HALLIBURTON

iCem® Service

LARAMIE ENERGY LLC

For: Laramie

Date: Wednesday, June 28, 2017

GUNDERSON BCU 20-05E Surface

API# 05-077-10344-00

Sincerely,

Grand Junction Cement Engineering

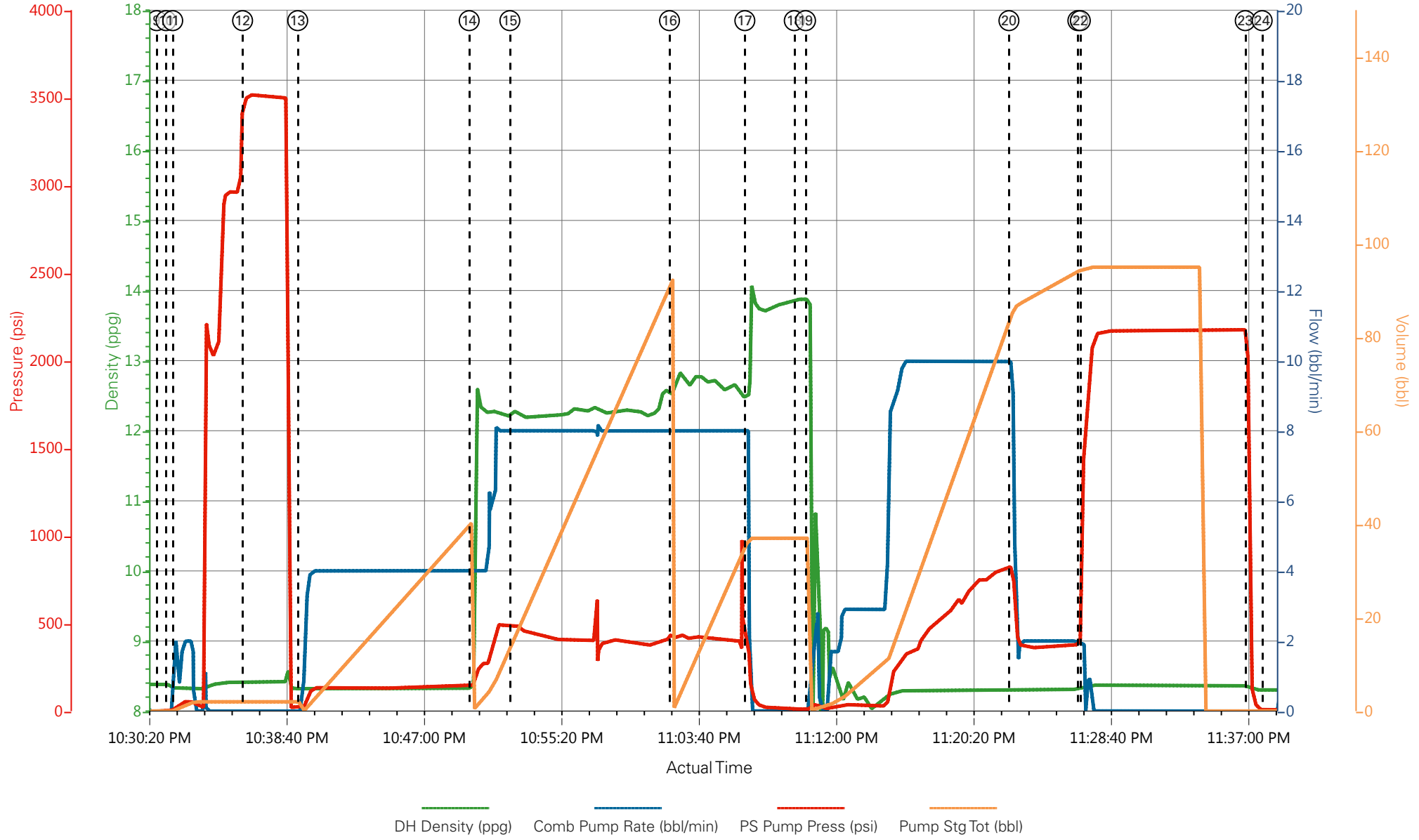
1.0 Real-Time Job Summary

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	6/27/2017	15:00:00	USER					REQUESTED ON LOCATION @ 21:00
Event	2	Pre-Convoy Safety Meeting	6/27/2017	18:45:00	USER					ALL HES CREW PRESENT
Event	3	Crew Leave Yard	6/27/2017	19:00:00	USER					1 HT 400 PUMP TRUCK E1, 1 660 BULK TRUCKS, 1 450 SERVICE PICKUP
Event	4	Arrive At Loc	6/27/2017	20:30:00	USER					RIG RUNNING CASING UPON HES ARRIVAL
Event	5	Assessment Of Location Safety Meeting	6/27/2017	20:45:00	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	Spot Equipment	6/27/2017	21:00:00	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	7	Pre-Rig Up Safety Meeting	6/27/2017	21:15:00	USER					ALL HES CREW PRESENT
Event	8	Pre-Job Safety Meeting	6/27/2017	22:30:00	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED FOR @ 10 BPM PRIOR TO JOB, PRESSURE @320 PSI
Event	9	Start Job	6/27/2017	22:30:58	USER					TD 1564', TP 1554' OF 8 5/8'' 24# J-55 SURFACE CSG, SJ 44.66', OH 11'', MUD 9.2 PPG
Event	10	Drop Bottom Plug	6/27/2017	22:31:32	USER					VERIFIED BY FLAG INDICATOR AND CO REP
Event	11	Prime Lines	6/27/2017	22:31:56	COM5	8.33	2.0	57	2	FRESH WATER
Event	12	Test Lines	6/27/2017	22:36:11	COM5			3517		PRESSURE HELD

Event	13	Pump H2O Spacer	6/27/2017	22:39:31	COM5	8.33	4.0	139	40	FRESH WATER
Event	14	Pump Lead Cement	6/27/2017	22:49:55	COM5	12.3	8.0	450	86.3	197 SKS VARICEM CMT 12.3 PPG, 2.46 FT3/SK, 14.17 GAL/SK
Event	15	Check weight	6/27/2017	22:52:23	COM5					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	16	Pump Tail Cement	6/27/2017	23:02:04	COM5	12.8	8.0	415	42.3	109 SKS VARICEM CMT 12.8 PPG, 2.18 FT3/SK, 12.11 GAL/SK
Event	17	Shutdown	6/27/2017	23:06:39	USER					END OF CEMENT
Event	18	Drop Top Plug	6/27/2017	23:09:38	COM5					VERIFIED BY FLAG INDICATOR AND CO REP
Event	19	Pump Displacement	6/27/2017	23:10:19	COM5	8.33	10	800	86	FRESH WATER
Event	20	Slow Rate	6/27/2017	23:22:40	USER	8.33	2.0	380	10	SLOWED RATE TO BUMP PLUG
Event	21	Bump Plug	6/27/2017	23:26:50	COM5	8.33	2.0	389	96	PLUG BUMPED
Event	22	Casing Test	6/27/2017	23:27:00	USER			2100		BROUGHT PSI UPTO 2100 FOR A 10 MIN CASING TEST
Event	23	Check Floats	6/27/2017	23:37:00	USER			2155		FLOATS HELD 1 BBL FLOW BACK TO TRUCK
Event	24	End Job	6/27/2017	23:38:01	COM5					30 LBS SUGAR USED 28 BBL OF CEMENT TO SURFACE
Event	25	Post-Job Safety Meeting (Pre Rig-Down)	6/27/2017	23:45:00	USER					ALL HES CREW PRESENT
Event	26	Pre-Convoy Safety Meeting	6/28/2017	00:45:00	USER					ALL HES CREW PRESENT
Event	27	Depart Location	6/28/2017	01:00:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT, DUSTIN HYDE AND CREW

LARAMIE, GUNDERSON BCU 20-05E, 8 5/8'' SUFRACE

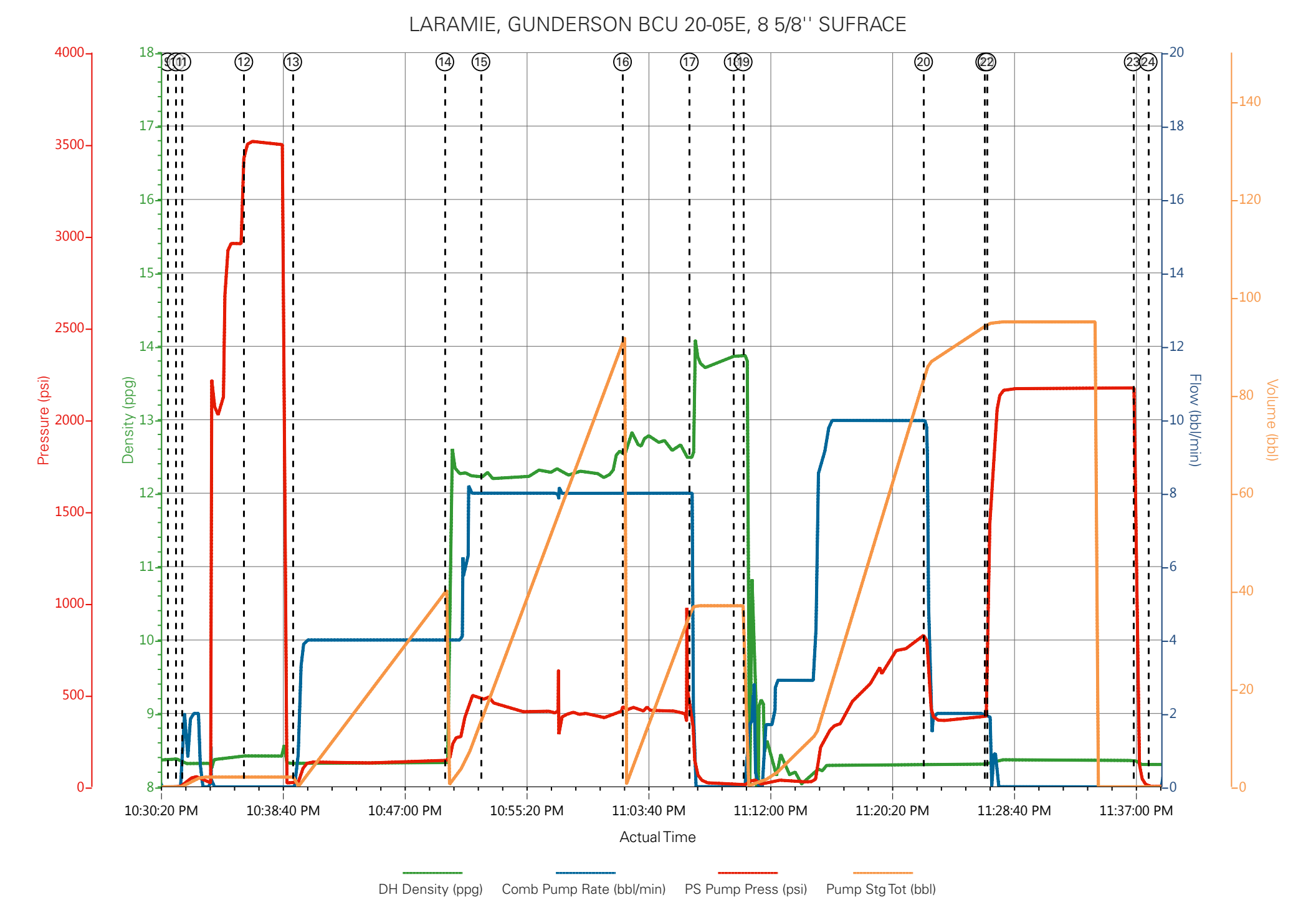


① Call Out	⑤ Assessment Of Location Safety Meeting	⑨ Start Job	⑬ Pump H2O Spacer	⑰ Shutdown	21 Bump Plug	25 Post-Job Safety Meeting (Pre Rig
② Pre-Convoy Safety Meeting	⑥ Spot Equipment	⑩ Drop Bottom Plug	⑭ Pump Lead Cement	⑱ Drop Top Plug	22 Casing Test	26 Pre-Convoy Safety Meeting
③ Crew Leave Yard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

HALLIBURTON | iCem® Service

Created: 2017-06-27 21:17:18, Version: 4.2.393 Edit

Customer : LARAMIE ENERGY II LLC
Representative : TYLER HALE
Job Date : 6/27/2017
Sales Order # : 904126630
Well : GUNDERSON BCU 20-05E
ELITE 1 : HYDE / GOWEN



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Sales Order # : 904126630

Well : GUNDERSON BCU 20-05E
ELITE 1 : HYDE / GOWEN

HALLIBURTON

iCem® Service

LARAMIE ENERGY LLC

For: Laramie

Date: Saturday, July 01, 2017

GUNDERSON BCU 20-05E Production

API# 05-077-10344-00

Sincerely,

Grand Junction Cement Engineering

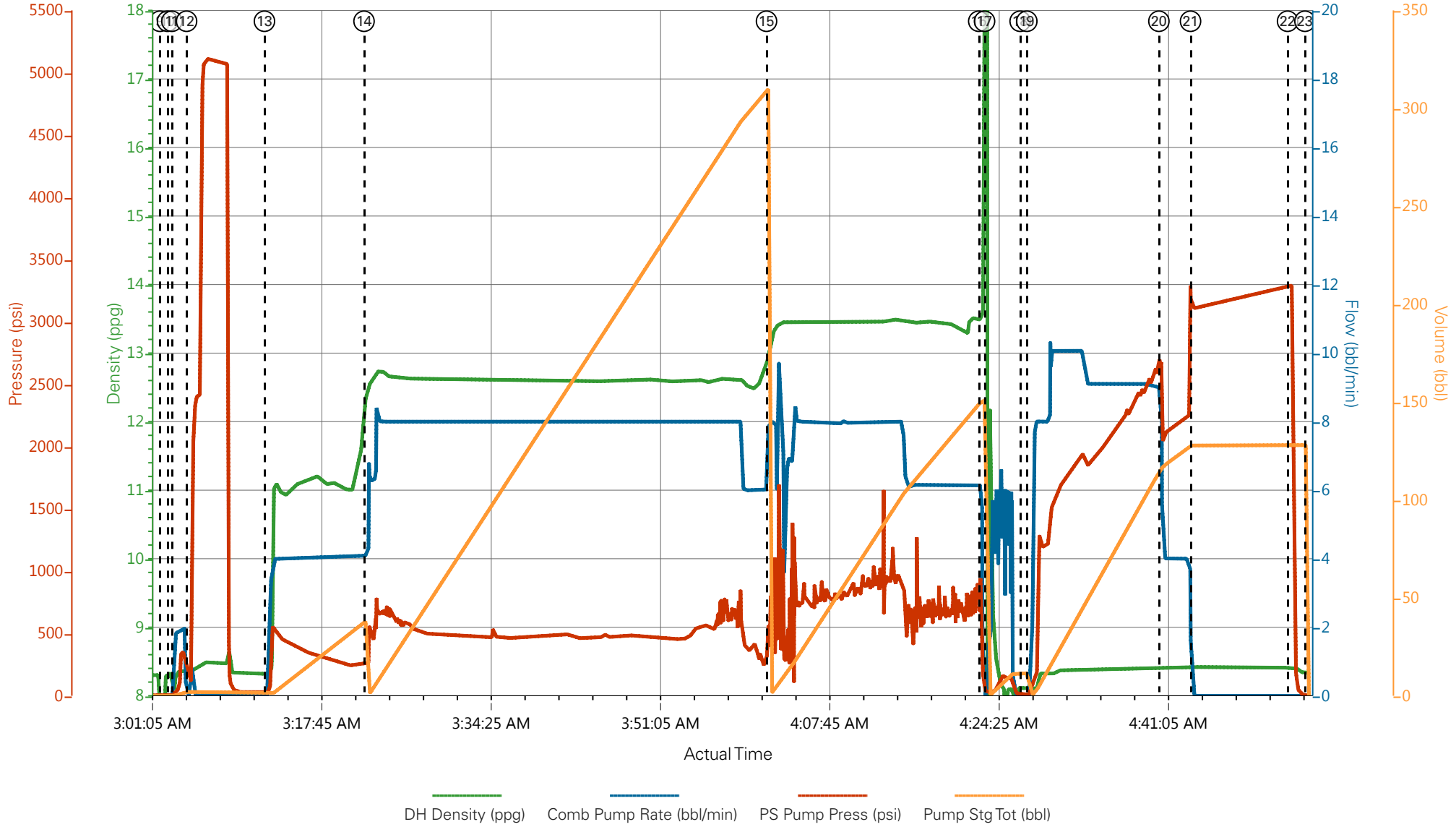
2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	6/30/2017	19:00:00	USER					ELITE #8
Event	2	Pre-Convoy Safety Meeting	6/30/2017	21:00:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	6/30/2017	23:00:00	USER					ARRIVED ON LOCATION 2 HOURS EARLY RIG RUNNING CASING UPON HES ARRIVAL
Event	4	Meet With Company Rep	7/1/2017	00:00:00	USER					COMPANY REP OFFERED SDS / WATER TEST TEMP: 67 PH: 7 CHLORIDES:0
Event	5	Assessment Of Location Safety Meeting	7/1/2017	00:10:00	USER					ALL HES EMPLOYEES
Event	6	Pre-Rig Up Safety Meeting	7/1/2017	00:20:00	USER					ALL HES EMPLOYEES
Event	7	Rig-Up Equipment	7/1/2017	00:30:00	USER					1 HT-400 PUMP TRUCK 1 660 BULK TRUCK 2 SILOS 1 F-550 PICKUP
Event	8	Pre-Job Safety Meeting	7/1/2017	02:00:00	USER					ALL HES EMPLOYEES AND RIG CREW RIG CIRCULATED FOR 1 HOUR PRIOR TO THE JOB @ 10 BPM @ 900 PSI
Event	9	Start Job	7/1/2017	03:02:10	COM5					TD: 7949 TP: 7938.35 SJ: 89.91 CSG: 4 1/2 11.6# L-80 OH: 7 7/8 SURFACE CASING @ 1564 - 8 5/8 24# MUD WTl 9.4 PPG
Event	10	Drop Bottom Plug	7/1/2017	03:02:54	COM5					PLUG AWAY NO PROBLEMS
Event	11	Prime Lines	7/1/2017	03:03:20	USER	8.33	2.0	375	2.0	PRIME LINES WITH 2 BBLS FRESH WATER
Event	12	Test Lines	7/1/2017	03:04:47	COM5	8.33	0.0	5116	2.0	PRESSURE TEST OK
Event	13	Pump Tuned Spacer III	7/1/2017	03:12:27	COM5	11.0	4.0	325	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	7/1/2017	03:22:15	COM5	12.5	8.0	650	289	834 SKS 12.5 PPG 1.94 YIELD 9.6 GAL/SK LEAD

										CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	15	Pump Tail Cement	7/1/2017	04:01:52	COM5	13.3	8.0	950	131.5	427 SKS 13.3 PPG 1.73 YIELD 7.81 GAL/SK TAIL CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	16	Shutdown	7/1/2017	04:22:45	USER					SHUTDOWN TO CLEAN PUMPS AND LINES
Event	17	Clean Lines	7/1/2017	04:23:20	COM5	8.33			10.0	CLEAN PUMPS AND LINES TO CELLAR
Event	18	Drop Top Plug	7/1/2017	04:26:50	COM5					PLUG AWAY NO PROBLEMS
Event	19	Pump Displacement	7/1/2017	04:27:29	COM5	8.4	10.0,9.0	2650	121.7	1 GAL MMCR 5 GALS CLA-WEB, FRESH WATER DISPLACEMENT
Event	20	Slow Rate	7/1/2017	04:40:29	USER	8.4	4.0	2300	111	SLOW RATE TO BUMP PLUG
Event	21	Bump Plug	7/1/2017	04:43:36	COM5	8.4	4.0	3294	121.7	PSI BEFORE BUMPING PLUG @ 2300 BUMPED PLUG UP TO 3000 FOR CASING TEST HELD FOR 10 MINUTES PRESSURE @3294 PRIOR TO CHECKING FLOATS
Event	22	Check Floats	7/1/2017	04:53:09	USER					FLOATS HELD 1 1/2 BBL BACK TO DISPLACEMENT TANKS
Event	23	End Job	7/1/2017	04:54:52	COM5					MAINTAINED RETURNS THROUGHOUT THE JOB 40 BBLS TUNED SPACER AND 10 BBL CEMENT TO SURFACE PIPE STATIC THROUGHOUT JOB RIG USED 60#S OF SUGAR
Event	24	Pre-Rig Down Safety Meeting	7/1/2017	05:00:00	USER					ALL HES EMPLOYEES
Event	25	Rig-Down Equipment	7/1/2017	05:20:00	USER					
Event	26	Pre-Convoy Safety Meeting	7/1/2017	06:20:00	USER					ALL HES EMPLOYEES
Event	27	Crew Leave Location	7/1/2017	06:30:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT, DUSTIN SMITH AND CREW

LARAMIE - GUNDERSON BCU 20-05E - 4 1/2 PRODUCTION



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

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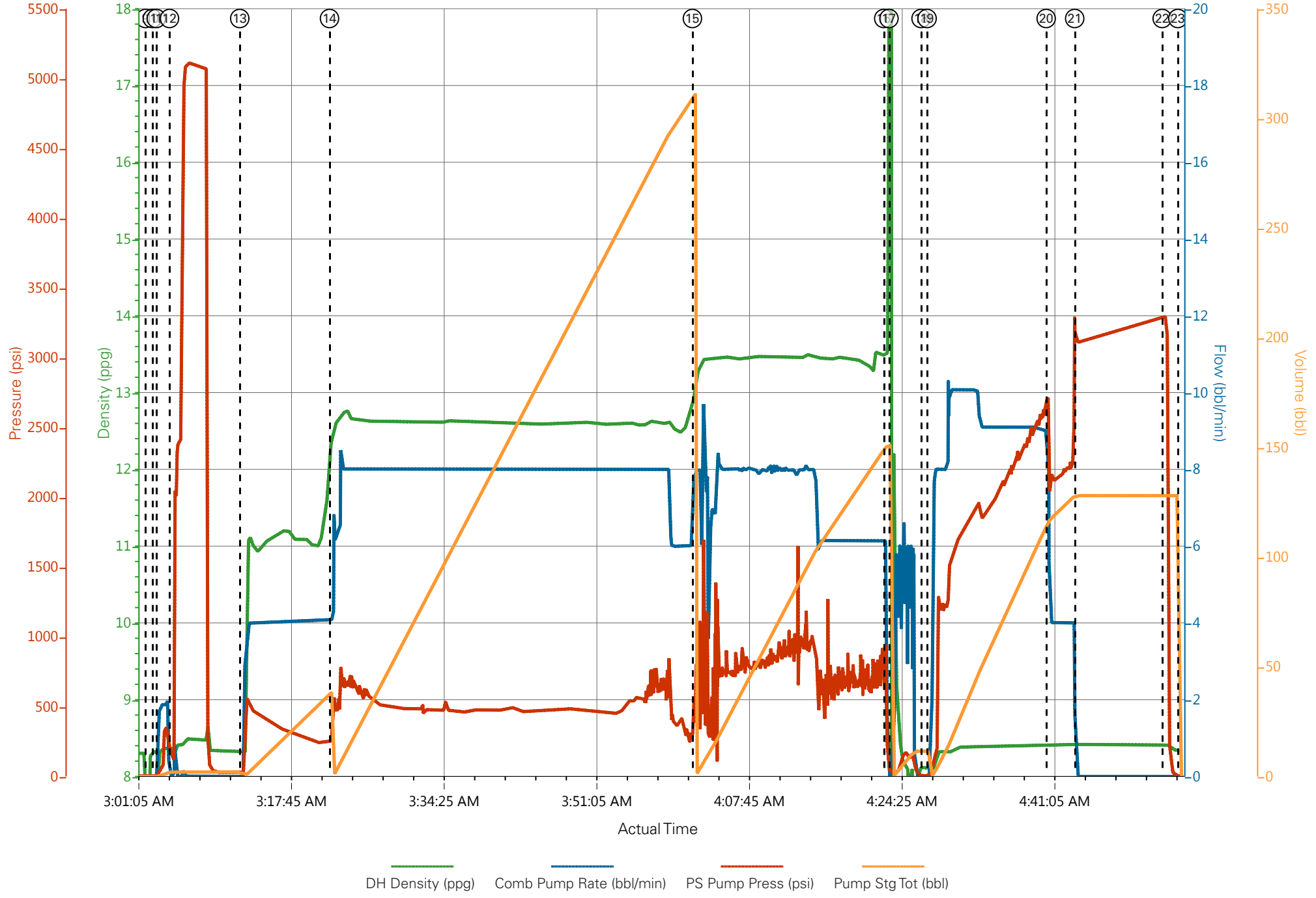
Created: 2017-06-30 19:56:55, Version: 4.2.393

Edit

Customer : LARAMIE ENERGY II LLC
Representative : TYLER HALE
Job Date : 7/1/2017 12:55:18 AM
Sales Order # : 0904132586
Well : GUNDERSON BCU 20-05E
ELITE #8 : DUSTIN SMITH / TRAVIS BROWN

LARAMIE - GUNDERSON BCU 20-05E - 4 1/2 PRODUCTION



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Customer : LARAMIE ENERGY II LLC
Representative : TYLER HALE

Job Date : 7/1/2017 12:55:18 AM
Sales Order # : 0904132586

Well : GUNDERSON BCU 20-05E
ELITE #8 : DUSTIN SMITH / TRAVIS BROWN

HALLIBURTON

Rockies, Grand Junction

Lab Results- Lead

Job Information

Request/Slurry	2397683/1	**Rig Name**	H&P 522	**Date**	27/JUN/2017
Submitted By	Aaron Katz	**Job Type**	Production Casing	**Bulk Plant**	Grand Junction
Customer	Laramie Energy	**Location**	Garfield	**Well**	Gunderson BCU 20-05E

Well Information

Casing/Liner Size	4.5 in	**Depth MD**	7939 ft	**BHST**	113°C / 235°F
Hole Size	7.875 in	**Depth TVD**	7553 ft	**BHCT**	76°C / 168°F
Pressure	4590 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	1.941	ft3/sack
Water Requirement	9.623	gal/sack
Total Mix Fluid	9.623	gal/sack
Water Source	Field (Fresh) Water	
Water Chloride		

Operation Test Results Request ID 2397683/1

Thickening Time - ON-OFF-ON 29/JUN/2017

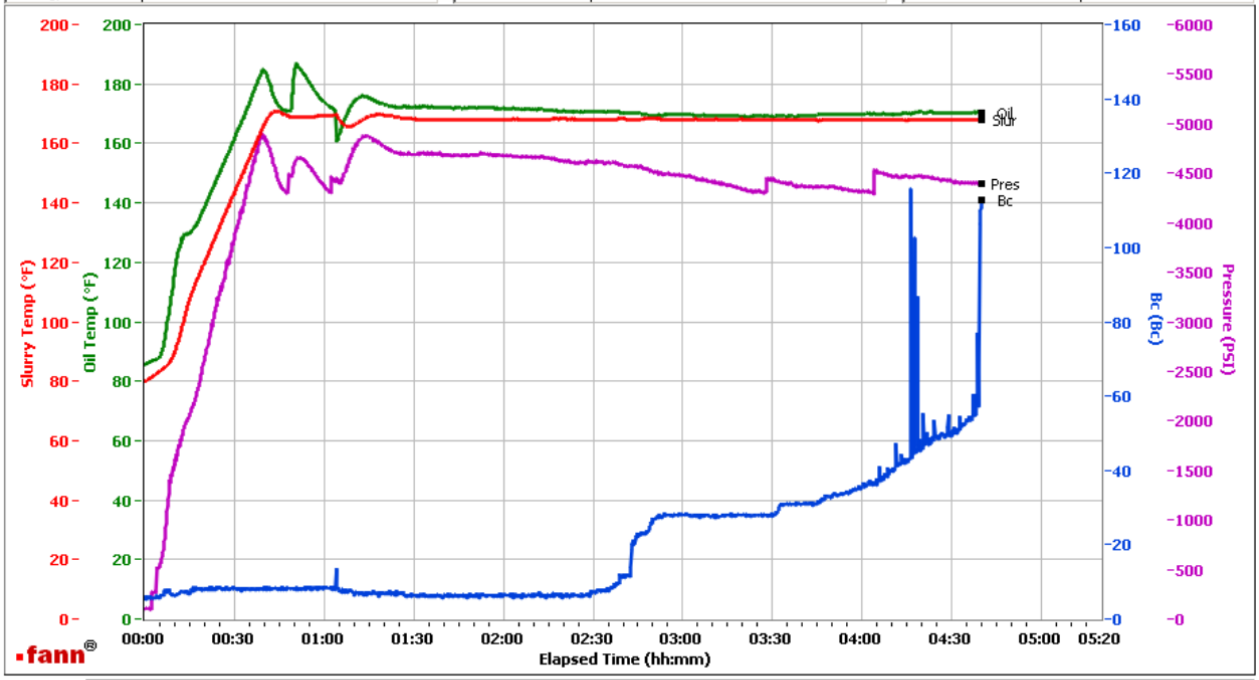
Test Temp (°F)	Pressure (psi)	Reached in (min)	30 Bc (hh:min)	50 Bc (hh:min)	70 Bc (hh:min)	100 Bc (hh:min)	Start Bc	Stirring before stop (mins)	Static Period (min)	Peak reading (BC)
168	4590	39	3:32	4:27	4:39	4:39	5	49	15	15

Grand Junction Colorado

Fields	Values
Project Name	2397683-1 LARAMIE ENERGY 12.5 PPG BULK
Test ID	34658541 TT
Request ID	2397683-1
Tested by	CT
Customer	LARAMIE ENERGY
Well No	GUNDERSON BCU 20-05E
Rig	H&P 522
Casing/Liner Size	4.5 INCH

Fields	Values
Job Type	PRODUCTION CASING
Cement Type	TYPE I-II
Cement Weight	Standard
Test Date	06/29/17
Test Time	02:49 AM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	03h:32m
40.00 Bc	04h:09m
50.00 Bc	04h:27m
70.00 Bc	04h:39m
100.00 Bc	04h:39m
00h:30m	8.15
01h:00m	8.04
01h:30m	6.44



Data File C:\Documents and Settings\Administrator\Desktop\Test Data\GJ2397683-1 LARAMIE ENERGY BULK PRODUCTION TT.tdms

Comments OPERATION - COMPOSITE TT - CS1618, TRAILER 2878, 417 SKS - CS1620, TRAILER 1513, 417 SKS

Total sks = 834
CS1618, Trailer 2878, 417 sks
CS1620, Trailer 1513, 417 sks
Deflected 8-- > 15

HALLIBURTON

Rockies, Grand Junction

Lab Results- Tail

Job Information

Request/Slurry	2397684/1	**Rig Name**	H&P 522	**Date**	27/JUN/2017
Submitted By	Aaron Katz	**Job Type**	Production Casing	**Bulk Plant**	Grand Junction
Customer	Laramie Energy	**Location**	Garfield	**Well**	Gunderson BCU 20-05E

Well Information

Casing/Liner Size	4.5 in	**Depth MD**	7939 ft	**BHST**	113°C / 235°F
Hole Size	7.875 in	**Depth TVD**	7553 ft	**BHCT**	76°C / 168°F
Pressure	4590 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			

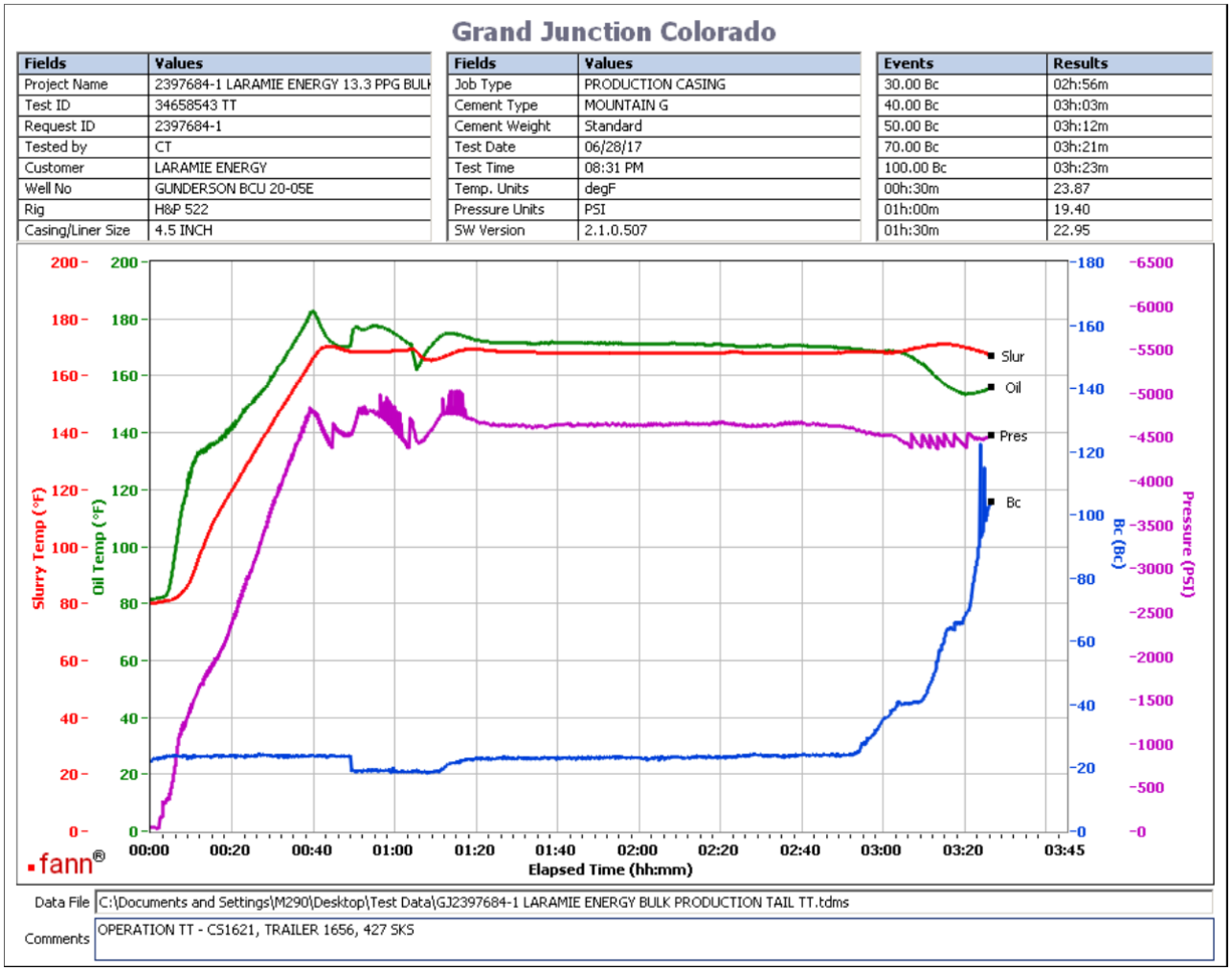
Cement Properties

Slurry Density	13.3	lbm/gal
Slurry Yield	1.733	ft3/sack
Water Requirement	7.799	gal/sack
Total Mix Fluid	7.799	gal/sack
Water Source	Field (Fresh) Water	
Water Chloride		

Operation Test Results Request ID 2397684/1

Thickening Time - ON-OFF-ON 29/JUN/2017

Test Temp (°F)	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)
168	4590	39	2:56	3:12	3:21	3:23	22	49	15	19



Fields	Values
Project Name	2397684-1 LARAMIE ENERGY 13.3 PPG BULK
Test ID	34658543 TT
Request ID	2397684-1
Tested by	CT
Customer	LARAMIE ENERGY
Well No	GUNDERSON BCU 20-05E
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	06/28/17
Test Time	08:31 PM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	02h:56m
40.00 Bc	03h:03m
50.00 Bc	03h:12m
70.00 Bc	03h:21m
100.00 Bc	03h:23m
00h:30m	23.87
01h:00m	19.40
01h:30m	22.95

Total sks = 427
CS1621, Trailer 1656, 427 sks
No deflection