

HALLIBURTON

iCem[®] Service

LARAMIE ENERGY II LLC EBUSINESS

For: Laramie

Date: Wednesday, June 06, 2018

CC 0697-03-13E Surface PJR

API# 05-045-23813

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

2.1 Job Event Log

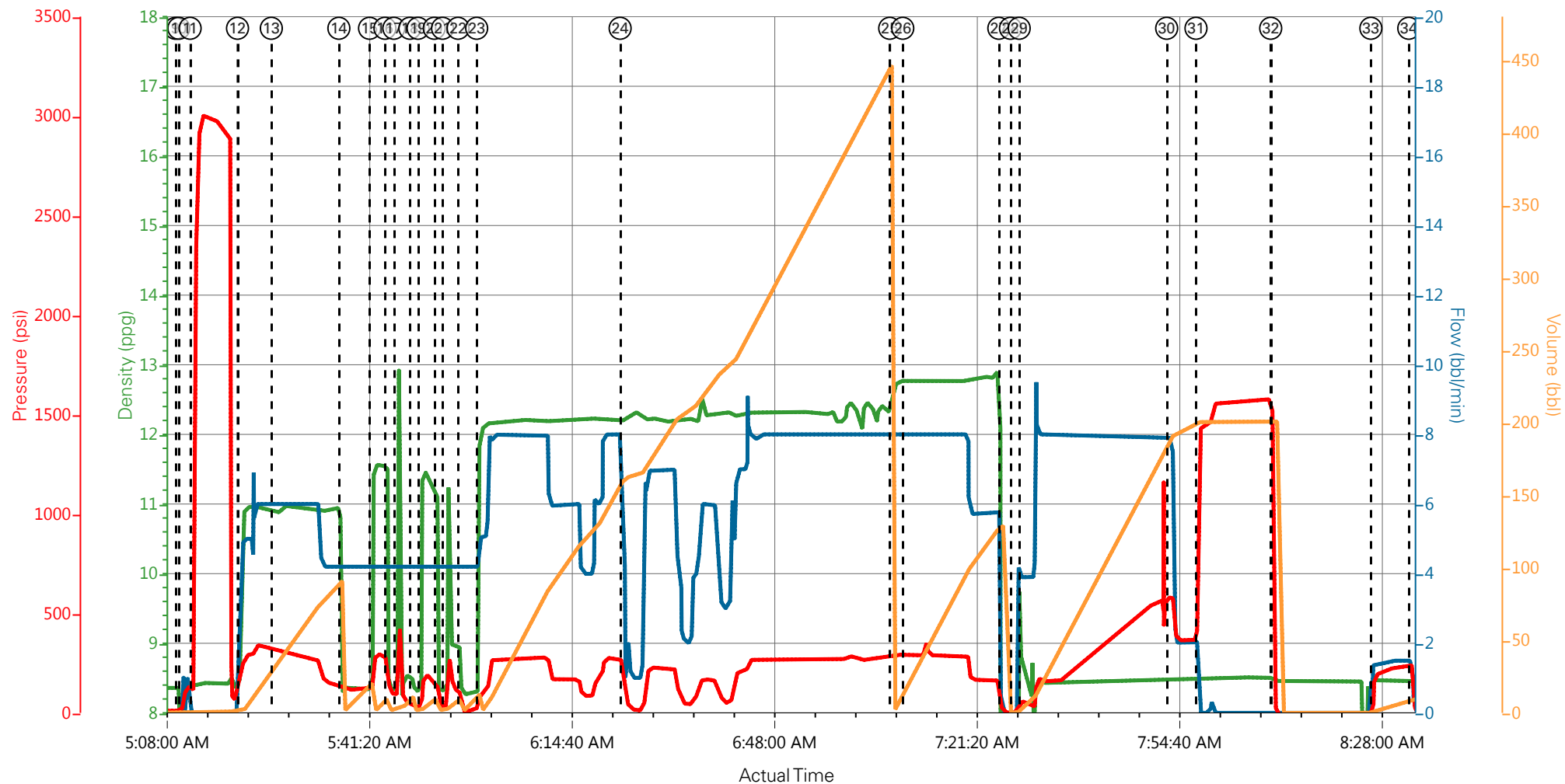
Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	6/5/2018	22:30:00	USER					REQUESTED ON LOCATION @ 04:30
Event	2	Pre-Convoy Safety Meeting	6/6/2018	00:00:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	6/6/2018	00:15:00	USER					1 HT 400 PUMP TRUCK E4, 1 SUPERFLUSH TRANSPORT, 1 660 BULK TRUCK, 1 450 SERVICE PICKUP
Event	4	Arrive At Loc	6/6/2018	02:30:00	USER					RIG RUNNING CASING UPON HES ARRIVAL
Event	5	Assessment Of Location Safety Meeting	6/6/2018	02:35:00	USER					MET WITH COMP REP, AND WENT OVER NUMBERS AND JOB PROCEDURE. WALKED AROUND LOCATION AND COLLECTED WATER SAMPLE (PH- 7, CHLORIDES- 500, TEMP- 60F). COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES.
Event	6	Pre-Rig Up Safety Meeting	6/6/2018	02:45:00	USER					ALL HES PRESENT
Event	7	Rig-Up Equipment	6/6/2018	02:50:00	USER					HES RIGGED UP EQUIPMENT WITHOUT ENTERING RED ZONE.
Event	8	Pre-Job Safety Meeting	6/6/2018	05:00:00	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 10 BPM WITH 233 PSI

Event	9	Start Job	6/6/2018	05:10:00	COM6					TD 2575', TP 2565', CSG 9 5/8" J-55 36#, SJ 43.65', OH 14 3/4", MUD 8.8 PPG
Event	10	Prime Lines	6/6/2018	05:10:33	USER	8.33	2	140	2	FRESH WATER
Event	11	Test Lines	6/6/2018	05:12:24	COM6				3005	ALL LINES HELD PRESSURE AT 3005 PSI
Event	12	Scavenger	6/6/2018	05:20:12	COM6	11	6	306	75	185 SKS EXTENDACEM CMT 11 PPG, 2.28 FT3/SK, 12.38 GAL/SK
Event	13	Check weight	6/6/2018	05:25:46	COM6					WEIGHT VERIFIED VIA PRISSEREIZED MUD SCALES
Event	14	Pump H2O Spacer	6/6/2018	05:36:53	COM6	8.33	4	127	20	FRESH WATER
Event	15	Super Flush	6/6/2018	05:41:56	COM6	11	4	222	10	10BBLS SUPER FLUSH
Event	16	H2O Spacer	6/6/2018	05:44:28	COM6	8.33	4	94	5	FRESH WATER
Event	17	CC Spacer	6/6/2018	05:45:56	COM6	8.4	4	60	10	10BBLS CALCIUM CHL. WATER
Event	18	H2O Spacer	6/6/2018	05:48:34	COM6	8.33	4	45	5	FRESH WATER
Event	19	Super Flush	6/6/2018	05:49:55	COM6	11	4	119	10	10BBLS SUPER FLUSH
Event	20	H2O Spacer	6/6/2018	05:52:35	COM6	8.33	4	150	5	FRESH WATER
Event	21	CC Spacer	6/6/2018	05:53:57	COM6	8.4	4	100	10	10BBLS CALCIUM CHL. WATER
Event	22	H2O Spacer	6/6/2018	05:56:30	COM6	8.33	4	20	10	FRESH WATER
Event	23	Pump Lead Cement	6/6/2018	05:59:34	COM6	12.3	8	280	428.5	1015 SKS VARICEM CMT 12.3 PPG, 2.37 FT3/SK, 13.74 GAL/SK
Event	24	Slow Rate	6/6/2018	06:23:11	USER					SLOWED DUE TO CELLAR PUMP NOT KEEPING UP
Event	25	Pump Tail Cement	6/6/2018	07:07:33	COM6	12.8	8	300	109.7	292 SKS VARICEM CMT 12.8 PPG, 2.11 FT3/SK, 11.75 GAL/SK

Event	26	Check weight	6/6/2018	07:09:42	COM6					WEIGHT VERIFIED VIA PRISSEREIZED MUD SCALES
Event	27	Shutdown	6/6/2018	07:25:31	USER					END OF CEMENT, WASH UP ON TOP OF PLUG
Event	28	Drop Top Plug	6/6/2018	07:27:26	USER					VERIFIED BY FLAG INDICATOR
Event	29	Pump Displacement	6/6/2018	07:28:52	COM6	8.33	8	580	195	FRESH WATER
Event	30	Slow Rate	6/6/2018	07:53:09	USER	8.33	2	360	185	SLOW RATE TO 2 BPM TO BUMP PLUG
Event	31	Bump Plug	6/6/2018	07:57:58	USER	8.33	2	380	195	LAND PLUG AT 380 PSI, BROUGHT UP TO 1500 PSI. HELD FOR 10MIN CASING TEST.
Event	32	Check Floats	6/6/2018	08:10:16	USER					FLOATS HELD, 1.5 BBL BACK TO TRUCK
Event	33	Clean Lines	6/6/2018	08:26:45	USER	8.33	2	240	12	PUMPED 12BBLs OF SUGAR WATER DOWN THE PARASITE
Event	34	End Job	6/6/2018	08:33:00	USER					SPARATIC RETURNS ON CEMENT, NO RETURNS ON DISPLACEMENT. USED 40# OF SUGAR. NO CEMENT TO SURFACE.
Event	35	Top Out	6/6/2018	09:30:00	COM6	15.6	1.5	240	12.7	60 SKS G-NEAT CMT 15.6 PPG, 1.19 FT3/SK, 5.24 GAL/SK
Event	36	End Job	6/6/2018	09:50:04	USER					CEMENT TO SURFACE, NOT FALLING BACK.
Event	37	Post-Job Safety Meeting (Pre Rig-Down)	6/6/2018	10:15:00	USER					ALL HES PRESENT
Event	38	Rig-Down Equipment	6/6/2018	10:25:00	USER					ALL HES PRESENT
Event	39	Pre-Convoy Safety Meeting	6/6/2018	11:30:00	USER					ALL HES PRESENT

Event	40	Crew Leave Location	6/6/2018	11:40:00	USER	THANK YOU FOR CHOOSING HALLIBURTON CEMENT, SHAWN BLOSSOM AND CREW
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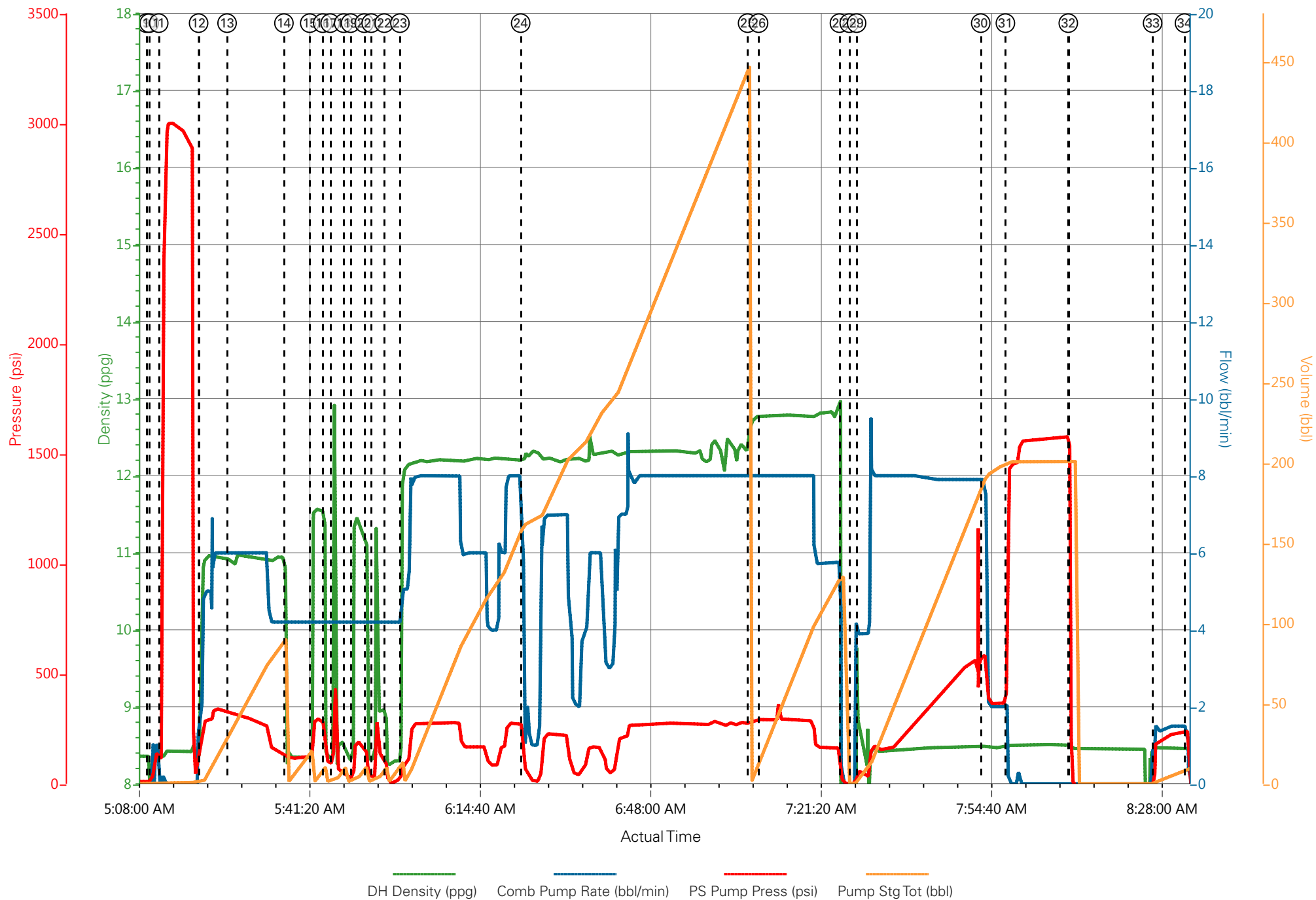
LARAMIE CC 0697-03-13E, 9 5/8" SURFACE



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

- | | | | | | |
|---|--------------------------|---------------|---------------------|----------------------|---|
| ① Call Out | ⑧ Pre-Job Safety Meeting | ⑮ Super Flush | 22 H2O Spacer | 29 Pump Displacement | 36 End Job |
| ② Pre-Convoy Safety Meeting | ⑨ Start Job | ⑯ H2O Spacer | 23 Pump Lead Cement | 30 Slow Rate | 37 Post-Job Safety Meeting (Pre Rig-Down) |
| ③ Crew Leave Yard | ⑩ Prime Lines | ⑰ CC Spacer | 24 Slow Rate | 31 Bump Plug | 38 Rig-Down Equipment |
| ④ Arrive At Loc | ⑪ Test Lines | ⑱ H2O Spacer | 25 Pump Tail Cement | 32 Check Floats | 39 Pre-Convoy Safety Meeting |
| ⑤ Assessment Of Location Safety Meeting | ⑫ Scavenger | ⑲ Super Flush | 26 Check weight | 33 Clean Lines | 40 Crew Leave Location |
| ⑥ Pre-Rig Up Safety Meeting | ⑬ Check weight | 20 H2O Spacer | 27 Shutdown | 34 End Job | |
| ⑦ Rig-Up Equipment | ⑭ Pump H2O Spacer | 21 CC Spacer | 28 Drop Top Plug | 35 Top Out | |

LARAMIE CC 0697-03-13E, 9 5/8" SURFACE



Job Information

Request/Slurry	2478055/1	Rig Name	H&P 522	Date	30/MAY/2018
Submitted By	Connor Matthews	Job Type	Surface Casing	Bulk Plant	Grand Junction
Customer	Laramie Energy	Location	Garfield	Well	Cascade Creek 0697-03-13E

Well Information

Casing/Liner Size	9.625 in	Depth MD	2530 ft	BHST	50°C / 122°F
Hole Size	12.25 in	Depth TVD	2495 ft	BHCT	34°C / 94°F
Pressure	1472 psi				

Drilling Fluid Information

Mud Supplier Name	AMC	Mud Trade Name		Density	
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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>	<u>Cement Properties</u>		
		VariCem			Tank 9	Slurry Density	12.3	lbm/gal
					NA	Slurry Yield	2.372	ft3/sack
					Tank 15	Water Requirement	13.736	gal/sack
					U052017	Total Mix Fluid	13.736	gal/sack
					2017-8-1			
					Tank 14			
					N/A	Water Source	Fresh Water	
					2017286AC	Water Chloride		
					1710-1339			

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Operation Test Results Request ID 2478055/1

Thickening Time

02/JUN/2018

Temp (degF)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	40 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)
94	1472	19	5	3:31	3:55	4:21	5:02	5:25

Total sks = 1015

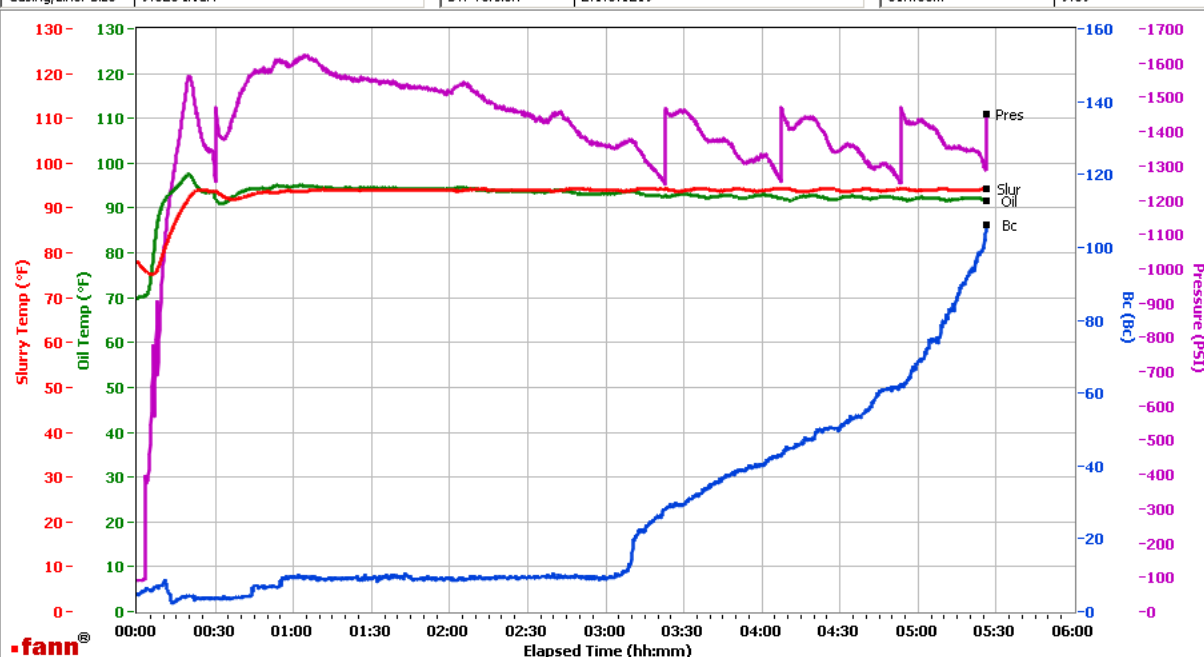
CS1143, Trailer 8678, 435.7 sks

CS1144, Trailer 2878, 435.7 sks

CS1145, Trailer 1513, 435.7 sks

Grand Junction Colorado

Fields	Values	Fields	Values	Events	Results
Project Name	2478055-1 LARAMIE BULK SURFACE LEAD	Job Type		30.00 Bc	03h:31m
Test ID	35540075 - TT	Cement Type	GCC TYPE I-II	40.00 Bc	03h:55m
Request ID	2478055-1	Cement Weight	Standard	50.00 Bc	04h:21m
Tested by	CT	Test Date	07/09/11	70.00 Bc	05h:02m
Customer	LARAMIE ENERGY	Test Time	02:53 PM	100.00 Bc	05h:25m
Well No	CASCADE CREEK 0697-03-13E	Temp. Units	degF	00h:30m	3.73
Rig	H&P 522	Pressure Units	PSI	01h:00m	9.14
Casing/Liner Size	9.625 INCH	SW Version	2.1.0.1219	01h:30m	9.09



Data File C:\Documents and Settings\HPHT\Local Settings\Temporary Internet Files\Content.IE5\6J6B21WN\2478055-1 LARAMIE BULK SURFACE LEAD[1].tdms

Comments CS1143, TRAILER 8678, 435.7 SKS - CS1144, TRAILER 2878, 435.7 SKS - CS1145 TR 1513 435.7 SKS

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HALLIBURTON

Rockies, Grand Junction

Lab Results- Tail

Job Information

Request/Slurry	2478056/1	Rig Name	H&P 522	Date	30/MAY/2018
Submitted By	Connor Matthews	Job Type	Surface Casing	Bulk Plant	Grand Junction
Customer	Laramie Energy	Location	Garfield	Well	Cascade Creek 0697-03-13E

Well Information

Casing/Liner Size	9.625 in	Depth MD	2530 ft	BHST	50°C / 122°F
Hole Size	12.25 in	Depth TVD	2495 ft	BHCT	34°C / 94°F
Pressure	1472 psi				

Drilling Fluid Information

Mud Supplier Name	AMC	Mud Trade Name	Density
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Cement Information - Tail Design



Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.	Cement Properties		
		VariCem				Slurry Density	12.8	lbm/gal
						Slurry Yield	2.107	ft3/sack
						Water Requirement	11.748	gal/sack
						Total Mix Fluid	11.748	gal/sack
						Water Source	Fresh Water	
						Water Chloride		

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Operation Test Results Request ID 2478056/1

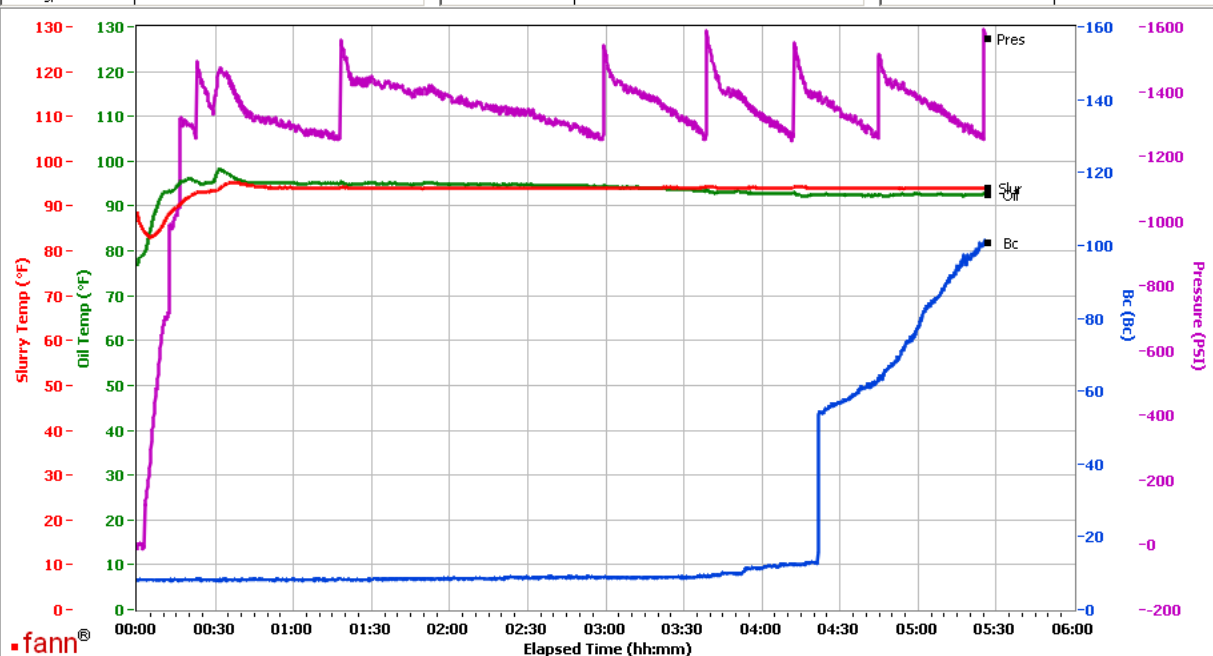
Thickening Time

02/JUN/2018

Temp (degF)	Pressure (psi)	Reached in (min)	Start Bc	30 Bc (hh:mm)	40 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)
94	1472	19	8	4:21	4:21	4:21	4:53	5:23

Grand Junction Colorado

Fields	Values	Fields	Values	Events	Results
Project Name	GJ2478056-1 LARAMIE SURFACE BULK TAIL	Job Type	SURFACE	30.00 Bc	04h:21m
Test ID	35540077	Cement Type	GCC TYPE I-II	40.00 Bc	04h:21m
Request ID	2478056-1	Cement Weight	Light Weight	50.00 Bc	04h:21m
Tested by	JASON	Test Date	06/01/18	70.00 Bc	04h:53m
Customer	LARAMIE ENERGY	Test Time	04:45 PM	100.00 Bc	05h:23m
Well No	CC 0697-03-13E	Temp. Units	degF	00h:30m	7.75
Rig	H&P 522	Pressure Units	PSI	01h:00m	8.72
Casing/Liner Size	9.625 INCH	SW Version	2.1.0.507	01h:30m	8.03



Data File C:\Documents and Settings\M290\Local Settings\Temporary Internet Files\Content.IE5\CDER4HUV\GJ2478056-1 LARAMIE SURFACE BULK TAIL [1].tdms

Comments CS1145 TR 1513 435.7 SKS

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iCem[®] Service

LARAMIE ENERGY II LLC

Date: Sunday, June 10, 2018

Cascade Creek 0697-03-13E

API# 05-045-23813-00

Laramie Cascade Creek 0697-03-13E Production

Job Date: Sunday, June 10, 2018

Sincerely,

Grand Junction Cement Engineering

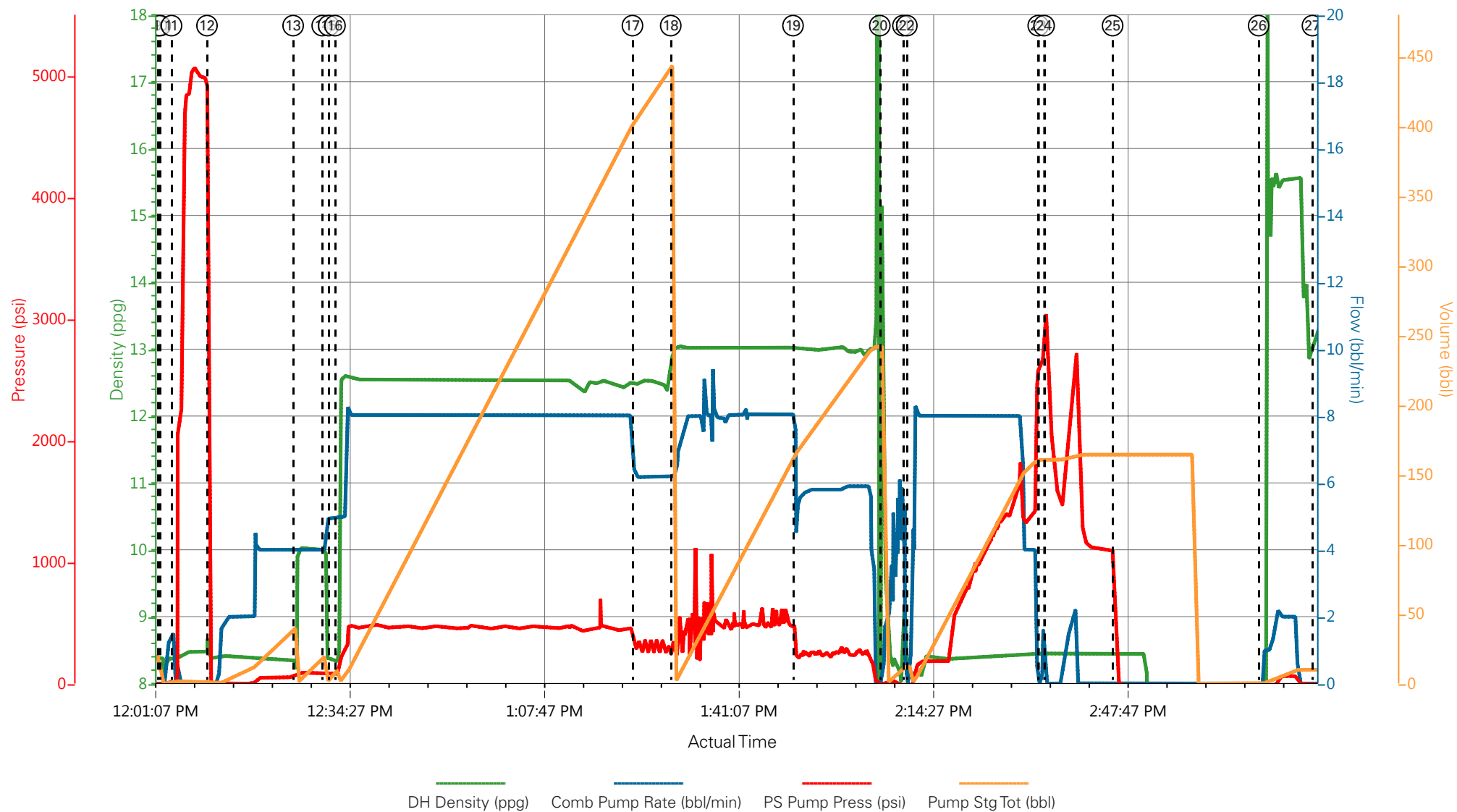
1.0 Real-Time Job Summary

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	6/10/2018	03:00:00	USER					REQUESTED ON LOCATION @ 09:00
Event	2	Pre-Convoy Safety Meeting	6/10/2018	04:45:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	6/10/2018	05:00:00	USER					1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCK, 1 TRANSPORT, 1 450 SERVICE PICKUP
Event	4	Arrive At Loc	6/10/2018	07:00:00	USER					RIG RUNNING CASING WHEN HES ARRIVED AT LOCATION
Event	5	Assessment Of Location Safety Meeting	6/10/2018	07:05:00	USER					MET WITH COMP REP, AND WENT OVER NUMBERS AND JOB PROCEDURE. WALKED AROUND LOCATION AND COLLECTED WATER SAMPLE (PH- 7.0, CHLORIDES- 500, TEMP- 62F). COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES.
Event	6	Pre-Rig Up Safety Meeting	6/10/2018	07:10:00	USER					ALL HES PRESENT
Event	7	Rig-Up Equipment	6/10/2018	07:15:00	USER					HES RIGGED UP 1 HT400 PUMP TRUCK, 1 660 BULK TRUCK, 2 CEMENT SILOS, 1 TRANSPORT, 2" DISCHARGE IRON, AND 4" SUCTION HOSE WITHOUT ENTERING RED ZONE.
Event	8	Pre-Job Safety Meeting	6/10/2018	11:50:00	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 9 BPM PRIOR TO JOB PRESSURE @ 75PSI. WITH 2000CFM ON PARASITE
Event	9	Start Job	6/10/2018	12:02:06	COM6					TD 9807', TP 9797' OF 4 ½" 11.6# P110 CSG, SJ 86.75', SURFACE CSG 9 5/8" 36# J55 SET @ 2565', OH 8 3/4", MUD 8.8 PPG
Event	10	Prime Lines	6/10/2018	12:02:30	USER	8.33	2	30	2	8.33 PPG FRESH WATER
Event	11	Test Lines	6/10/2018	12:04:26	COM6			5090		ALL LINES HELD PRESSURE AT 5090 PSI
Event	12	Mud Flush	6/10/2018	12:10:31	COM6	8.4	4	55	40	40 BBL MUD FLUSH

Event	13	Super Flush	6/10/2018	12:25:17	COM6	10	4	100	20	20 BBLS OF SUPER FLUSH
Event	14	Pump H2O Spacer	6/10/2018	12:30:16	COM6	8.33	4	90	10	10 BBLS OF FRESH WATER
Event	15	Drop Bottom Plug	6/10/2018	12:31:22	COM6					VERIFIED BY PLUG INDICATOR
Event	16	Pump Lead Cement	6/10/2018	12:32:27	COM6	12.5	8	480	406	1175 SKS OF NEOCEM CMT 12.5 PPG, 1.94 FT3/SK, 9.59 GAL/SK.
Event	17	Slow Rate	6/10/2018	13:23:27	USER					SLOWED TO END LEAD SILO
Event	18	Pump Tail Cement	6/10/2018	13:30:00	COM6	13	8	500	186.2	505 SKS NEOCEM CMT 13. PPG, 2.07 FT3/SK, 9.42 GAL/SK.
Event	19	Slow Rate	6/10/2018	13:50:58	USER					SLOWED TO END CEMENT
Event	20	Clean Pumps And Lines	6/10/2018	14:05:50	COM6					END OF CEMENT. CLEAN PUMPS AND LINES TO CELLAR.
Event	21	Drop Top Plug	6/10/2018	14:09:48	COM6					VERIFIED BY PLUG INDICATOR
Event	22	Pump Displacement	6/10/2018	14:10:28	COM6	8.33	8	1715	140.5	1 GAL MMCR IN FIRST 10 BBLS, 5 GALS CLAY WEB THROUGHT DISPLACEMENT. SLOWED RATE AT 140.5BBLS GONE TO 4BPM TO BUMP PLUG.
Event	23	Bump Plug	6/10/2018	14:33:00	COM6	8.33	4	1480	150.5	LANDED PLUG AT 1480 PSI, BROUGHT UP TO 3000 PSI
Event	24	Casing Test	6/10/2018	14:34:00	COM6			3000		PRESSURED UP TO 3000PSI FOR CASING TEST. PRESSURE DID NOT HOLD. PRESSURE LEVELED OUT AT 1200PSI
Event	25	Check Floats	6/10/2018	14:45:44	USER					FLOATS HELD, .5 BBL BACK TO TRUCK
Event	26	Pump Cement	6/10/2018	15:10:46	COM6					PUMPED 7.5BBLS OF TOP OUT DOWN THE PARASITE STRING .35 SKS OF G-NEAT CMT 15.6 PPG, 1.19 FT3/SK, 5.24 GAL/SK.
Event	27	End Job	6/10/2018	15:20:00	COM6					RETURNS THROUGHT CEMENT WITH 1500CFM ON PARASITE. LOTS RETUNERS ON DISPLACEMENT AFTER SHUTTING OFF AIR, NO SPACER TO SURFACE. 40# OF SUGAR USED.
Event	28	Post-Job Safety Meeting (Pre Rig-Down)	6/10/2018	15:25:00	USER					ALL HES PRESENT
Event	29	Rig-Down Equipment	6/10/2018	15:30:00	USER					ALL HES PRESENT
Event	30	Pre-Convoy Safety Meeting	6/10/2018	16:15:00	USER					ALL HES PRESENT
Event	31	Crew Leave Location	6/10/2018	16:30:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT, SHAWN BLOSSOM & CREW

LARAMIE CC 0697-03-13E, 4.5" PRODUCTION



- | | | | | |
|---|--------------------------|--------------------------|---|------------------------------|
| ① Call Out | ⑧ Pre-Job Safety Meeting | ⑮ Drop Bottom Plug | 22 Pump Displacement | 29 Rig-Down Equipment |
| ② Pre-Convoy Safety Meeting | ⑨ Start Job | ⑯ Pump Lead Cement | 23 Bump Plug | 30 Pre-Convoy Safety Meeting |
| ③ Crew Leave Yard | ⑩ Prime Lines | ⑰ Slow Rate | 24 Casing Test | 31 Crew Leave Location |
| ④ Arrive At Loc | ⑪ Test Lines | ⑱ Pump Tail Cement | 25 Check Floats | |
| ⑤ Assessment Of Location Safety Meeting | ⑫ Mud Flush | ⑲ Slow Rate | 26 Pump Cement | |
| ⑥ Pre-Rig Up Safety Meeting | ⑬ Super Flush | 20 Clean Pumps And Lines | 27 End Job | |
| ⑦ Rig-Up Equipment | ⑭ Pump H2O Spacer | 21 Drop Top Plug | 28 Post-Job Safety Meeting (Pre Rig-Down) | |

▼ **HALLIBURTON** | iCem® Service

Created: 2018-06-10 04:05:57, Version: 4.2.393

Edit

Customer : LARAMIE ENERGY II LLC EBUSINESS

Job Date : 6/10/2018

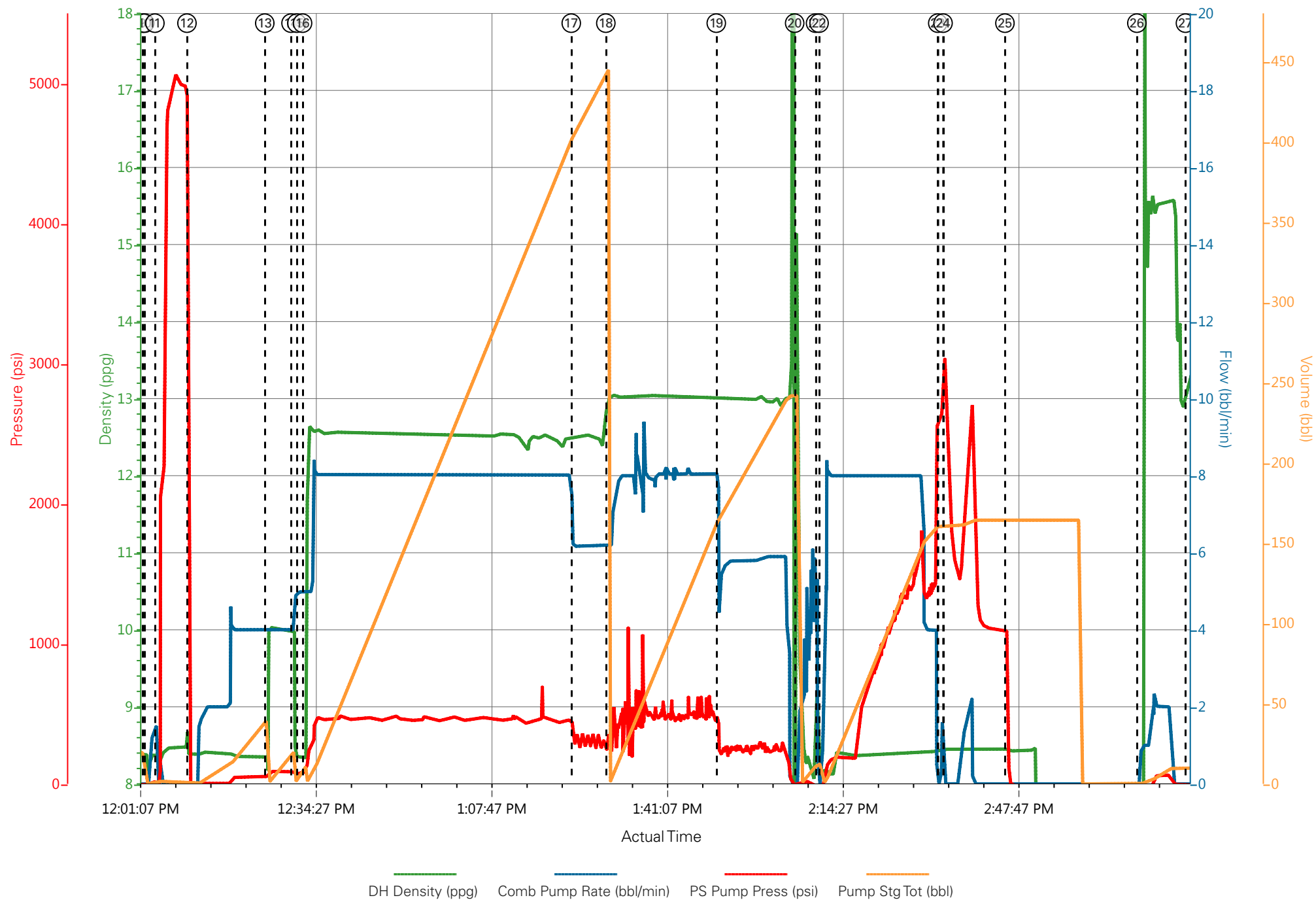
Well : CC 697-03-13E

Representative : SHANE HEARD

Sales Order # : 904911576

ELITE 8 : J.LEIST/S.BLOSSOM

LARAMIE CC 0697-03-13E, 4.5" PRODUCTION



Job Information

Request/Slurry	2479469/2	Rig Name	H&P 522	Date	05/JUN/2018
Submitted By	Connor Matthews	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Laramie Energy	Location	Garfield	Well	Cascade Creek 0697-03-13E

Well Information

Casing/Liner Size	4.5 in	Depth MD	9842 ft	BHST	118°C / 245°F
Hole Size	8.75 in	Depth TVD	9723 ft	BHCT	79°C / 175°F
Pressure	6106 psi				

Drilling Fluid Information

Mud Supplier Name	Mud Trade Name	Density
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Cement Information - Lead Design



Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.	Cement Properties		
		NeoCem				Slurry Density	12.5	lbm/gal
						Slurry Yield	1.946	ft3/sack
						Water Requirement	9.615	gal/sack
						Total Mix Fluid	9.615	gal/sack
						Water Source	Fresh Water	
						Water Chloride		

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Operation Test Results Request ID 2479469/2

Thickening Time - ON-OFF-ON

08/JUN/2018

Test Temp (degF)	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)
175	6106	49	3:55	4:26	4:48	4:48	18	59	15	20

Total SKS = 1214

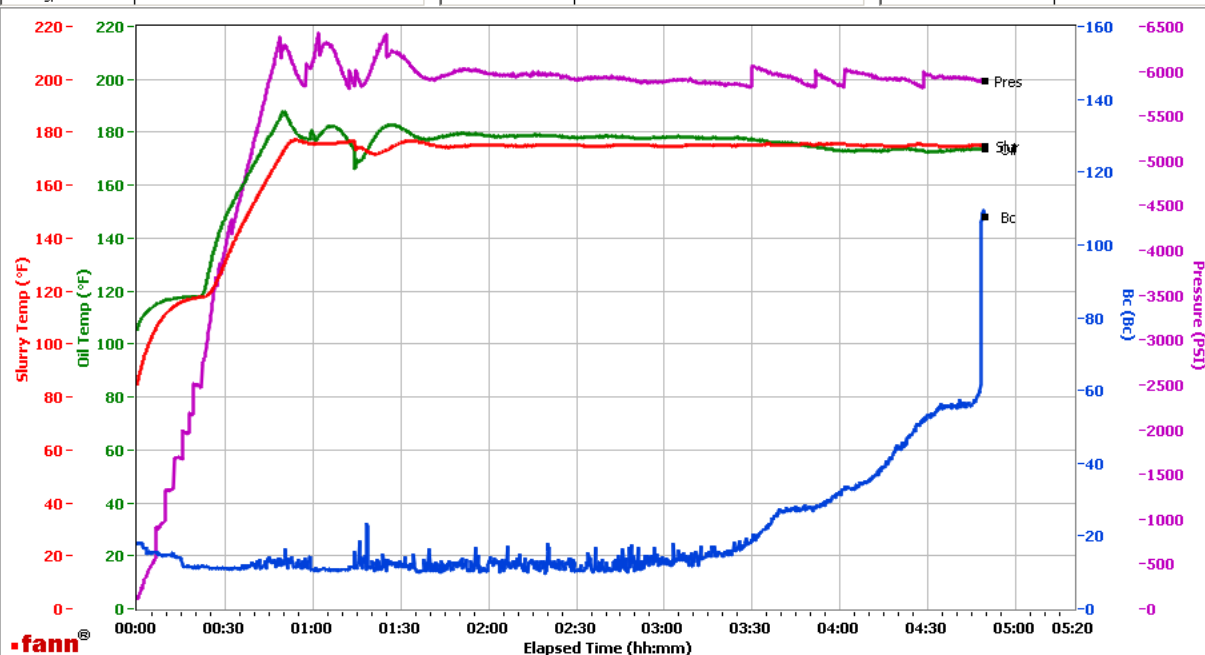
CS1179, Trailer 8678, 400 sks

CS1186, Trailer 7094, 275 sks

Deflection: 11 – 20

Grand Junction Colorado

Fields	Values	Fields	Values	Events	Results
Project Name	GJ2479469-2 LARAMIE BULK PRODUCTION	Job Type	PRODUCTION CASING	30.00 Bc	03h:55m
Test ID	35562231 - TT	Cement Type	GCC TYPE I-II	40.00 Bc	04h:15m
Request ID	2479469-2	Cement Weight	Standard	50.00 Bc	04h:26m
Tested by	CT	Test Date	06/08/18	70.00 Bc	04h:48m
Customer	LARAMIE ENERGY	Test Time	02:14 AM	100.00 Bc	04h:48m
Well No	CASCADE CREEK 0697-03-13E	Temp. Units	degF	00h:30m	11.17
Rig	H8P 522	Pressure Units	PSI	01h:00m	10.82
Casing/Liner Size	4.5 INCH	SW Version	2.1.0.507	01h:30m	12.49



Data File C:\Documents and Settings\Administrator\Local Settings\Temporary Internet Files\Content.IE5\AFGSUB25\GJ2479469-2 LARAMIE BULK PRODUCTION LEAD[1].tdms

Comments CS1179, TRAILER 8678, 400 SKS - CS1186, TRAILER 7094, 275 SKS

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Operation Test Results Request ID 2479469/1

Thickening Time - ON-OFF-ON

07/JUN/2018

Test Temp (degF)	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)
175	6106	49	3:55	4:39	4:54	5:57	9	59	15	12

Total SKS = 1214

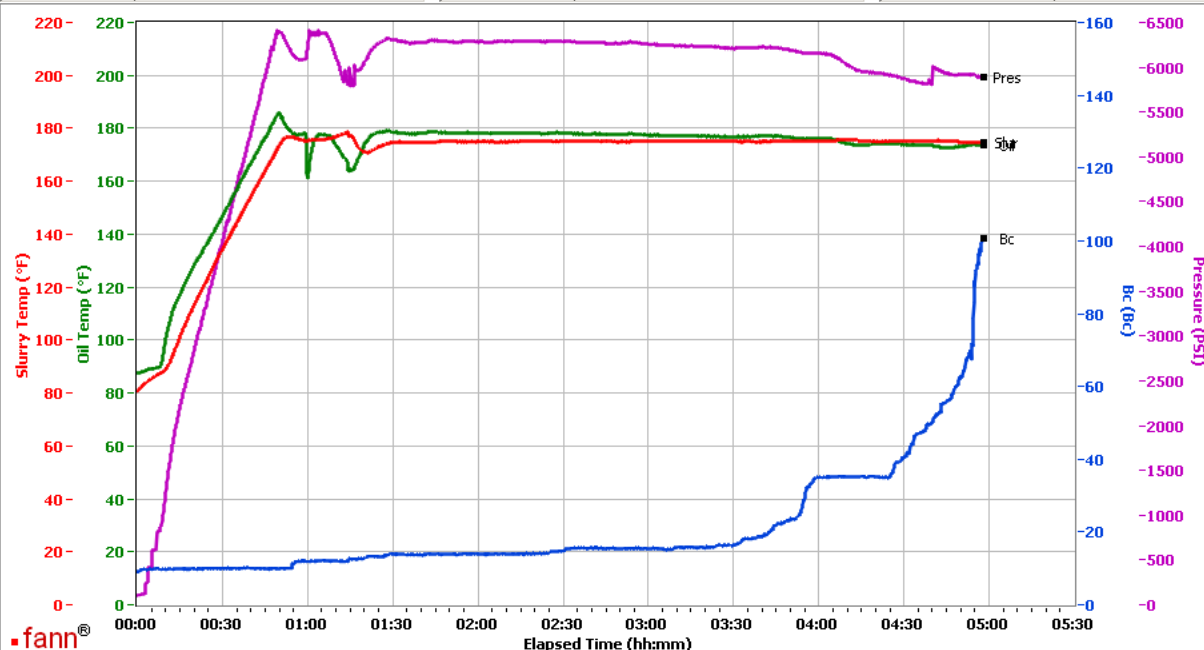
CS1197, Trailer 8677, 400 sks

CS1182, Trailer 7304, 100 sks - Front Pod

Deflection: 12 - 12

Grand Junction Colorado

Fields	Values	Fields	Values	Events	Results
Project Name	GJ2479469-1 LARAMIE PRODUCTION BULK	Job Type	PRODUCTION CASING	30.00 Bc	03h:55m
Test ID	35561956	Cement Type	GCC TYPE I-II	40.00 Bc	04h:29m
Request ID	GJ2479469-1	Cement Weight	Standard	50.00 Bc	04h:39m
Tested by	DEBA	Test Date	06/07/18	70.00 Bc	04h:54m
Customer	LARAMIE ENERGY	Test Time	09:56 PM	100.00 Bc	04h:57m
Well No	CC 0697-03-13E	Temp. Units	degF	00h:30m	10.14
Rig	H&P 522	Pressure Units	PSI	01h:00m	12.08
Casing/Liner Size	4.5"	SW Version	2.1.0.507	01h:30m	13.97



Data File C:\Documents and Settings\M290\Local Settings\Temporary Internet Files\Content.IE5\0HU9OBIZ\GJ2479469-1 LARAMIE PRODUCTION BULK LEAD[1].tdms

Comments CS1177 TR#8677 400 SKS AND CS1182 TR#7304 100 SKS

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HALLIBURTON

Rockies, Grand Junction

Lab Results- Tail

Job Information

Request/Slurry	2479470/1	Rig Name	H&P 522	Date	05/JUN/2018
Submitted By	Connor Matthews	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Laramie Energy	Location	Garfield	Well	Cascade Creek 0697-03-13E

Well Information

Casing/Liner Size	4.5 in	Depth MD	9842 ft	BHST	118°C / 245°F
Hole Size	8.75 in	Depth TVD	9723 ft	BHCT	79°C / 175°F
Pressure	6106 psi				

Drilling Fluid Information

Mud Supplier Name	Mud Trade Name	Density
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Cement Information - Tail Design



Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.	Cement Properties	
		NeoCem				Slurry Density	13 lbm/gal
						Slurry Yield	2.069 ft3/sack
						Water Requirement	9.417 gal/sack
						Total Mix Fluid	9.417 gal/sack
						Water Source	Fresh Water
						Water Chloride	

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Operation Test Results Request ID 2479470/1

Thickening Time - ON-OFF-ON

07/JUN/2018

Test Temp (degF)	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)
175	6106	49	2:10	2:16	2:25	2:26	17	59	15	13

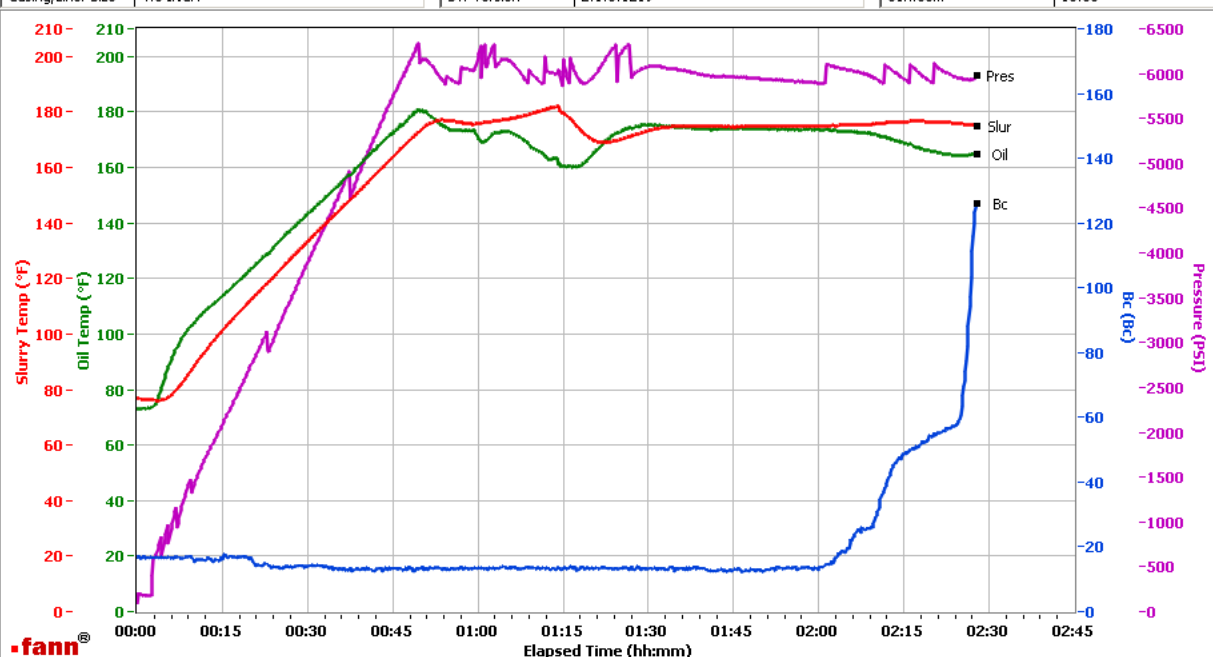
Total SKS = 505

CS1181, Trailer 7304, 125 sks

CS1178, Trailer 2878, 380 sks

Grand Junction Colorado

Fields	Values	Fields	Values	Events	Results
Project Name	GJ2479470-1 LARAMIE BULK PRODUCTION	Job Type	PRODUCTION CASING	30.00 Bc	02h:10m
Test ID	35556069 - TT	Cement Type	GCC TYPE I-II	40.00 Bc	02h:12m
Request ID	2479470-1	Cement Weight	Standard	50.00 Bc	02h:16m
Tested by	CT	Test Date	07/15/11	70.00 Bc	02h:25m
Customer	LARAMIE ENERGY	Test Time	01:37 PM	100.00 Bc	02h:26m
Well No	CASCADE CREEK 0697-03-13E	Temp. Units	degF	00h:30m	13.82
Rig	H&P 522	Pressure Units	PSI	01h:00m	13.67
Casing/Liner Size	4.5 INCH	SW Version	2.1.0.1219	01h:30m	13.33



Data File C:\Documents and Settings\HPHT\Local Settings\Temporary Internet Files\Content.IE5\6J6B21WN\GJ2479470-1 LARAMIE BULK PRODUCTION TAIL[1].tdms

Comments CS1181, TRAILER 7304, 125 SKS - CS1178, TRAILER 2878, 380 SKS

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