

HALLIBURTON

iCem[®] Service

LARAMIE ENERGY LLC

For: Chuck Mallary

Date: Thursday, October 05, 2017

Bruton 30-06E Surface PJR

API# 05-077-10455-00

Sincerely,

Grand Junction Cement Engineering

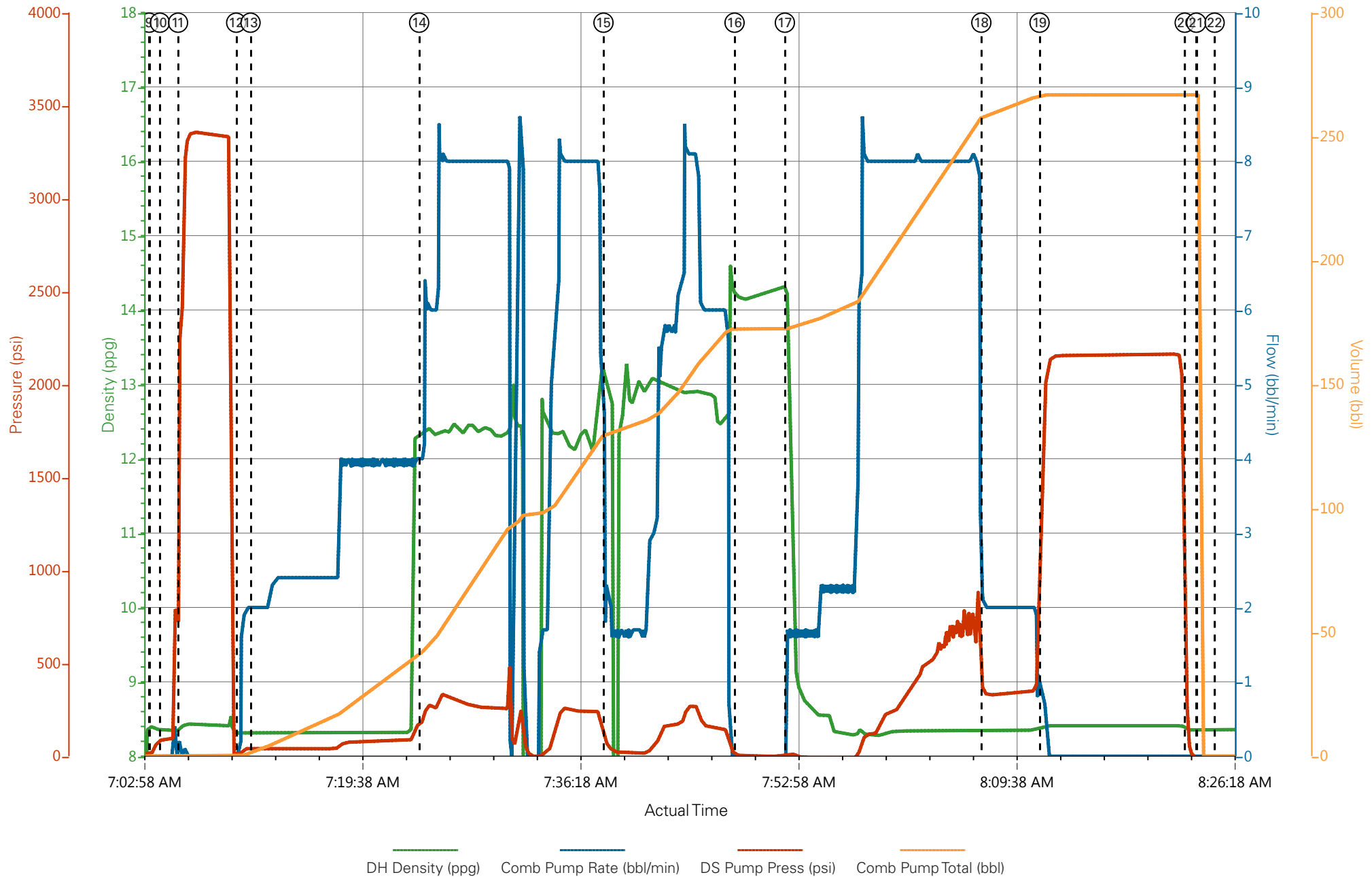
2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Driv-Side Pump Pressure (psi)	Combined Pump Total (bbl)	Comments
Event	1	Call Out	10/4/2017	23:00:00	USER					Requested on Location @ 0530
Event	2	Pre-Convoy Safety Meeting	10/5/2017	01:00:00	USER					
Event	3	Crew Leave Yard	10/5/2017	01:15:00	USER					1 Elite, 1 660, 1 pickup
Event	4	Arrive At Loc	10/5/2017	05:04:10	USER					Rig Running Casing
Event	5	Assessment Of Location Safety Meeting	10/5/2017	05:05:05	USER					JSA completed - Customer offered/received SDS - water test pH 7.5, Cl <200, temp 53 degrees
Event	6	Pre-Rig Up Safety Meeting	10/5/2017	05:06:40	USER					
Event	7	Rig-up Lines	10/5/2017	05:12:23	USER					1 hardline to standpipe, water hoses to upright and day tank, bulk hoses to 660.
Event	8	Pre-Job Safety Meeting	10/5/2017	06:53:00	USER					ALL HES, RIG PERSONEL AND CUSTOMER REP
Event	9	Start Job	10/5/2017	07:03:33	USER					TD 1564, TP 1553, SJ 42.2, OH 11", Mud 9.3 ppg
Event	10	Prime Lines	10/5/2017	07:04:23	COM7					FRESH WATER
Event	11	Test Lines	10/5/2017	07:05:46	COM7	8.33		3400		HELT PRESSURE FOR 2 MIN, AND NO LEAKS
Event	12	Pump Spacer 1	10/5/2017	07:10:13	COM7	8.33	4	220	40	BOTTOM PLUG RELEASED AHEAD OF SPACER
Event	13	CHECK WEIGHT	10/5/2017	07:11:18	USER					CHECK WEIGHT VIA MUD SCALES
Event	14	Pump Lead Cement	10/5/2017	07:24:12	COM7	12.3	8	400	86.3	197 SKS, 12.3 PPG, 2.46 YEILD, 14.17 GAL/SK
Event	15	Pump Tail Cement	10/5/2017	07:38:17	COM7	12.8	6	210	42.3	109 SKS 12.8 PPG, 2.18 YEILD, 12.11 GAL/SK

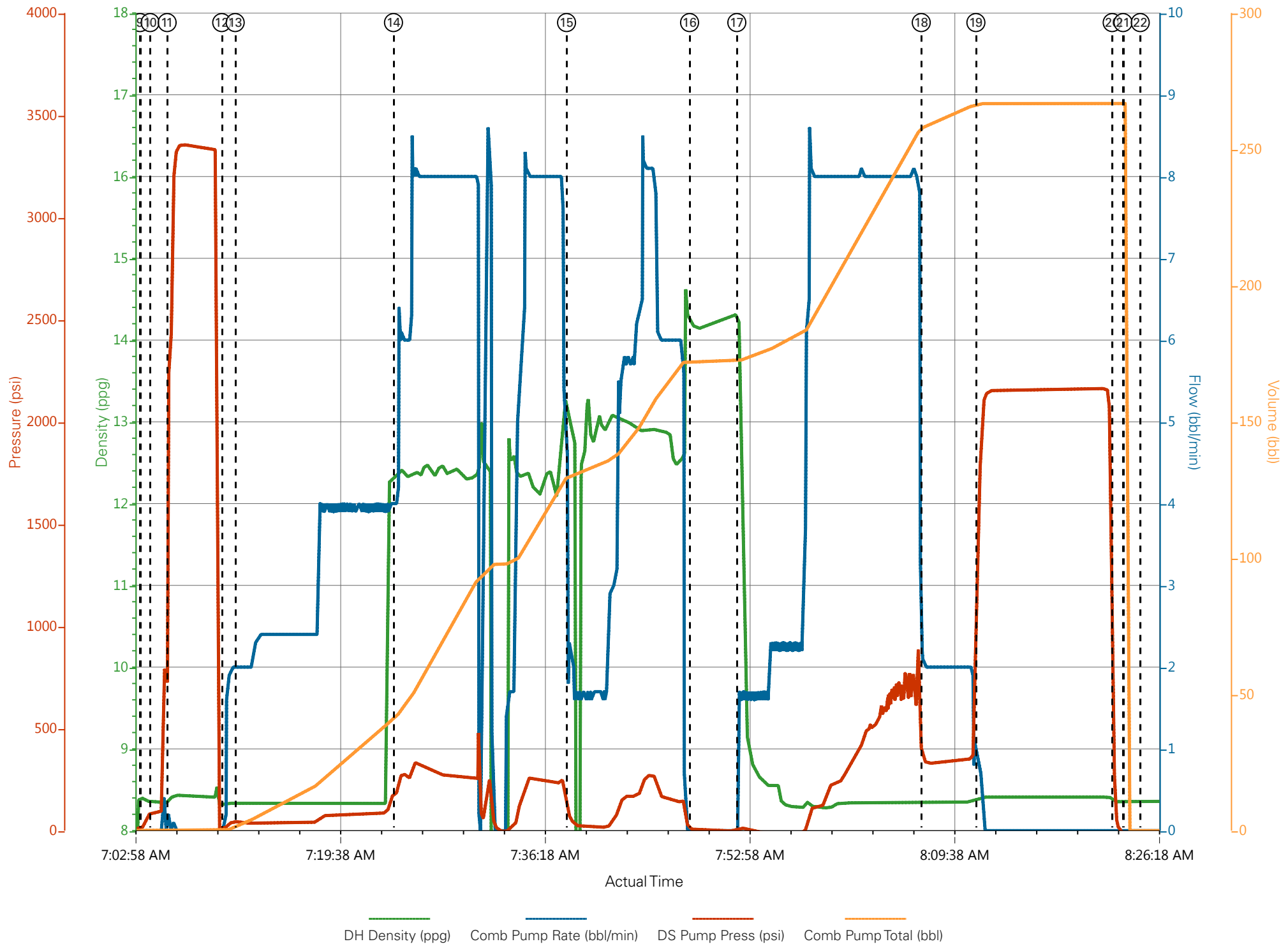
Event	16	Drop Top Plug	10/5/2017	07:48:18	USER					
Event	17	Pump Displacement	10/5/2017	07:52:09	COM7	8.33	8	800		WASH UP ON TOP OF PLUG
Event	18	Slow Rate	10/5/2017	08:07:10	USER	8.33	2	350	85	SLOW RATE FROM 8 BPM TO 2 BPM
Event	19	Bump Plug	10/5/2017	08:11:37	USER	8.33	2	2100	96.1	PRESSURED UP CASING TO 2100 PSI FOR 10 MIN.
Event	20	Check Floats	10/5/2017	08:22:42	USER					FLOAT HELD
Event	21	End Job	10/5/2017	08:23:36	COM7					GOOD RETURNS THROUGH OUT JOB, 32 BBL OF CEMENT TO SURFACE, USED 40 POUNDS OF SUGAR, NO ADD HOURS
Event	22	Pre-Rig Down Safety Meeting	10/5/2017	08:25:00	USER					
Event	23	RIG DOWN	10/5/2017	08:40:00	USER					
Event	24	Pre-Convoy Safety Meeting	10/5/2017	09:04:58	USER					
Event	25	Crew Leave Location	10/5/2017	09:05:14	USER					THANKS FOR USING HALLIBURTON CEMENT. CHRIS MARTINEZ AND CREW

BRUTON 30-06E 8 5/8 SURFACE



- | | | | | |
|---|--|----------------------------|---------------------------------------|---------------------------------|
| ① Call Out n/a;n/a;n/a;n/a | ⑤ Assessment Of Location Safety Meeting 8.33;0;0;0 | ⑨ Start Job 8.37;0;17;0 | ⑬ CHECK WEIGHT 8.33;2;42;1.9 | ⑰ Pump Displacement 12.89;1.0 |
| ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a | ⑥ Pre-Rig Up Safety Meeting 8.33;0;1;0 | ⑩ Prime Lines 8.35;0;91;0 | ⑭ Pump Lead Cement 12.33;4;186;42.2 | ⑱ Slow Rate 8.35;2;339;258.2 |
| ③ Crew Leave Yard n/a;n/a;n/a;n/a | ⑦ Rig-up Lines 8.33;0;-1;0 | ⑪ Test Lines 8.41;0;2383;0 | ⑮ Pump Tail Cement 13.08;2.3;68;130.3 | ⑲ Bump Plug 8.39;0.8;1613;266.8 |
| ④ Arrive At Loc 8.33;0;0;0 | ⑧ Pre-Job Safety Meeting 8.33;0;2;0 | ⑫ Pump Spacer 18.31;0;14;0 | ⑯ Drop Top Plug 14.18;0;5;172.3 | ⑳ Check Floats 8.35;0;119;266.8 |

BRUTON 30-06E 8 5/8 SURFACE



HALLIBURTON

iCem[®] Service

LARAMIE ENERGY LLC

For: Chuck Mallary

Date: Sunday, October 08, 2017

Bruton 30-06E Production PJR

API# 05-077-10455-00

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

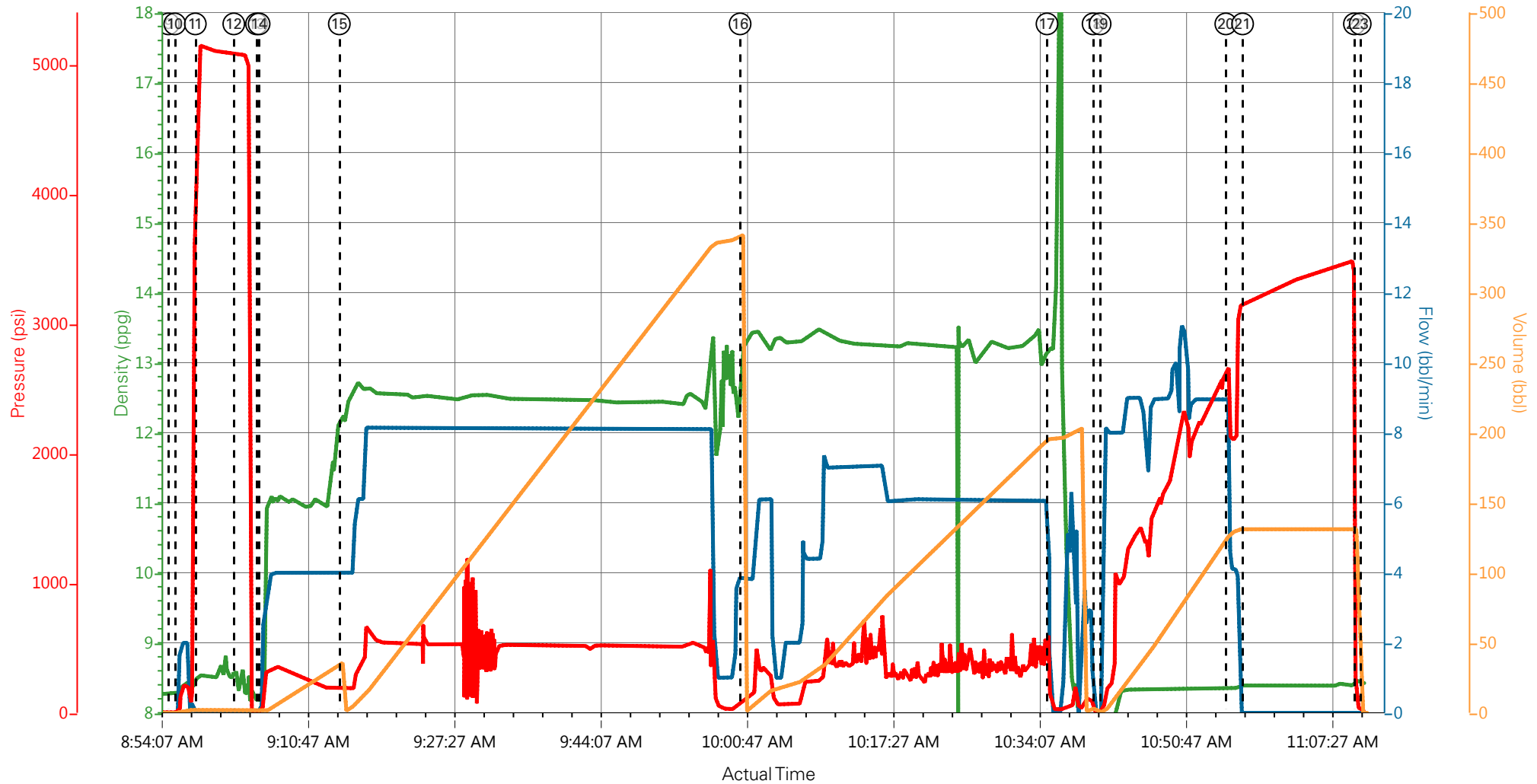
2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pass-Side Pump Pressure (psi)	Pump Stage Total (bbl)	Comments
Event	1	Call Out	10/8/2017	01:30:00	USER					HES CREW NOTIFIED - ON LOCATION TIME 0730
Event	2	Pre-Convoy Safety Meeting	10/8/2017	01:45:00	USER					HES CREW WAS ROLLING FROM PREVIOUS JOB - ELITE PUMP TRUCK WENT STRAIGHT TO LOCATION - SUPERVISOR AND BULK TRUCK OPERATOR WENT BACK TO HALLIBURTON FACILITY AND GOT EQUIPMENT FOR JOB
Event	3	Arrive At Loc	10/8/2017	06:00:00	USER					HES ARRIVED 1 HOUR EARLY - HES SUPERVISOR TRIED TO SPEAK WITH COMPANY REP BUT COMPANY REP WAS ASLEEP
Event	4	Assessment Of Location Safety Meeting	10/8/2017	06:10:00	USER					RIG WAS RUNNING CASING - HES WAITED TO SPOT EQUIPMENT
Event	5	Pre-Rig Up Safety Meeting	10/8/2017	06:30:00	USER					JSA FILLED OUT AND REVIEWED BY ALL HES
Event	6	Rig-Up Equipment	10/8/2017	06:45:00	USER					RIG-UP IRON TO THE STAND PIPE - WASH-UP LINE TO THE CELLAR - WATER HOSE TO BOTH RIG UPRIGHT AND RIG TANK
Event	7	Rig-Up Completed	10/8/2017	07:45:00	USER	8.35	0.00	3.00	0.0	COMPLETED SAFELY
Event	8	Pre-Job Safety Meeting	10/8/2017	08:15:00	USER	8.29	0.00	0.00	0.0	ALL HES, RIG CREW AND COMPANY REP IN ATTENDANCE TO DISCUSS JOB PROCEDURES
Event	9	Start Job	10/8/2017	08:55:15	COM5					TD: 8201FT TP: 8191FT SJ: 81.69FT OH: 7 7/8" CSG: 4.5 11.6# I-80 WTR TEST: TEMP- 45 CHLOR- 0 PH-7
Event	10	Fill Lines	10/8/2017	08:55:58	USER	8.30	2	220	2	FILL LINES WITH 2BBLs OF WATER AT 2BPM TO

PRESSURE TEST LINES										
Event	11	Test Lines	10/8/2017	08:58:19	COM5			5155		PRESSURE TEST LINES TO 5000PSI, PRESSURE TEST OK
Event	12	Check weight	10/8/2017	09:02:42	COM5	11				VERIFIED WEIGHT OF TUNED SPACER PRIOR TO PUMPING DOWNHOLE
Event	13	Tuned Spacer	10/8/2017	09:05:17	COM5	11	4	250	40	40BBLs OF TUNED SPACER 11PPG 4.86YIELD 31.9GAL/SK - WEIGHT OF TUNED SPACER VERIFIED VIA PRESSURIZED MUD SCALES THROUGHOUT
Event	14	Drop Bottom Plug	10/8/2017	09:05:35	USER					BOTTOM PLUG AWAY NO PROBLEMS
Event	15	Pump Lead Cement	10/8/2017	09:14:43	COM5	12.5	8	530	298.5	864SKS OF NEOCEM CEMENT (298.5BBLs) 12.5PPG 1.94YIELD 9.6GAL/SK - WEIGHT OF CEMENT VERIFIED VIA PRESSURIZED MUD SCALES THROUGHOUT CEMENT
Event	16	Pump Tail Cement	10/8/2017	10:00:22	COM5	13.3	6	750	142	461SKS OF THERMACEM CEMENT (142BBLs) 13.3PPG 1.73YIELD 7.81GAL/SK - WEIGHT OF CEMENT VERIFIED VIA PRESSURIZED MUD SCALES THROUGHOUT CEMENT
Event	17	Shutdown	10/8/2017	10:35:19	USER					SHUTDOWN END OF CEMENT - CLEAN LINES TO THE RIG CELLAR - READY TANKS FOR DISPLACEMENT
Event	18	Drop Top Plug	10/8/2017	10:40:34	USER					TOP PLUG AWAY NO PROBLEMS
Event	19	Pump Displacement	10/8/2017	10:41:22	COM5	8.34	9	2650	115.7	FRESH WATER DISPLACEMENT WITH 1-GAL MMCR AND 5-GALS OF CLA-WEB ADDED THROUGHOUT DISPLACEMENT
Event	20	Slow Rate	10/8/2017	10:55:41	USER	8.34	4	2150	10	SLOW RATE TO BUMP THE PLUG - PRESSURE PRIOR TO SLOWING WAS 2650PSI AT 9BPM
Event	21	Bump Plug	10/8/2017	10:57:36	COM5	8.34	4	2250	125.7	PLUG BUMPED AT CALCULATED DISPLACEMENT - PLUG BUMPED AT 2250PSI - TOOK TO 3000PSI FOR 10MIN CASING TEST PER COMPANY REPS REQUEST
Event	22	Check Floats	10/8/2017	11:10:20	COM5			3483		FLOATS HELD - 1.5BBLs BACK TO TANKS - 30BBLs

						OF TUNED SPACER TO SURFACE - RIG USED 30 POUNDS OF SUGAR
Event	23	End Job	10/8/2017	11:11:00	COM5	THANK YOU FOR CHOOSING HALLIBURTON CEMENT CARL KUKUS AND CREW
Event	24	Pre-Rig Down Safety Meeting	10/8/2017	11:15:00	USER	JSA REVIEWED - ALL HES INVOLVED IN SAFETY MEETING
Event	25	Rig-Down Equipment	10/8/2017	11:20:00	USER	WASH UP AND BLOW DOWN PUMP TRUCK - RIG DOWN ALL IRON - WATER HOSES AND BULK EQUIPMENT
Event	26	Rig-Down Completed	10/8/2017	12:20:00	USER	RIG-DOWN COMPLETED SAFELY
Event	27	Pre-Convoy Safety Meeting	10/8/2017	12:25:00	USER	JOURNEY CREATED - ALL HES INVOLVED IN SAFETY MEETING
Event	28	Crew Leave Location	10/8/2017	12:30:00	USER	1-F-550 PICKUP - 1-ELITE PUMP TRUCK - 1-660BULK TRUCK

LARAMIE - BRUTON 30-06E - 904354090



— 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	⑧ Pre-Job Safety Meeting 8.29;0;0;0	⑮ Pump Lead Cement 12.25;4;193;35.8	⑳ Check Floats 8.45;0;44;131.1
② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a	⑨ Start Job 8.26;0;4;0	⑯ Pump Tail Cement 13.23;3.9;103;0	㉑ End Job 8.41;0;15;0
③ Arrive At Loc n/a;n/a;n/a;n/a	⑩ Fill Lines 8.3;0;3;0	⑰ Shutdown 13.21;0;97;196.1	㉒ Pre-Rig Down Safety Meeting n/a;n/a;n/a;n/a
④ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a	⑪ Test Lines 8.52;0;5153;2	⑱ Drop Top Plug 7.94;0;-2;3.1	㉓ Rig-Down Equipment n/a;n/a;n/a;n/a
⑤ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a	⑫ Check weight 8.3;0;5080;2	⑲ Pump Displacement 7.92;3.5;51;0.5	㉔ Rig-Down Completed n/a;n/a;n/a;n/a
⑥ Rig-Up Equipment n/a;n/a;n/a;n/a	⑬ Tuned Spacer 8.18;0;4;0	㉚ Slow Rate 8.37;8.9;2652;127.1	㉕ Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a
⑦ Rig-Up Completed 8.35;0;3;0	⑭ Drop Bottom Plug 8.17;2.2;98;0.2	㉛ Bump Plug 8.39;0;3171;131.1	㉖ Crew Leave Location n/a;n/a;n/a;n/a

▼ **HALLIBURTON** | iCem® Service

Created: 2017-10-08 06:13:55, Version: 4.2.393

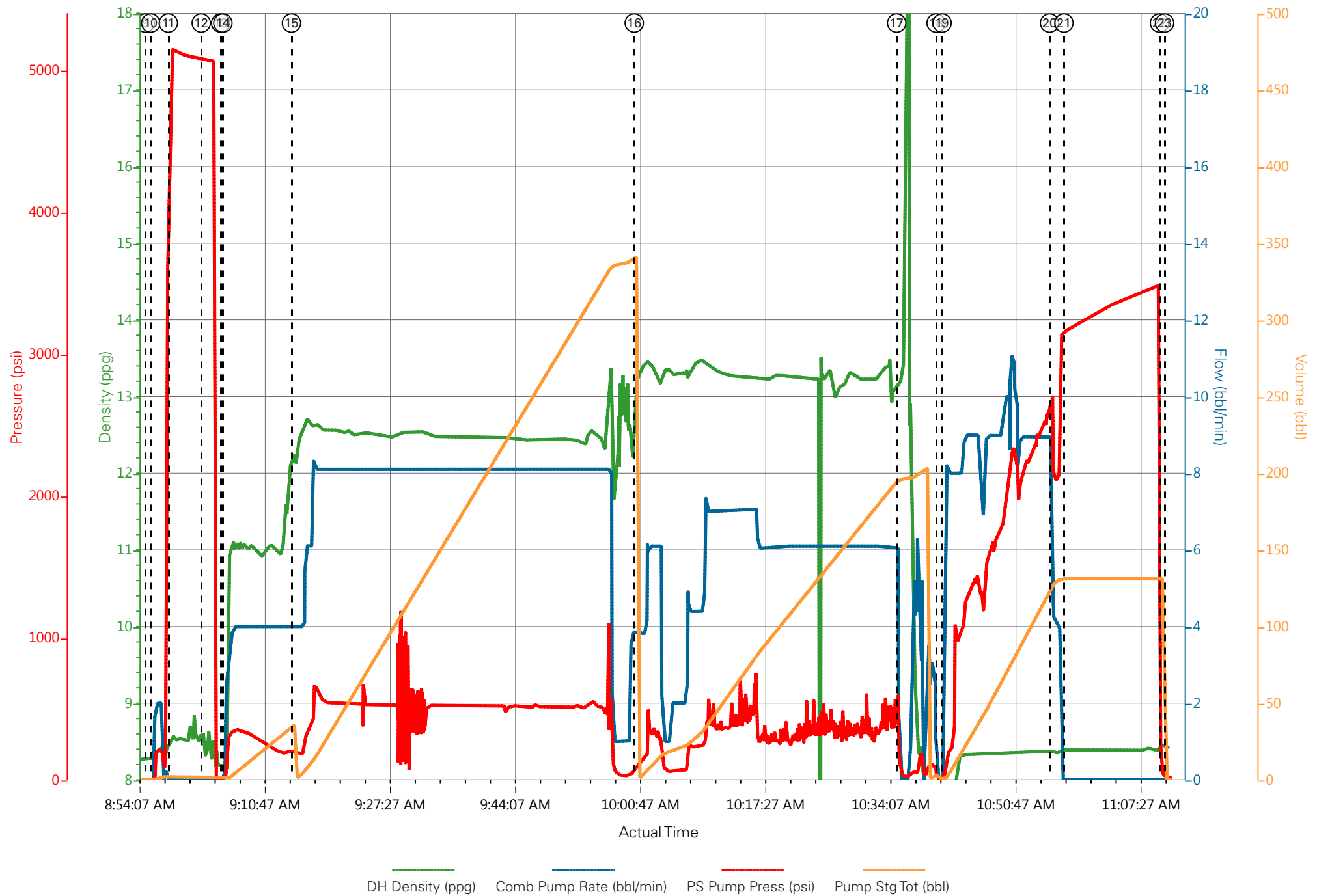
Edit

Customer : LARAMIE ENERGY II LLC
Representative : Shane Heard

Job Date : 10/8/2017 7:40:38 AM
Sales Order # : 904354090

Well : BRUTON 30-06E
Elite 4 : Dillon Martin/Carlton Kukus

LARAMIE - BRUTON 30-06E - 904354090



Job Information

Request/Slurry	2421541/1	Rig Name	H&P 522	Date	06/OCT/2017
Submitted By	Patrick Ealey	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Laramie Energy	Location	Garfield	Well	Bruton 30-06E

Well Information

Casing/Liner Size	4.5 in	Depth MD	8200 ft	BHST	115°C / 239°F
Hole Size	7.875 in	Depth TVD	7734 ft	BHCT	78°C / 172°F
Pressure	4714 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

<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	Cement Properties		
		NeoCem Lead				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		

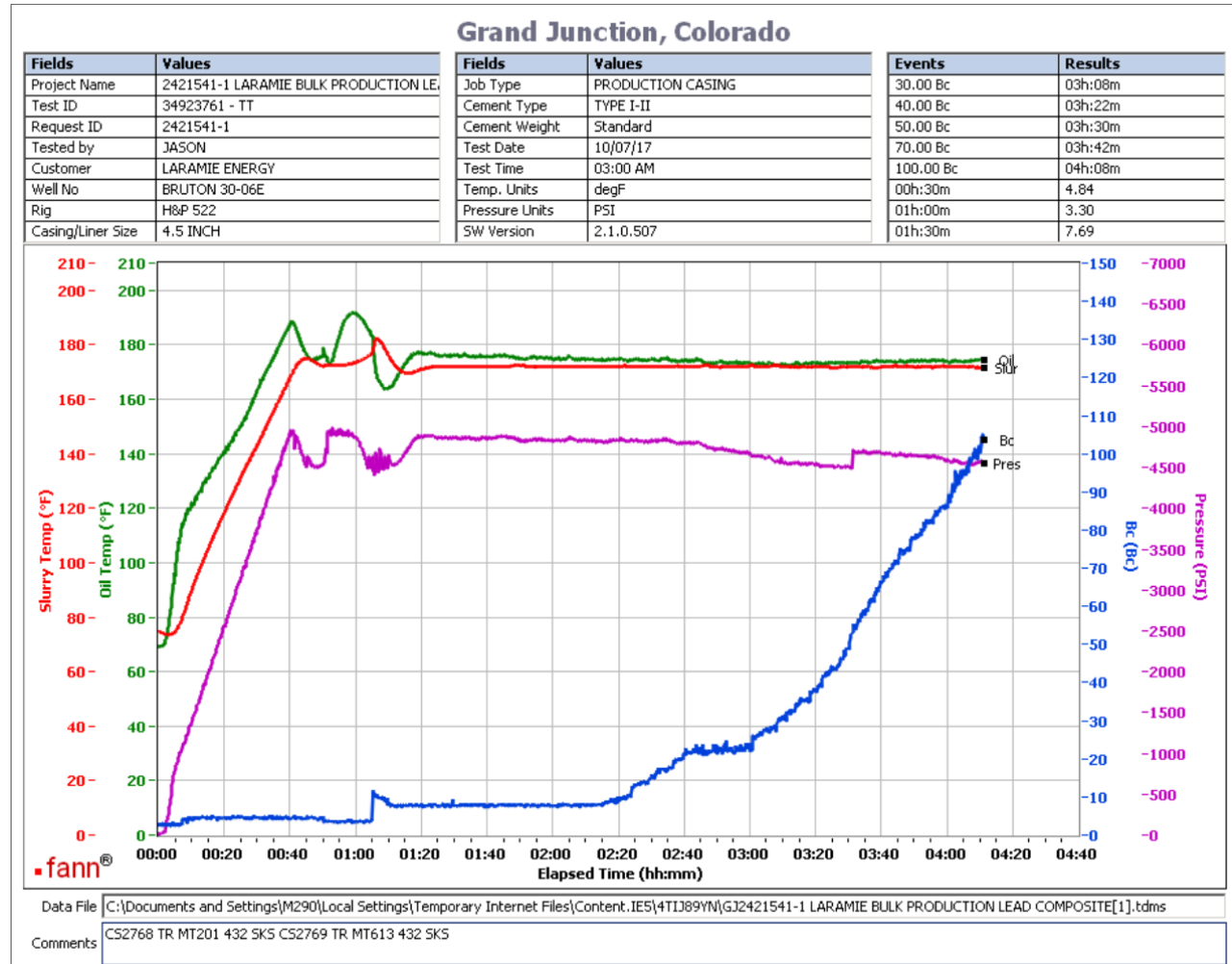
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Operation Test Results Request ID 2421541/1

Thickening Time - ON-OFF-ON

07/OCT/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	4714	40	3:08	3:30	3:42	4:08	3	50	15	11



Total sks = 864

Composite:

CS2768 TR MT201 432 SKS

CS2769 TR MT613 432 SKS

Deflection: 4 - 11

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HALLIBURTON

Rockies, Grand Junction

Lab Results- Tail

Job Information

Request/Slurry	2421542/1	Rig Name	H&P 522	Date	06/OCT/2017
Submitted By	Patrick Ealey	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Laramie Energy	Location	Garfield	Well	Bruton 30-06E

Well Information

Casing/Liner Size	4.5 in	Depth MD	8200 ft	BHST	115°C / 239°F
Hole Size	7.875 in	Depth TVD	7734 ft	BHCT	78°C / 172°F
Pressure	4714 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



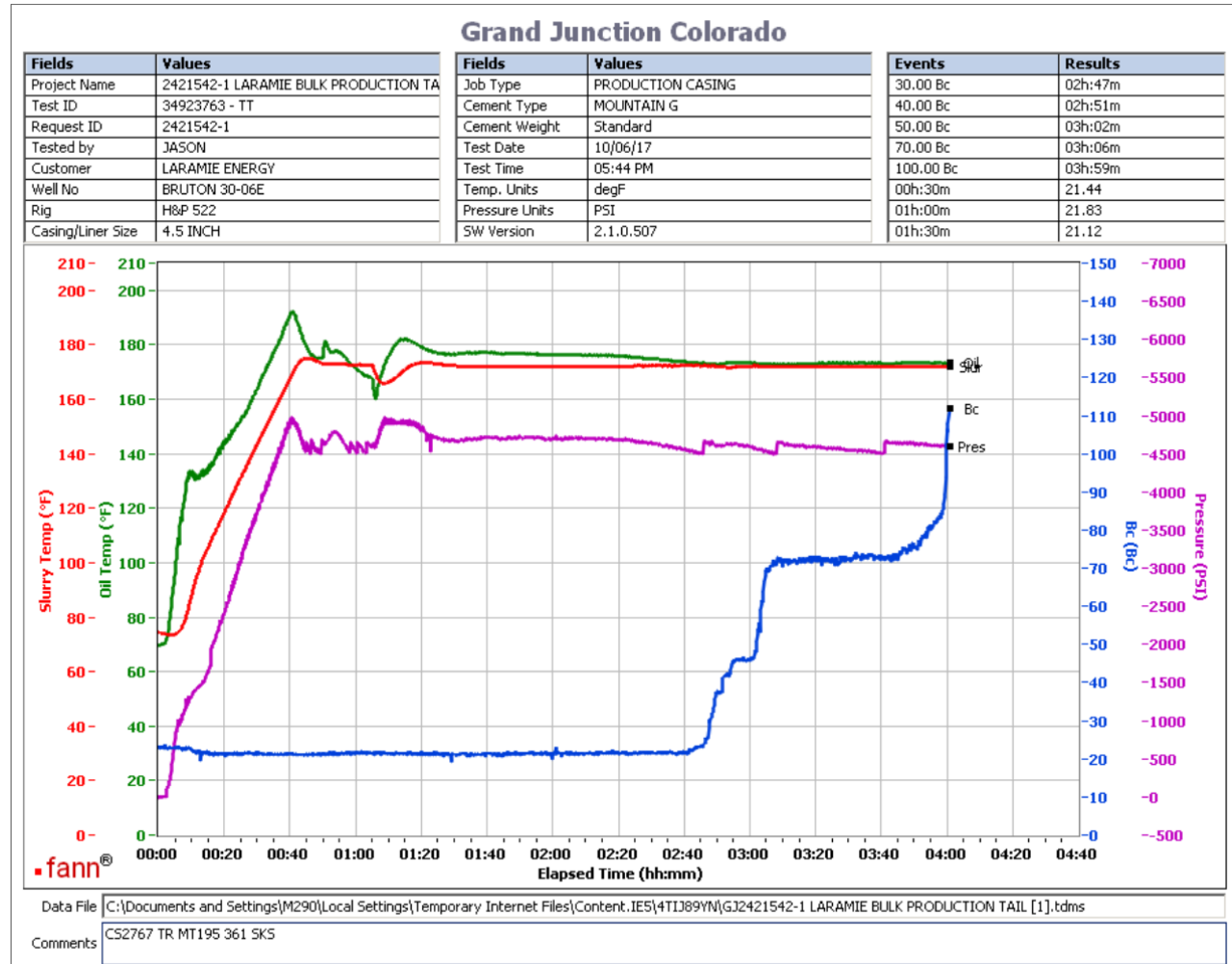
<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	Cement Properties		
		ThermaCem Tail				Slurry Density	13.3	lbm/gal
						Slurry Yield	1.733	ft3/sack
						Water Requirement	7.799	gal/sack
						Total Mix Fluid	7.799	gal/sack
						Water Source	Field (Fresh) Water	
						Water Chloride		

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Thickening Time - ON-OFF-ON

07/OCT/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	4714	40	2:47	3:02	3:06	3:59	23	50	15	21



Total sks = 461
 CS2767 TR M195 361 SKS
 Deflection: 21 – 21

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Operation Test Results Request ID 2421542/2

Thickening Time - ON-OFF-ON

07/OCT/2017

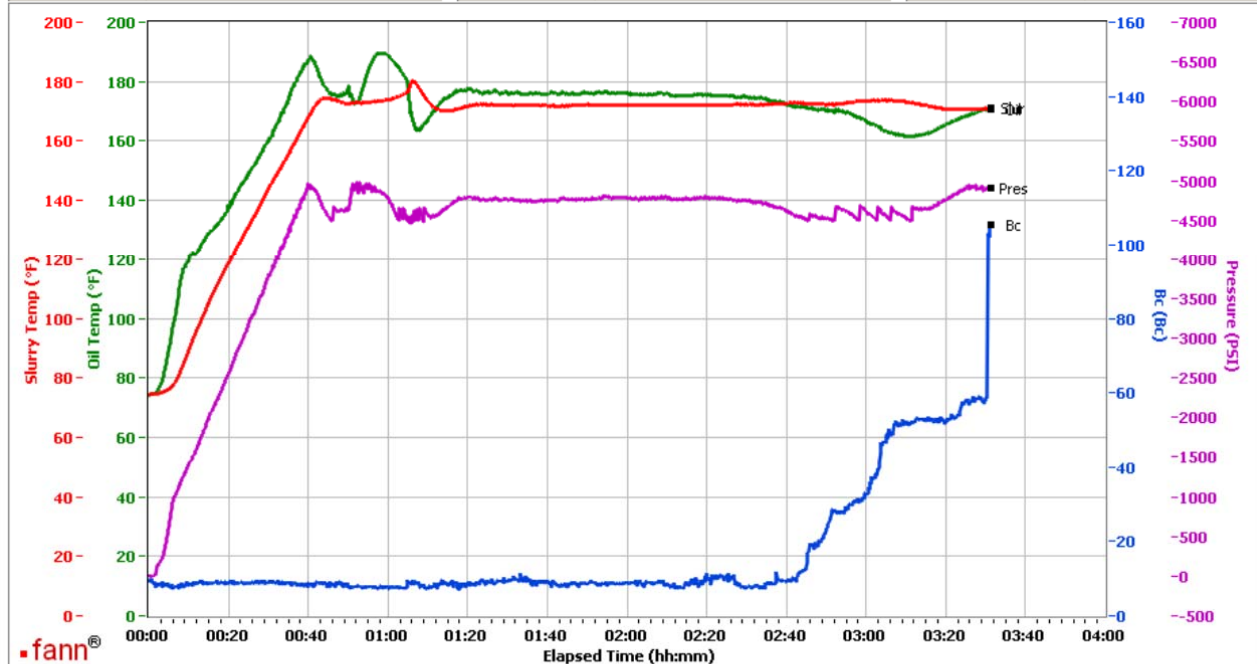
Test Temp (°F)	Pressure (psi)	Reached in (min)	30 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)	Start Bc	Stirring before stop (mins)	Static Period (min)	Peak reading (BC)
172	4714	40	2:55	3:05	3:30	3:30	10	50	15	8

Grand Junction, Colorado

Fields	Values
Project Name	2421542-2 LARAMIE BULK PRODUCTION TA
Test ID	34926126 - TT
Request ID	2421542-2
Tested by	CT
Customer	LARAMIE ENERGY
Well No	BRUTON 30-06E
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	10/07/17
Test Time	07:45 PM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	02h:55m
40.00 Bc	03h:03m
50.00 Bc	03h:05m
70.00 Bc	03h:30m
100.00 Bc	03h:30m
00h:30m	9.17
01h:00m	7.78
01h:30m	9.55



Data File C:\Documents and Settings\M290\Local Settings\Temporary Internet Files\Content.IE5\CDER4HUV\GJ2421542-2 LARAMIE BULK PRODUCTION TAIL[1].tdms

Comments CS2770, TRAILER 4053, 100 SKS

Total sks = 461
CS2770, Trailer 4053, 100 sks
Deflection: 8 - 8

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