HALLIBURTON

iCem® Service

Laramie Energy LLC

United States of America, COLORADO

For: Laramie

Date: Sunday, September 16, 2018

BCU 993-21-07E Surface

API#05-077-10514

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

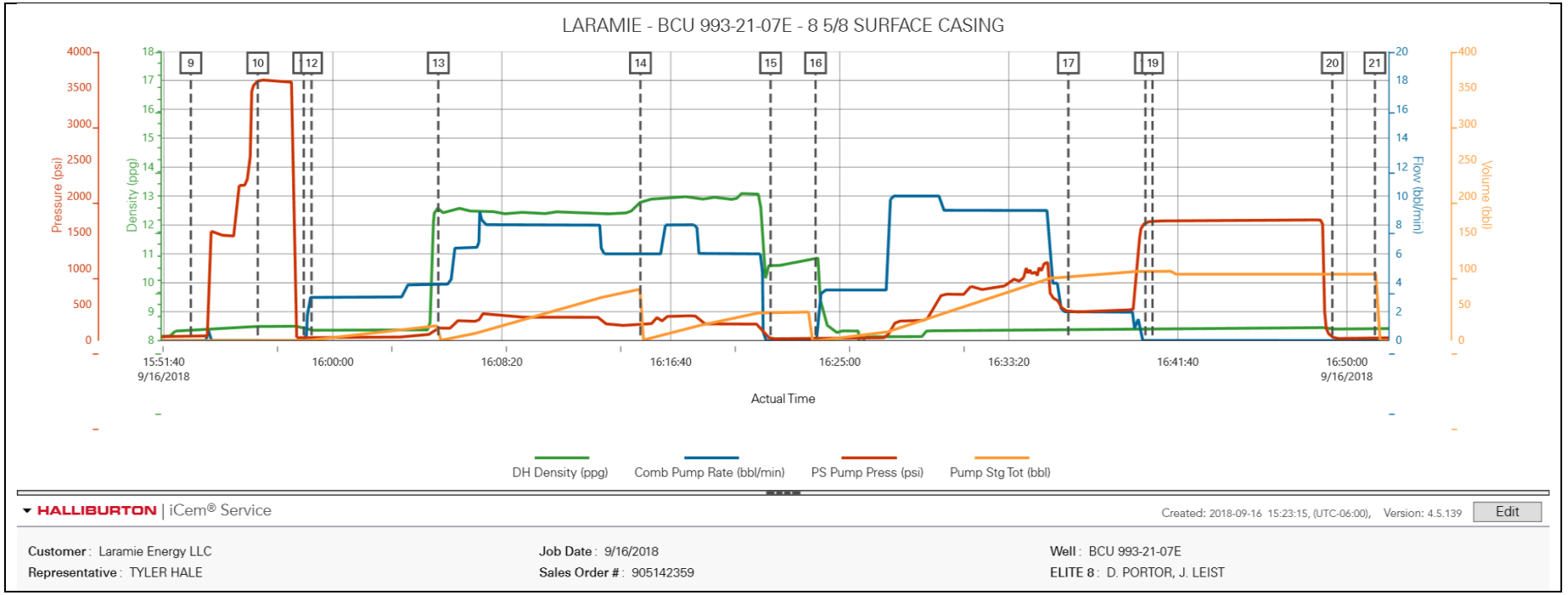
2.1 Job Event Log

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	9/16/2018	10:00:00	USER					
Event	2	Pre-Convoy Safety Meeting	9/16/2018	12:45:00	USER					JOURNEY MANAGEMENT COMPLETE, AS WELL AS JSA
Event	3	Crew Leave Yard	9/16/2018	13:00:00	USER					
Event	4	Arrive At Loc	9/16/2018	14:45:00	USER					JOURNEY MANAGEMENT CLOSED OUT. RIG FINNISHED RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	9/16/2018	14:50:00	USER					
Event	6	Pre-Rig Up Safety Meeting	9/16/2018	15:00:00	USER					JSA COMPLETE
Event	7	Rig-Up Equipment	9/16/2018	15:20:00	USER					
Event	8	Other	9/16/2018	15:20:00	USER					WATER TEST: PH-7, CL-0, TEMP-67 WELL INFO: 8 5/8 32# CASING SET @ 1545, TD- 1555, F.C. @ 1504.22, HOLE- 11
Event	9	Other	9/16/2018	15:25:00	USER					MUD SCALES CHECKED WITH WATER PRIOR TO JOB.
Event	10	Pre-Job Safety Meeting	9/16/2018	15:30:00	USER					JSA COMPLETE
Event	11	Prime Pumps	9/16/2018	15:49:19	COM5					FRESH WATER
Event	12	Start Job	9/16/2018	15:53:00	COM5					
Event	13	Test Lines	9/16/2018	15:56:18	COM5			3605.00		3605 PSI
Event	14	Pump Spacer 1	9/16/2018	15:58:34	COM5	8.33	4.00	68.00	20.00	FRESH WATER
Event	15	Drop Bottom Plug	9/16/2018	15:58:57	USER					AWAY
Event	16	Pump Lead Cement	9/16/2018	16:05:12	COM5	12.3	8.00	350.00	74.9	171 SKS VARICEM, 12.3 PPG, 2.46 FT3/SK, 14.17 GAL/SK

Event	17	Pump Tail Cement	9/16/2018	16:15:10	COM5	12.80	8.00	225.00	36.5	94 SKS VARICEM, 12.8 PPG, 2.18 FT3/SK, 12.11 GAL/SK
Event	18	Shutdown	9/16/2018	16:21:35	COM5					TO DROP TOP PLUG
Event	19	Pump Displacement	9/16/2018	16:23:48	COM5	8.33	9.00	870.0	91.6	FRESH WATER
Event	20	Slow Rate	9/16/2018	16:36:16	COM5	8.33	2.00	550.0	81.10	TO BUMP PLUG
Event	21	Bump Plug	9/16/2018	16:40:04	COM5	8.33	2.00	426.0	91.6	PLUG BUMPED
Event	22	Other	9/16/2018	16:40:25	USER			1703.00		ONCE PLUG BUMPED CASING TEST TO 1670 PSI AND HELD FOR 10 MINS, CASING TEST IS GOOD.
Event	23	Check Floats	9/16/2018	16:49:17	COM5					FLOATS HELD 0.5 BBLS BACK TO TRUCK
Event	24	End Job	9/16/2018	16:51:23	COM5					GOOD RETURNS THROUGH OUT JOB, NO PIPE MOVEMENT, 20 BBLS OF CEMENT TO SURFACE
Event	25	Post-Job Safety Meeting (Pre Rig-Down)	9/16/2018	16:55:00	USER					
Event	26	Crew Leave Location	9/16/2018	17:45:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT, JAMES LEIST AND CREW

3.0 Attachments

3.1 CHART.png



HALLIBURTON

iCem® Service

Laramie Energy LLC

United States of America, COLORADO

Date: Tuesday, September 25, 2018

BCU 993-21-07E Production

Laramie BCU 993-21-07E Production
API# 05-077-10514-00
Job Date: Wednesday, September 19, 2018

Sincerely,

Grand Junction Cement Engineering

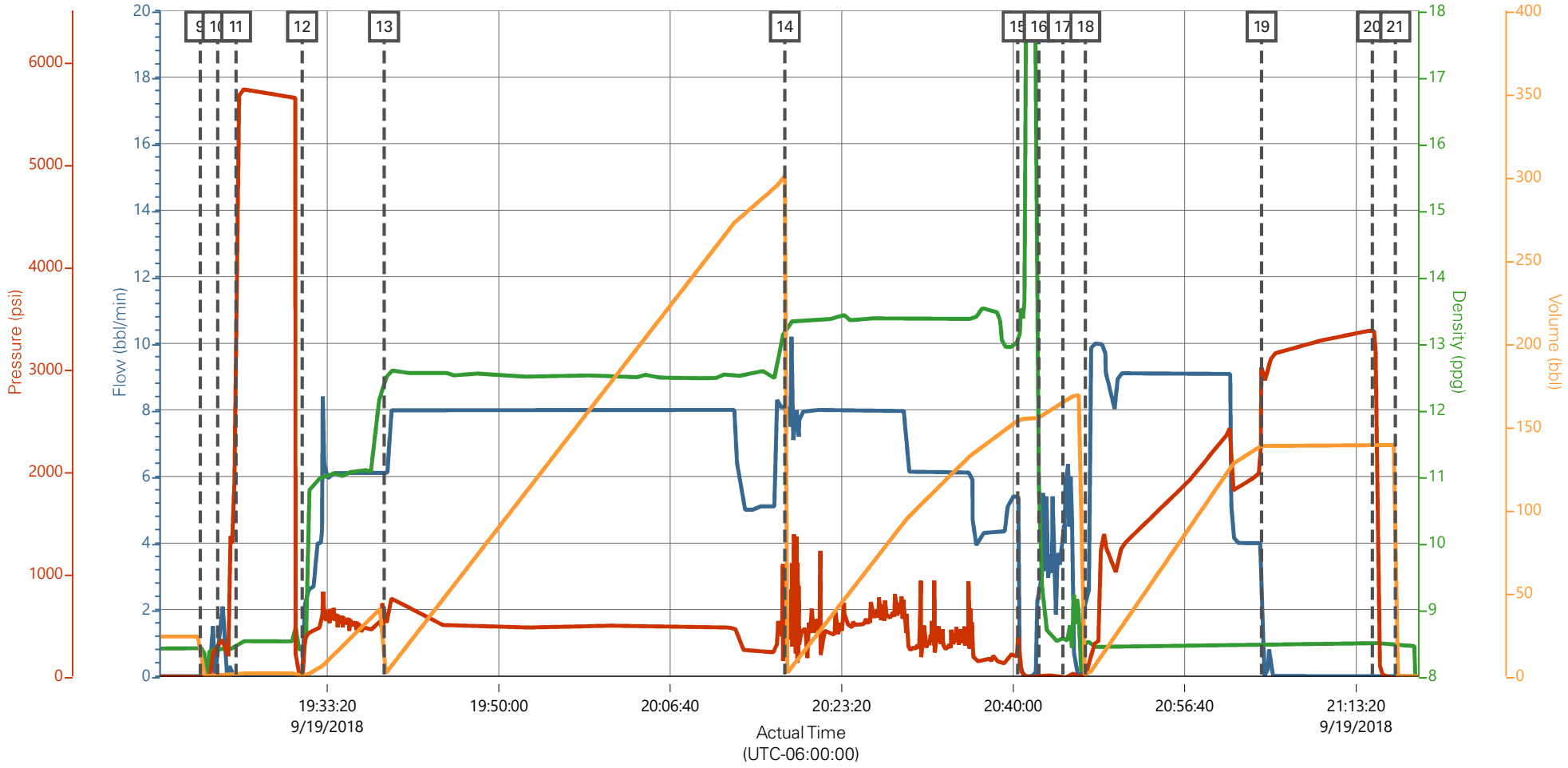
1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	Comb Pump Rate (bbl/min)	DH Density (ppg)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	9/19/2018	11:00:00	USER					REQUESTED ON LOCATION 9/19/18 @ 17:00
Event	2	Depart Yard Safety Meeting	9/19/2018	13:25:00	USER					JSA COMPLETED
Event	3	Crew Leave Shop	9/19/2018	13:30:00	USER					
Event	4	Arrive At Loc	9/19/2018	15:00:00	USER					RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	9/19/2018	15:05:00	USER					JSA COMPLETED
Event	6	Pre-Rig Up Safety Meeting	9/19/2018	15:15:00	USER					JSA COMPLETED
Event	7	Rig-Up Equipment	9/19/2018	15:20:00	USER					
Event	8	Pre-Job Safety Meeting	9/19/2018	19:00:00	USER					JSA COMPLETED, PRESSURIZED MUD SCALES CALIBRATED TO FRESH WATER
Event	9	Start Job	9/19/2018	19:21:00	COM4					4 1/2" - 11.6# CASING IN 7 7/8" OH, TD 8554', TP 8544', ST 84.4', MUD 9.1 PPG, WATER TEMP 60, PH 7 CHLORIDES 0
Event	10	Drop Bottom Plug	9/19/2018	19:22:40	COM4					PLUG AWAY
Event	11	Test Lines	9/19/2018	19:24:28	COM4			5000.00		TEST LINES TO 5000 PSI
Event	12	Pump Spacer 1	9/19/2018	19:30:53	COM4	6.00	11.00	600.00	40.00	40 BBL TUNED SPACER AT 11.0 PPG
Event	13	Pump Lead Cement	9/19/2018	19:38:51	COM4	8.00	12.50	500.00	276.80	276.8 BBL LEAD CEMENT, 801 SKS @ 12.5 PPG / 1.94 YLD / 9.59 GAL/SK

Event	14	Pump Tail Cement	9/19/2018	20:17:48	COM4	8.00	13.30	500.00	117.50	117.5 BBLS TAIL CEMENT, 379 SKS @ 13.3 PPG / 1.74 YLD / 7.8 GAL/SK
Event	15	Shutdown	9/19/2018	20:40:26	COM4					
Event	16	Clean Lines	9/19/2018	20:42:29	COM4					
Event	17	Drop Top Plug	9/19/2018	20:44:49	COM4					PLUG AWAY
Event	18	Pump Displacement	9/19/2018	20:47:01	COM4	9.00	8.40	2350.00	131.10	131.1 BBL FRESH WATER DISPLACEMENT WITH 1 GAL MMCR, 5 GAL CAL-WEB AND 5 GAL BIOCIDE PROVIDED BY CUSTOMER
Event	19	Bump Plug	9/19/2018	21:04:08	COM4	4.00	8.40	2000.00	131.10	PLUG BUMPED AT CALCULATED, FINAL CIRCULATING PRESSURE 2000 PSI @ 4 BBL/MIN, BROUGHT TO 3000 PSI FOR 10 MINUTE CASING TEST
Event	20	Other	9/19/2018	21:14:54	COM4					FLOATS HELD, 1.5 BBL BACK TO PUMP
Event	21	End Job	9/19/2018	21:17:08	COM4					PIPE LEFT STATIC, GOOD RETURNS THROUGHOUT, 10 BBLS CEMENT TO SURFACE, 1 - 4 1/2" BOTTOM AND 1 - 4 1/2" TOP PLUG USED, 40# SUGAR, 1 GAL MMCR AND 5 GAL CLA-WEB USED, NO ADD HOURS CHARGED
Event	22	Pre-Rig Down Safety Meeting	9/19/2018	21:45:00	USER					JSA COMPLETED
Event	23	Rig-Down Equipment	9/19/2018	21:50:00	USER					
Event	24	Pre-Convoy Safety Meeting	9/19/2018	22:25:00	USER					JSA COMPLETED
Event	25	Crew Leave Location	9/19/2018	22:30:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENTING OF GRAND JUNCTION, CO - RYAN MARTIN AND CREW

LARAMIE - BCU 993-21-07E - 4 1/2" PRODUCTION CASING



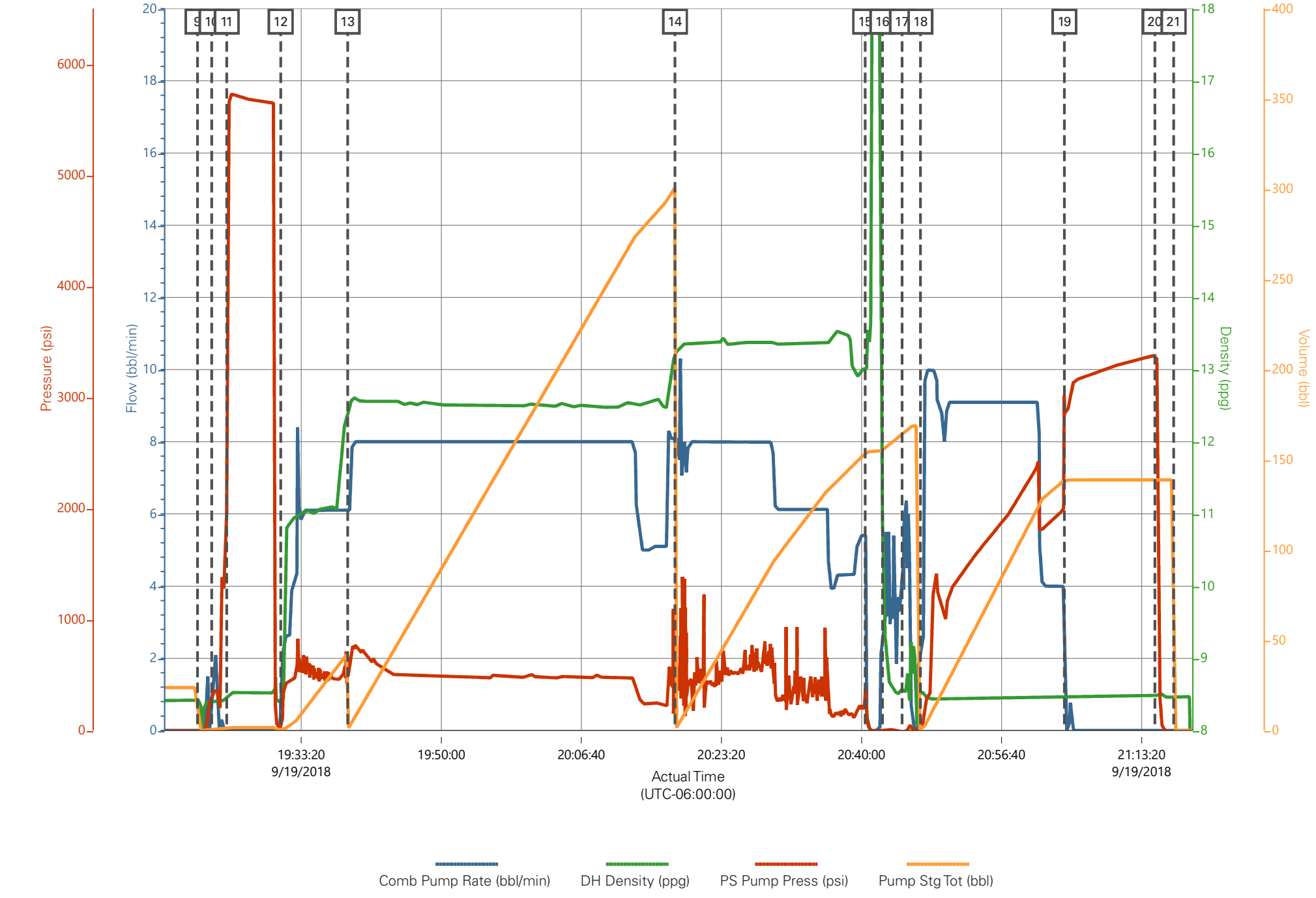
Description	Actual Time (UTC-06:00:00)	Comb Pump Rate (bbl/min)	DH Density (ppg)	PS Pump Press (psi)	Pump Stg Tot (bbl)
16 Clean Lines	20:42:29	2.80	11.04	7.00	155.20
17 Drop Top Plug	20:44:49	3.70	8.56	-17.00	163.40
18 Pump Displacement	20:47:01	2.20	8.55	56.00	0.60
19 Bump Plug	21:04:08	4.00	8.44	3012.00	138.80
20 CHECK FLOATS	21:14:54	0.00	8.49	3278.00	138.90

Customer : Laramie Energy LLC
Representative : TYLER HALE

Job Date : 9/19/2018
Sales Order # : 905145713

Well : BCU 993-21-07E
ELITE #8 : KIEL CHRIST / RYAN MARTIN

LARAMIE - BCU 993-21-07E - 4 1/2" PRODUCTION CASING



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Created: 2018-09-19 15:46:53, (UTC-06:00), Version: 4.5.139 Edit

Customer : Laramie Energy LLC
Representative : TYLER HALE

Job Date : 9/19/2018
Sales Order # : 905145713

Well : BCU 993-21-07E
ELITE #8 : KIEL CHRIST / RYAN MARTIN

HALLIBURTON

Rockies, Grand Junction

Lab Results- Lead

Job Information

Request/Slurry	2501297/1	**Rig Name**	H&P 522	**Date**	15/SEP/2018
Submitted By	Lukas Van Zyl	**Job Type**	Production Casing	**Bulk Plant**	Grand Junction
Customer	Laramie Energy	**Location**	Garfield	**Well**	BCU 0993-21-07E

Well Information

Casing/Liner Size	4.5 in	**Depth MD**	7726 ft	**BHST**	101°C / 213°F
Hole Size	7.875 in	**Depth TVD**	8538 ft	**BHCT**	61°C / 142°F
Pressure	4708 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.
		NeoCem Lead			

Cement Properties

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	Field (Fresh) Water	
Water Chloride		

Operation Test Results Request ID 2501297/1

Thickening Time - ON-OFF-ON 18/SEP/2018

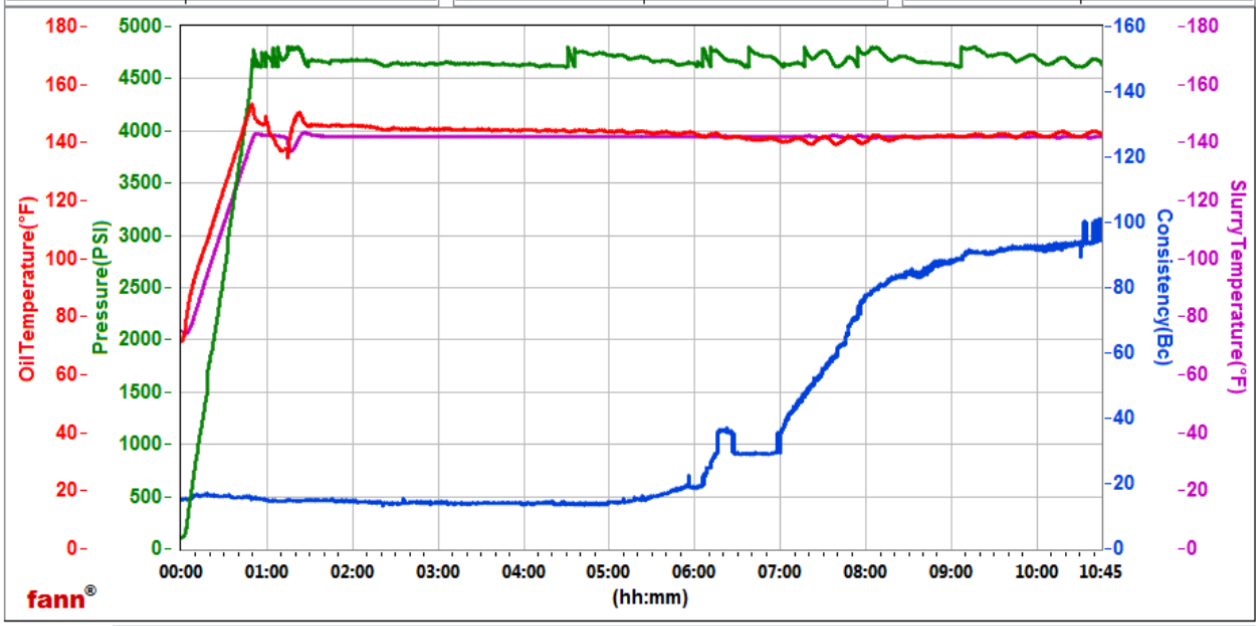
Test Temp (degF)	Pressure (psi)	Reached in (min)	30 Bc (hh:min)	50 Bc (hh:min)	70 Bc (hh:min)	100 Bc (hh:min)	Start Bc	Stirring before stop (mins)	Static Period (min)	Peak reading (BC)
142	4708	49	6:15	7:23	7:53	10:44	15	59	15	15

GRAND JUNCTION

Fields	Values
Project Name	TempTest
SW Version	1.0
Test ID	35821956 - TT
Request ID	2501297-1
Tested by	DEBA
Customer	LARAMIE ENERGY
Well No	BCU-0993-21-07E

Fields	Values
Rig	H&P522
Casing/Liner Size	4.5 INCH
Job Type	PRODUCTION CASING
Cement Weight	GCC TYPE I-11
Comments	Standard
Date Time	9/17/2018 10:17:33.061
Temp. Units	degF

Events	Results
30 BC	6:15
50 BC	7:23
70 BC	7:53
100 BC	10:44



Data File C:\Users\H185329\Desktop\000 Graphs\GJ2501297-1 LARAMIE BULK PRODUCTION LEAD.tdms

Comments Standard

Total sks = 801
CS2071 TR#8658 400.5 SKS
CS2072 TR#2878 400.5 SKS
Deflection: 15 - 15

HALLIBURTON

Rockies, Grand Junction

Lab Results- Tail

Job Information

Request/Slurry	2501298/1	**Rig Name**	H&P 522	**Date**	15/SEP/2018
Submitted By	Lukas Van Zyl	**Job Type**	Production Casing	**Bulk Plant**	Grand Junction
Customer	Laramie Energy	**Location**	Garfield	**Well**	BCU 0993-21-07E

Well Information

Casing/Liner Size	4.5 in	**Depth MD**	7726 ft	**BHST**	101°C / 213°F
Hole Size	7.875 in	**Depth TVD**	8538 ft	**BHCT**	61°C / 142°F
Pressure	4708 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.
		ThermaCem Tail			

Cement Properties

Slurry Density	13.3	lbm/gal
Slurry Yield	1.737	ft3/sack
Water Requirement	7.785	gal/sack
Total Mix Fluid	7.785	gal/sack
Water Source	Field (Fresh) Water	
Water Chloride		

Operation Test Results Request ID 2501298/1

Thickening Time - ON-OFF-ON 18/SEP/2018

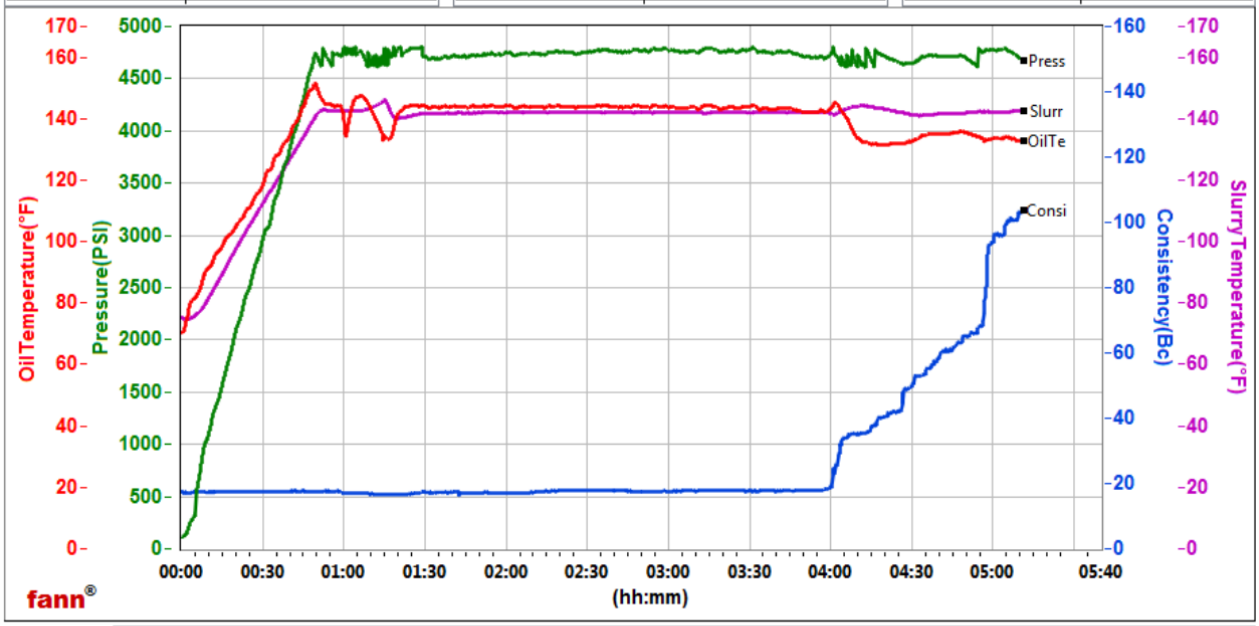
Test Temp (degF)	Pressure (psi)	Reached in (min)	30 Bc (hh:min)	50 Bc (hh:min)	70 Bc (hh:min)	100 Bc (hh:min)	Start Bc	Stirring before stop (mins)	Static Period (min)	Peak reading (BC)
142	4708	49	4:04	4:30	4:56	5:05	17	59	15	16

GRAND JUNCTION

Fields	Values
Project Name	TempTest
SW Version	1.0
Test ID	35821958- TT
Request ID	2501298-1
Tested by	DEBA
Customer	LARAMIE ENERGY
Well No	BCU 0993-21-07E

Fields	Values
Rig	H&P 522
Casing/Liner Size	4.5INCH
Job Type	PRODUCTION CASING
Cement Weight	MOUNTAIM G
Comments	Light Weight
Date Time	9/17/2018 11:29:44.061
Temp. Units	degF

Events	Results
30 BC	4:04
50 BC	4:30
70 BC	4:56
100 BC	5:05



Data File C:\Users\H185329\Desktop\000 Graphs\GJ2501298-1 LARAMIE PRODUCTION BULK TAIL.tdms

Comments Light Weight

Total sks = 379
CS2073 TR#1513 379 SKS
Deflection: 16 - 16