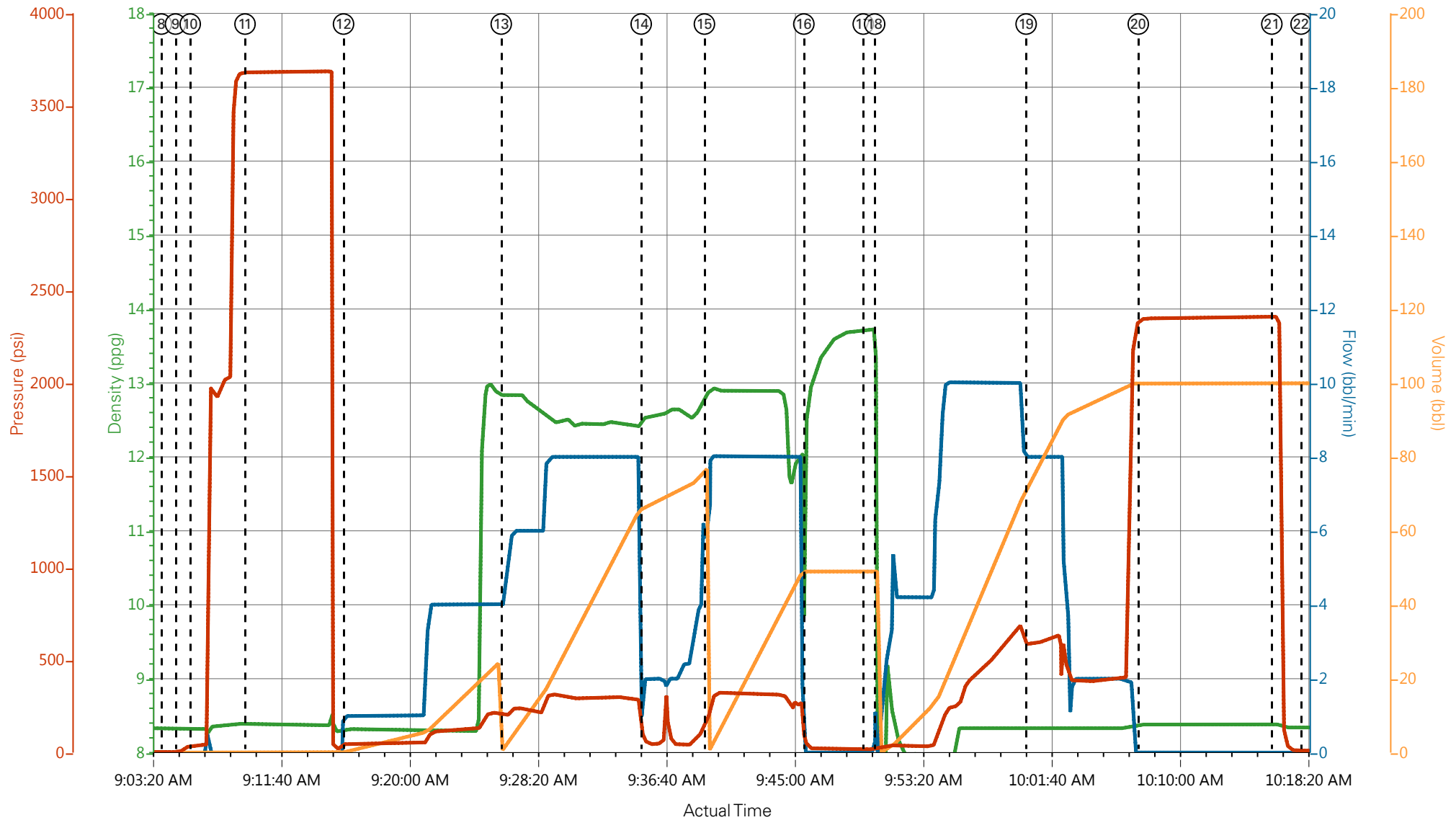
1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	Pass-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pump Stage Total (bbl)	Comments
Event	1	Call Out	9/12/2017	02:30:00	USER					REQUESTED ON LOCATION @ 830
Event	2	Pre-Convoy Safety Meeting	9/12/2017	05:20:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	9/12/2017	05:45:00	USER					1 F550, 1 PUMP TRUCK & 1 660 BULK TURCK
Event	4	Arrive At Loc	9/12/2017	07:30:00	USER					RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	9/12/2017	07:45:00	USER					MET WITH COMP REP, AND WENT OVER NUMBERS AND JOB PROCEDURE. WALKED AROUND LOCATION AND COLLECTED WATER SAMPLE (PH- 7, CHLORIDES- 0, TEMP- 65F). COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES.
Event	6	Pre-Rig Up Safety Meeting	9/12/2017	08:00:00	USER					ALL HES PRESENT
Event	7	Pre-Job Safety Meeting	9/12/2017	08:55:00	USER					ALL HES AND RIG CREW PRESENT
Event	8	Start Job	9/12/2017	09:04:05	COM6					TD 1559', TP 1549', SJ 42.2', OH 11'', CSG 8.625" 24#, MUD 9.2 PPG. RIG CIRCULATED WELL @ APPROX 10 BPM FOR 1 HR.
Event	9	Drop Bottom Plug	9/12/2017	09:05:00	USER					PLUG WENT
Event	10	Prime Pumps	9/12/2017	09:05:57	COM6	38.00	8.32	0.00	2.0	8.33 PPG FRESH WATER
Event	11	Test Lines	9/12/2017	09:09:30	COM6	3679.00	8.39	0.50	0.5	ALL LINES HELD PRESSURE AT 3679 PSI
Event	12	Pump Spacer 1	9/12/2017	09:15:54	COM6	151.00	8.31	4.00	20.0	8.33 PPG FRESH WATER (20BBL)
Event	13	Pump Lead Cement	9/12/2017	09:26:08	COM6	201.00	12.33	8.00	85.2	VARICEM CEMENT 197 SKS (86 BBLS), 12.3 PPG, 2.46 FT3/SK, 14.17 GAL/SK
Event	14	Slow Rate	9/12/2017	09:35:13	USER			2.00		SLOWR RATE FOR BOTTOM PLUG
Event	15	Pump Tail Cement	9/12/2017	09:39:20	COM6	315.00	12.80	8.00	42.0	VARICEM CEMENT 109 SKS (42 BBLS), 12.8 PPG, 2.18 FT3/SK, 12.11 GAL/SK.

Event	16	Shutdown	9/12/2017	09:45:47	USER					END OF CEMENT
Event	17	Drop Top Plug	9/12/2017	09:49:38	USER					WASH UP PUMPS AND LINES ON TOP OF PLUG
Event	18	Pump Displacement	9/12/2017	09:50:23	COM6	622.00	8.34	8.00	86.0	8.34 PPG FRESH WATER (96 BBLs)
Event	19	Slow Rate	9/12/2017	10:00:13	USER	583.00	8.34	2.00	10.0	SLOW RATE TO 2 BPM PER CO REP TO LAND PLUG
Event	20	Bump Plug	9/12/2017	10:07:30	USER	2344.00	8.34		96.0	LAND PLUG AT 395 PSI, BROUGHT UP TO 2340 PSI FOR A 10 MIN CSG TEST
Event	21	Check Floats	9/12/2017	10:16:10	USER	2358.00			96.0	FLOATS HELD, 1 BBL BACK TO TRUCK
Event	22	End Job	9/12/2017	10:18:04	USER					GOOD RETURNS THROUGHOUT JOB, PIPE WAS NOT RECIPROCATED, 26 BBL OF CEMENT BACK TO SURFACE
Event	23	Post-Job Safety Meeting (Pre Rig-Down)	9/12/2017	10:25:00	USER					ALL HES PRESENT
Event	24	Pre-Convoy Safety Meeting	9/12/2017	10:50:00	USER					ALL HES PRESENT
Event	25	Crew Leave Location	9/12/2017	10:55:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT, CHRIS SMITH AND CREW

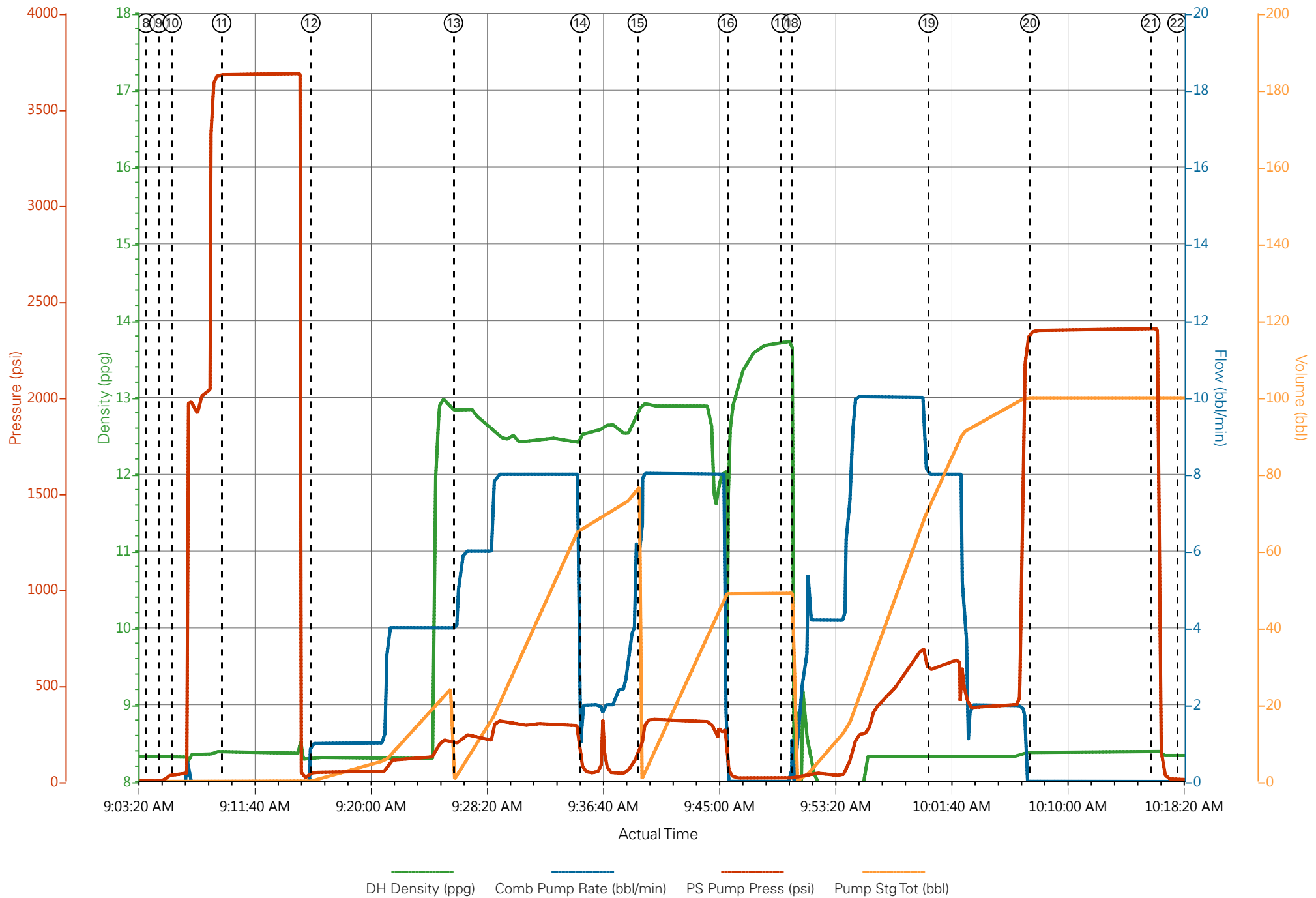
LARAMIE - BRUTON 30-05W - 8.625" SURFACE



DH Density (ppg) Comb Pump Rate (bbl/min) PS Pump Press (psi) Pump Stg Tot (bbl)

- | | | | | |
|---|---|--------------------------------------|-------------------------------|---------------------------|
| ① Call Out n/a;n/a;n/a;n/a | ④ Arrive At Loc n/a;n/a;n/a;n/a | ⑦ Pre-Job Safety Meeting 8.45;0;39;0 | ⑩ Prime Pumps 8.32;0;38;0 | ⑬ Pump Lead Cement 12.8 |
| ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a | ⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a | ⑧ Start Job 8.32;0;4;0 | ⑪ Test Lines 8.39;0;3679;0 | ⑭ Slow Rate 12.54;2;67;66 |
| ③ Crew Leave Yard n/a;n/a;n/a;n/a | ⑥ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a | ⑨ Drop Bottom Plug 8.31;0;4;0 | ⑫ Pump Spacer 1 8.31;1;51;0.3 | ⑮ Pump Tail Cement 12.87 |

LARAMIE - BRUTON 30-05W - 8.625" SURFACE



HALLIBURTON

iCem[®] Service

LARAMIE ENERGY LLC

For: Laramie

Date: Friday, September 15, 2017

BRUTON 30-05W Production

Sincerely,

Grand Junction Cement Engineering

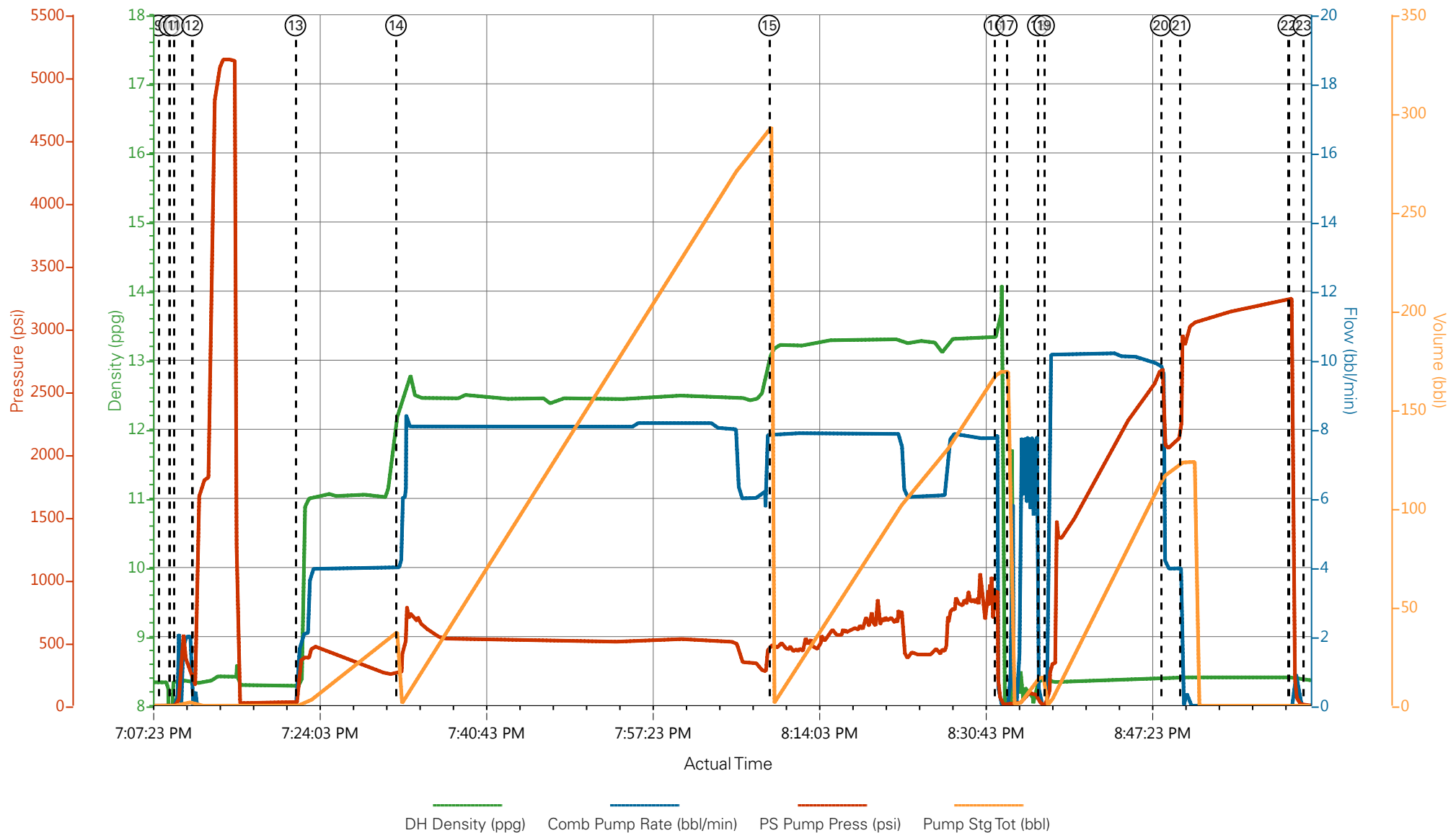
2.0 Real-Time Job Summary

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	9/15/2017	10:30:00	USER					ELITE #8, REQUESTED ON LOCATION TIME 1630
Event	2	Pre-Convoy Safety Meeting	9/15/2017	13:30:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	9/15/2017	15:00:00	USER					ARRIVED ON LOCATION 1 1/2 HOURS EARLY RIG RUNNING CASING
Event	4	Meet With Company Rep	9/15/2017	15:30:00	USER					COMPANY REP OFFERED SDS WATER TEST: TEMP: 65 PH: 7 CHLORIDES: 0
Event	5	Assessment Of Location Safety Meeting	9/15/2017	16:00:00	USER					ALL HES EMPLOYEES
Event	6	Pre-Rig Up Safety Meeting	9/15/2017	16:10:00	USER					ALL HES EMPLOYEES
Event	7	Rig-Up Equipment	9/15/2017	16:20:00	USER					1 HT-400 PUMP TRUCK 2 SILOS 1 660 BULK TRUC 1 F-550 PICKUP
Event	8	Pre-Job Safety Meeting	9/15/2017	18:00:00	USER					ALL HES EMPLOYEES AND RIG CREW RIG CIRCULATED @ 10.5 BPM @ 1050 PSI FOR 1 HOUR PRIOR TO THE JOB
Event	9	Start Job	9/15/2017	19:08:13	COM5					TD: 7762 TP: 7752 SJ: 74.07 CSG: 4 1/2 11.6# N-80 OH: 7 7/8 SURFACE SHOE @ 1559 8 5/8 24# J-55 MUD WT: 9.2 PPG
Event	10	Drop Bottom Plug	9/15/2017	19:09:17	COM5					PLUG AWAY NO PROBLEMS
Event	11	Prime Lines	9/15/2017	19:09:45	COM5	8.33	2.0	570	2.0	PRIME LINES WITH 2 BBLs FRESH WATER
Event	12	Test Lines	9/15/2017	19:11:35	USER	8.33	0.0	5152	2.0	PRESSURE TEST OK
Event	13	Pump Tuned Spacer III	9/15/2017	19:21:55	COM5	11.0	4.0	430	40	PUMP 40 BBL TUNED SPACER III 11.0 PPG 4.86 YIELD 31.9 GAL/SK TUNED SPACER WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	14	Pump Lead Cement	9/15/2017	19:31:59	COM5	12.5	8.0	560	270	781 SKS 12.5 PPG 1.94 YIELD 9.6 GAL/SK LEAD CEMENT

WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES										
Event	15	Pump Tail Cement	9/15/2017	20:09:20	COM5	13.3	8.0	870	142	461 SKS 13.3 PPG 1.73 YIELD 7.81 GAL/SK TAIL CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	16	Shutdown	9/15/2017	20:31:54	COM5					SHUTDOWN TO CLEAN PUMPS AND LINES
Event	17	Clean Lines	9/15/2017	20:33:07	COM5	8.33			10	CLEAN PUMPS AND LINES TO CELLAR
Event	18	Drop Top Plug	9/15/2017	20:36:14	COM5					PLUG AWAY NO PROBLEMS
Event	19	Pump Displacement	9/15/2017	20:36:52	COM5	8.4	10.0	2660	119	1 GAL MMCR 5 GAL CLA-WEB, FRESH WATER DISPLACEMENT
Event	20	Slow Rate	9/15/2017	20:48:32	COM5	8.4	4.0	2360	109	SLOW RATE TO BUMP PLUG
Event	21	Bump Plug	9/15/2017	20:50:26	COM5	8.4	4.0	3000	119	PSI BEFORE BUMPING PLUG @ 2360 BUMPED PLUG UP TO 3000 PSI FOR 10 MINUTE CSG TEST
Event	22	Check Floats	9/15/2017	21:01:19	COM5	8.4	0.0	3250		PRESSURE UP TO 3250 AFTER 10 MINUTE CASING TEST, FLOATS HELD, 1 1/2 BBL BACK TO DISPLACEMENT TANKS
Event	23	End Job	9/15/2017	21:02:49	COM5					MAINTAINED RETURNS THROUGHOUT JOB, PIPE STATIC THROUGHOUT JOB. 40 BBLs TUNED SPACER TO SURFACE
Event	24	Pre-Rig Down Safety Meeting	9/15/2017	21:05:00	USER					ALL HES EMPLOYEES
Event	25	Rig-Down Equipment	9/15/2017	21:15:00	USER					
Event	26	Pre-Convoy Safety Meeting	9/15/2017	22:25:00	USER					ALL HES EMPLOYEES
Event	27	Crew Leave Location	9/15/2017	22:30:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT, DUSTIN SMITH AND CREW

LARAMIE - BRUTON 30-05W - 4 1/2 PRODUCTION



- | | | | | |
|---|--------------------------|-------------------------|--------------------------------|------------------------------|
| ① Call Out | ⑦ Rig-Up Equipment | ⑬ Pump Tuned Spacer III | ⑰ Pump Displacement | 25 Rig-Down Equipment |
| ② Pre-Convoy Safety Meeting | ⑧ Pre-Job Safety Meeting | ⑭ Pump Lead Cement | 20 Slow Rate | 26 Pre-Convoy Safety Meeting |
| ③ Arrive At Loc | ⑨ Start Job | ⑮ Pump Tail Cement | 21 Bump Plug | 27 Crew Leave Location |
| ④ Meet With Company Rep | ⑩ Drop Bottom Plug | ⑯ Shutdown | 22 Chek Floats | |
| ⑤ Assessment Of Location Safety Meeting | ⑪ Prime Lines | ⑰ Clean Lines | 23 End Job | |
| ⑥ Pre-Rig Up Safety Meeting | ⑫ Test Lines | ⑱ Drop Top Plug | 24 Pre-Rig Down Safety Meeting | |

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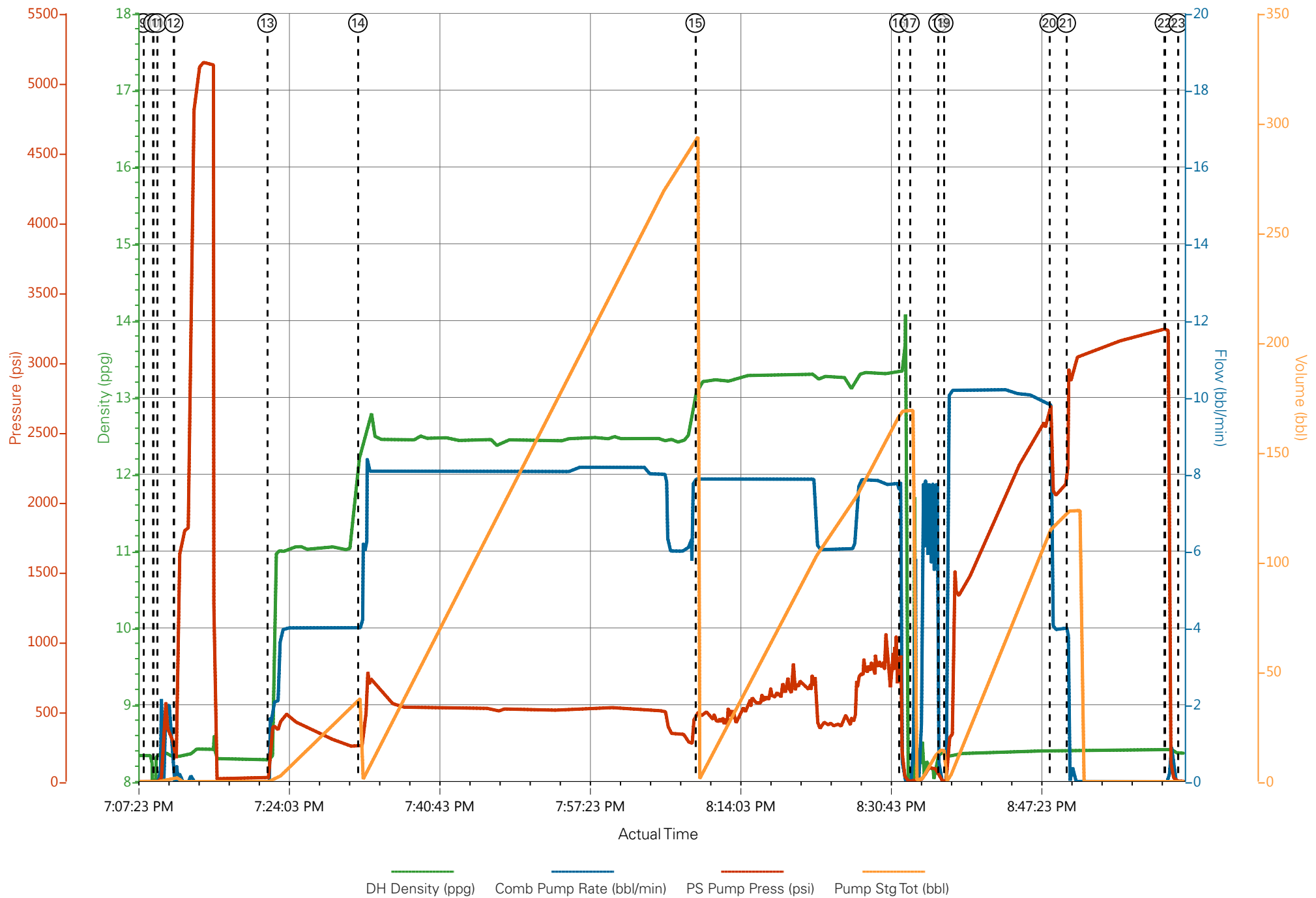
Edit

Customer : LARAMIE ENERGY II LLC
Representative : TYLER HALE

Job Date : 9/15/2017 4:34:29 PM
Sales Order # : 0904299911

Well : BRUTON 30-05W
ELITE #8 : DUSTIN SMITH / WES GOWEN

LARAMIE - BRUTON 30-05W - 4 1/2 PRODUCTION



Job Information

Request/Slurry	2416469/1	Rig Name	H&P 522	Date	12/SEP/2017
Submitted By	Aaron Katz	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Laramie Energy	Location	Garfield	Well	Bruton 30-05W

Well Information

Casing/Liner Size	4.5 in	Depth MD	7743 ft	BHST	115°C / 239°F
Hole Size	7.875 in	Depth TVD	7699 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
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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		

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Operation Test Results Request ID 2416469/1

Thickening Time - ON-OFF-ON

14/SEP/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)
172	4720	40	3:14	3:40	4:45	10:31	7	50	15	19

Total sks = 781

CS2498 TR# 8658 390.5 sks

CS2500 TR# MT 195 390.5 sks

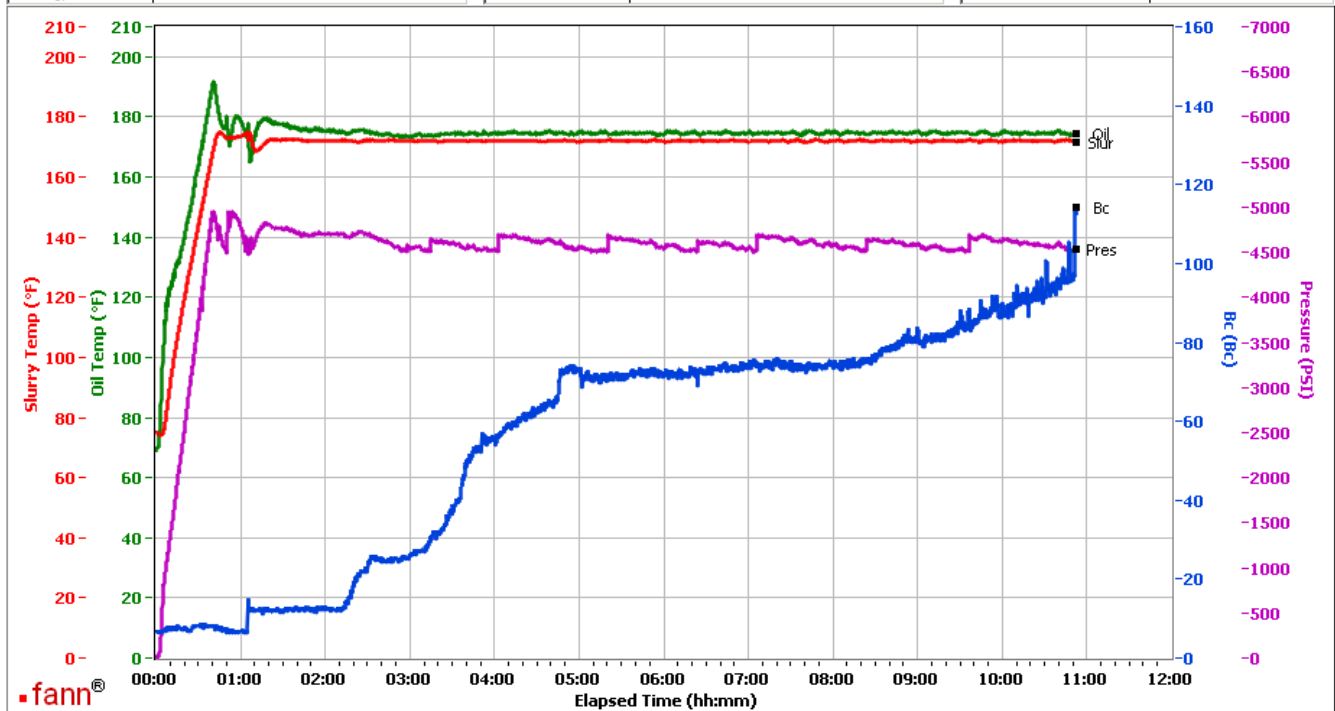
Deflection: 6 - 19 - 12

Grand Junction, Colorado

Fields	Values
Project Name	GJ2416469-1 LARAMIE PRODUCTION BULK
Test ID	34857724
Request ID	GJ2416889-1
Tested by	DEBA
Customer	LARAMIE ENERGY
Well No	BRUTON 30-05W
Rig	H&P 522
Casing/Liner Size	4.5"

Fields	Values
Job Type	PRODUCTION CASING
Cement Type	HOLCIM TYPE I/II
Cement Weight	Standard
Test Date	09/13/17
Test Time	09:13 PM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	03h:14m
40.00 Bc	03h:33m
50.00 Bc	03h:40m
70.00 Bc	04h:45m
100.00 Bc	10h:31m
00h:30m	8.24
01h:00m	6.83
01h:30m	11.47



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Comments COMPOSITE: CS 2498 TR#8658 390.5 SKS AND CS2500 TR# MT 195 390.5 SKS

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HALLIBURTON

Rockies, Grand Junction

Lab Results- Tail

Job Information

Request/Slurry	2416470/1	Rig Name	H&P 522	Date	12/SEP/2017
Submitted By	Aaron Katz	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Laramie Energy	Location	Garfield	Well	Bruton 30-05W

Well Information

Casing/Liner Size	4.5 in	Depth MD	7743 ft	BHST	115°C / 239°F
Hole Size	7.875 in	Depth TVD	7699 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
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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	

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Operation Test Results Request ID 2416470/1

Thickening Time - ON-OFF-ON

14/SEP/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)
172	4720	40	3:21	4:24	4:33	4:35	11	50	15

Total sks = 461

composite:

CS2505 TR#1972 Rear 100 SKS

CS2506 TR#MT199 361 SKS

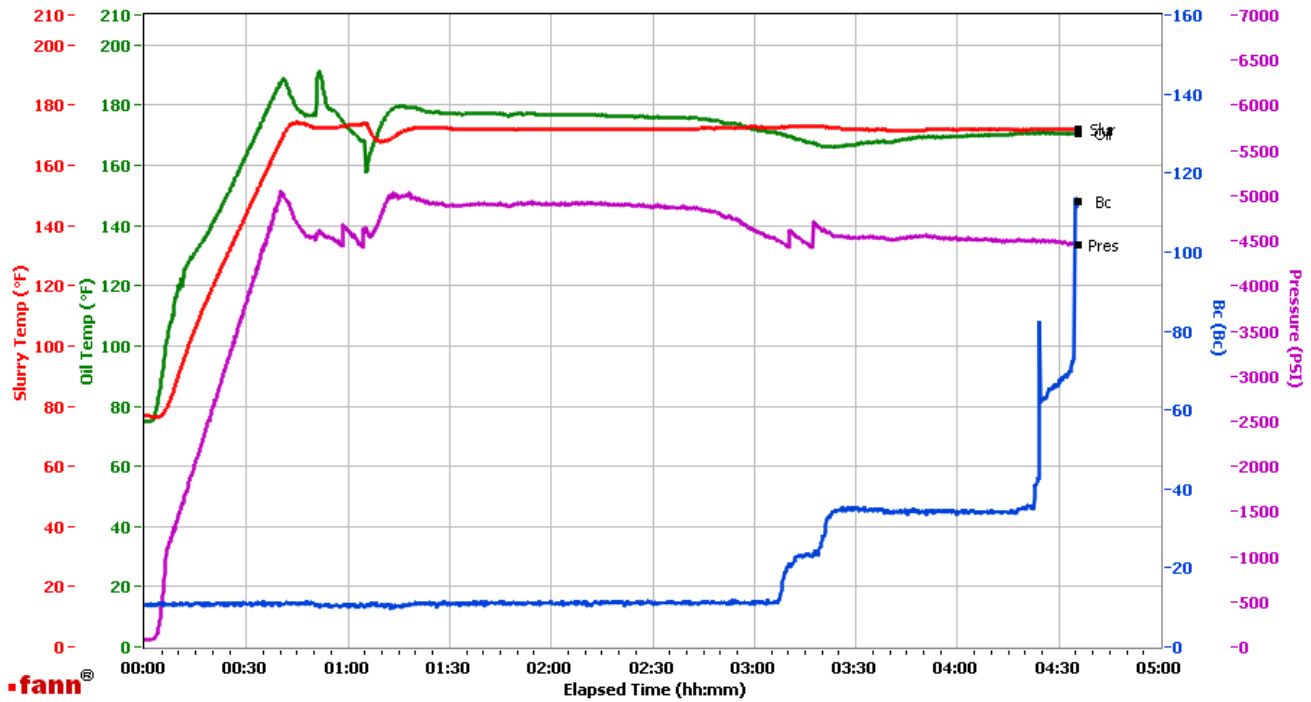
Deflection: 11 – 11

Grand Junction Colorado

Fields	Values
Project Name	GJ2416470-1 LARAMIE PRODUCTION BULK
Test ID	34857726
Request ID	GJ2416470-1
Tested by	DEBA
Customer	LARAMIE ENERGY
Well No	BRUTON 30-05 W
Rig	H&P 522
Casing/Liner Size	4.5 "

Fields	Values
Job Type	PRODUCTION CASING
Cement Type	MOUNTAIN G
Cement Weight	Standard
Test Date	09/14/17
Test Time	04:55 AM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	03h:21m
40.00 Bc	04h:22m
50.00 Bc	04h:24m
70.00 Bc	04h:33m
100.00 Bc	04h:35m
00h:30m	10.98
01h:00m	10.81
01h:30m	10.89



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Comments COMPO. CS2505 tr#1972 REAR. 100 SKS, CS06TR#199 361 SKS

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