

HALLIBURTON

iCem[®] Service

Laramie Energy LLC

For: Laramie

Date: Wednesday, November 21, 2018

SUP&SHEP 0993-25-14W Surface PJR

API# 05-077-10582-00

Sincerely,

Grand Junction Cement Engineering

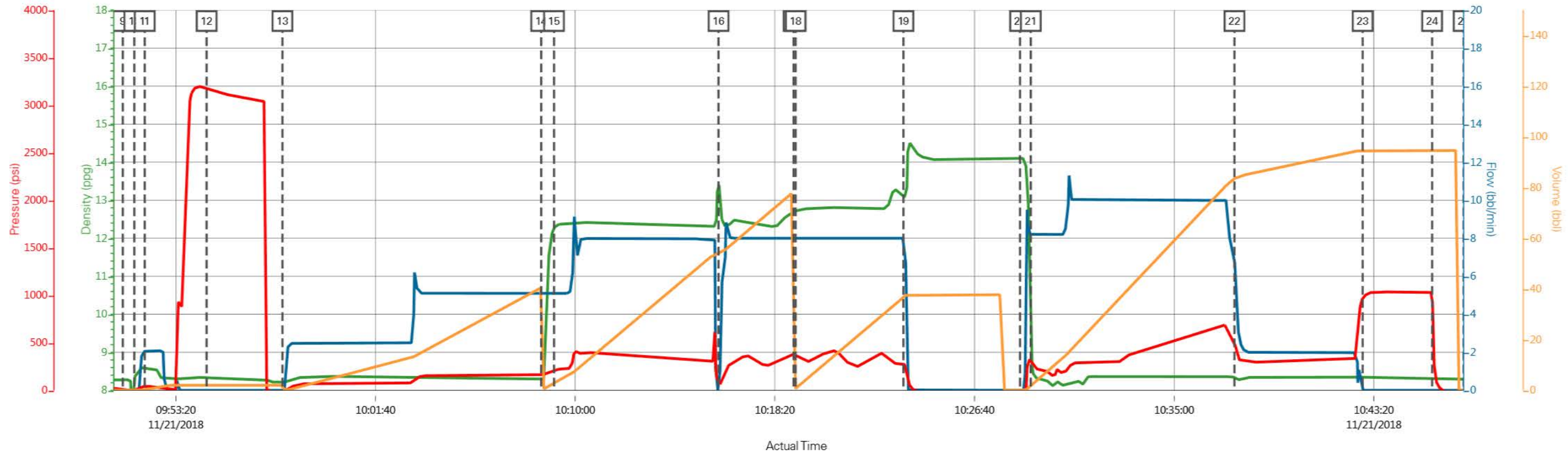
2.0 Real-Time Job Summary

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	11/21/2018	03:30:00	USER					REQUESTED ON LOCATION @ 09:30
Event	2	Pre-Convoy Safety Meeting	11/21/2018	05:30:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	11/21/2018	05:45:00	USER					1 HT 400 PUMP TRUCK E8, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP
Event	4	Arrive At Loc	11/21/2018	08:00:00	USER					RIG RUNNING CASING WHEN HES ARRIVED AT LOCATION
Event	5	Assessment Of Location Safety Meeting	11/21/2018	08:05:00	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	11/21/2018	08:10:00	USER					ALL HES PRESENT
Event	7	Rig-Up Equipment	11/21/2018	08:15:00	USER					HES RIGGED UP 1 HT400 PUMP TRUCK, 1 660 BULK TRUCK, 2" DISCHARGE IRON, AND 4" SUCTION HOSE WITHOUT ENTERING RED ZONE.
Event	8	Pre-Job Safety Meeting	11/21/2018	09:40:00	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 10 BPM PRIOR TO JOB PRESSURE @ 140 PSI. CALIBRATED MUD SCALES ON WATER.
Event	9	Start Job	11/21/2018	09:51:07	COM6					TD-1553', TP-1543', SJ-41496.68', CSG-8.625" 24# J55, OH-11", MUD-9.4PPG
Event	10	Prime Lines	11/21/2018	09:51:36	USER	8.33	2	115	2	FRESH WATER
Event	11	Drop Bottom Plug	11/21/2018	09:52:02	USER					VERIFIED BY FLAG INDICATOR

Event	12	Test Lines	11/21/2018	09:54:37	COM6			3200		ALL LINES HELD PRESSURE AT 3200 PSI
Event	13	Pump H2O Spacer	11/21/2018	09:57:47	COM6	8.33	5	150	40	40BBLs FRESH WATER
Event	14	Pump Lead Cement	11/21/2018	10:08:35	COM6	12.3	8	400	78	177 SKS VARICEM GJ5 CMT 12.3 PPG, 2.46 FT3/SK, 14.17 GAL/SK
Event	15	Check Weight	11/21/2018	10:09:07	COM6					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	16	Bump Bottom Plug	11/21/2018	10:15:59	USER					RUPTURED BOTTOM PLUG AT 750PSI
Event	17	Pump Tail Cement	11/21/2018	10:19:07	COM6	12.8	8	400	38	98 SKS VARICEM GJ5 CMT 12.8 PPG, 2.18 FT3/SK, 12.11 GAL/SK
Event	18	Check Weight	11/21/2018	10:19:12	COM6					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	19	Shutdown	11/21/2018	10:23:42	USER					END OF CEMENT, WASH UP ON TOP OF PLUG.
Event	20	Drop Top Plug	11/21/2018	10:28:34	COM6					VERIFIED BY FLAG INDICATOR
Event	21	Pump Displacement	11/21/2018	10:29:01	COM6	8.33	10	700	95.4	FRESH WATER
Event	22	Slow Rate	11/21/2018	10:37:31	USER	8.33	2	300	85.4	SLOW RATE TO 2 BPM TO BUMP PLUG
Event	23	Bump Plug	11/21/2018	10:42:52	COM6	8.33	2	360	95.4	LAND PLUG AT 360 PSI, BROUGHT UP TO 1050 PSI
Event	24	Check Floats	11/21/2018	10:45:46	USER					FLOATS HELD, .5 BBL BACK TO TRUCK
Event	25	End Job	11/21/2018	10:47:05	COM6					RETURNS THROUGHOUT JOB, 18 BBLs CMT TO SURFACE. 40# OF SUGAR, TOP PLUG AND BOTTOM PLUG USED.
Event	26	Post-Job Safety Meeting (Pre Rig-Down)	11/21/2018	11:00:00	USER					ALL HES PRESENT
Event	27	Rig Down Lines	11/21/2018	11:05:00	USER					ALL HES PRESENT
Event	28	Pre-Convoy Safety Meeting	11/21/2018	12:30:00	USER					ALL HES PRESENT
Event	29	Crew Leave Location	11/21/2018	12:45:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT, SHAWN BLOSSOM AND CREW

LARAMIE SUP&SHEP 0993-25-14W, 8 5/8" SURFACE



DH Density (ppg) 8.29 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) -28.7 Pump Stg Tot (bbl) 0

HALLIBURTON

iCem[®] Service

Laramie Energy LLC

For: Laramie

Date: Sunday, November 25, 2018

Sup & Shep 0993-25-14W Production PJR

API#: 05-077-10582-00

Sincerely,

Grand Junction Cement Engineering

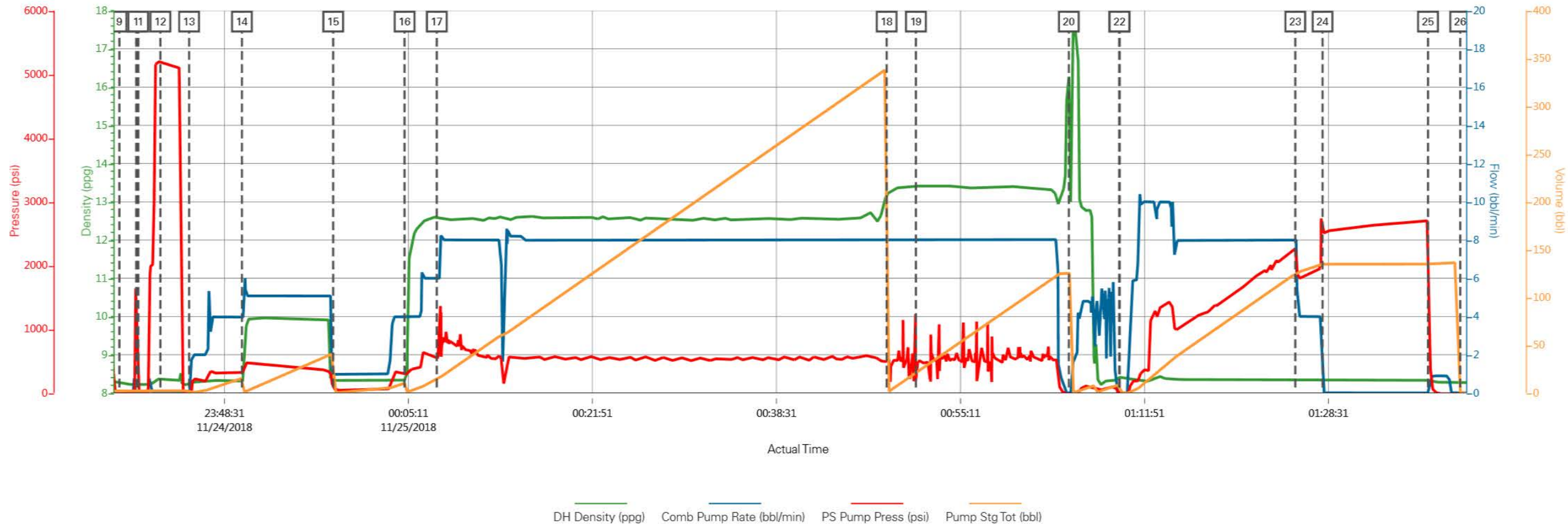
2.0 Real-Time Job Summary

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	11/24/2018	15:00:00	USER					REQUESTED ON LOCATION @ 21:00
Event	2	Pre-Convoy Safety Meeting	11/24/2018	17:00:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	11/24/2018	17:10:00	USER					1 HT 400 PUMP TRUCK E1, 1 660 BULK TRUCK, 1 TRANSPORT, 1 550 SERVICE PICKUP
Event	4	Arrive At Loc	11/24/2018	20:00:00	USER					RIG RUNNING CASING WHEN HES ARRIVED AT LOCATION
Event	5	Assessment Of Location Safety Meeting	11/24/2018	20:10:00	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- 52F). COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES.
Event	6	Pre-Rig Up Safety Meeting	11/24/2018	20:15:00	USER					ALL HES PRESENT
Event	7	Rig-Up Equipment	11/24/2018	20:20:00	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	11/24/2018	22:30:00	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 12 BPM PRIOR TO JOB PRESSURE @ 1200 PSI. 25UNITS OF GAS. CALIBRATED MUD SCALES ON WATER.
Event	9	Start Job	11/24/2018	23:39:00	COM6					TD 8745', TP 8735' OF 4 ½" 11.6# P110 CSG, SJ 86.85', SURFACE CSG 8 5/8" 24# J55 SET @ 1543', OH 7 7/8", MUD 9.1 PPG
Event	10	Prime Lines	11/24/2018	23:40:32	USER	8.33	2	250	2	FRESH WATER
Event	11	Drop Bottom Plug	11/24/2018	23:40:43	USER					VERIFIED BY PLUG INDICATOR
Event	12	Test Lines	11/24/2018	23:42:43	COM6			5180		ALL LINES HELD PRESSURE AT 5180 PSI

Event	13	Pump H2O Spacer	11/24/2018	23:45:19	COM6	8.33	4	330	15	15BBLs FRESH WATER WITH 5LBS OF POLYE-FLAKE
Event	14	Super Flush	11/24/2018	23:50:06	COM6	10	5	440	40	40BBLs OF SUPER FLUSH
Event	15	Pump H2O Spacer	11/24/2018	23:58:22	COM6	8.33	4	340	10	10BBLs FRESH WATER
Event	16	Pump Lead Cement	11/25/2018	00:04:50	COM6	12.5	8	590	323	935 SKS OF NEOCEM CMT 12.5 PPG, 1.94 FT3/SK, 9.59 GAL/SK.
Event	17	Check Weight	11/25/2018	00:07:45	COM6					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	18	Pump Tail Cement	11/25/2018	00:48:30	COM6	13.3	8	540	113	362 SKS THERMACEM CMT 13.3 PPG, 1.73 FT3/SK, 7.81 GAL/SK.
Event	19	Check Weight	11/25/2018	00:51:09	COM6					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	20	Clean Lines	11/25/2018	01:05:00	COM6					END OF CEMENT. CLEAN PUMPS AND LINES TO CELLAR.
Event	21	Drop Top Plug	11/25/2018	01:09:34	COM6					VERIFIED BY PLUG INDICATOR
Event	22	Pump Displacement	11/25/2018	01:09:36	COM6	8.4	10	2400	134	1 GAL MMCR IN FIRST 10 BBLs, 5 GALS CLAY WEB THROUGHOUT DISPLACEMENT, 1# BE-6 PER 20BBLs FOR THE FIRST 100BBLs
Event	23	Slow Rate	11/25/2018	01:25:31	USER	8.4	4	1900	124	SLOW RATE TO 4 BPM TO BUMP PLUG.
Event	24	Bump Plug	11/25/2018	01:27:59	COM6	8.4	4	1990	134	LANDED PLUG AT 1990 PSI, BROUGHT UP TO 2550 PSI AND HELD TEN MINS FOR CASING TEST.
Event	25	Check Floats	11/25/2018	01:37:32	USER					FLOATS HELD, 1.5 BBL BACK TO TRUCK
Event	26	End Job	11/25/2018	01:40:27	COM6					RETURNS THROUGHOUT JOB. 40 BBLs OF SUPER FLUSH TO SURFACE. 40# OF SUGAR USED.
Event	27	Post-Job Safety Meeting (Pre Rig-Down)	11/25/2018	01:45:00	USER					ALL HES PRESENT
Event	28	Rig Down Lines	11/25/2018	01:50:00	USER					ALL HES PRESENT
Event	29	Pre-Convoy Safety Meeting	11/25/2018	03:00:00	USER					ALL HES PRESENT
Event	30	Crew Leave Location	11/25/2018	03:15:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT, SHAWN BLOSSOM AND CREW

LARAMIE SUP&SHEP 0993-25-14W, 4.5" PRODUCTION



HALLIBURTON

Rockies, Grand Junction

Lab Results- Lead

Job Information					
Request/Slurry	2516728/1	Rig Name	H&P 522	Date	21/NOV/2018
Submitted By	Connor Matthews	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Laramie Energy	Location	Garfield	Well	Sup & Shep Federal 25-14W

Well Information					
Casing/Liner Size	4.5 in	Depth MD	8811 ft	BHST	114°C / 237°F
Hole Size	7.875 in	Depth TVD	8668 ft	BHCT	74°C / 166°F
Pressure	5368 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.	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	Field (Fresh) Water	
						Water Chloride		

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Operation Test Results Request ID 2516728/1

Thickening Time - ON-OFF-ON

21/NOV/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)
166	5368	44	5:05	5:15	5:28	5:35	8	54	15	8

Total sks = 935

CS2500 TR#8476 400 SKS

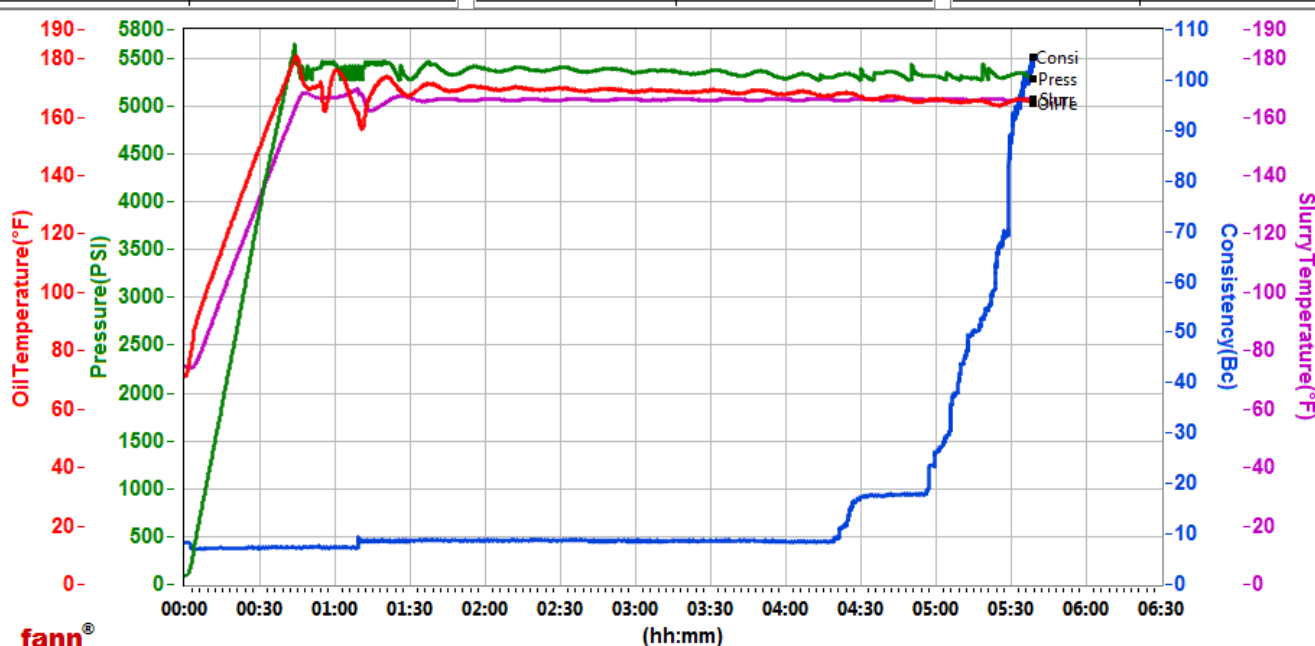
CS2501 TR#2878 400 SKS

CS2502 TR#7428 Front 135 SKS

deflected from 7Bc---> 8Bc

GRAND JUNCTION

Fields	Values	Fields	Values	Events	Results
Project Name	TempTest	Rig	H&P522		
SW Version	1.0	Casing/Liner Size	4.5"		
Test ID	36000434-TT	Job Type	PRODUCTION CASING		
Request ID	2516728-1	Cement Weight	GCC TYPE II-II		
Tested by	DEBA	Comments	Standard		
Customer	LARAMIE ENERGY	Date Time	11/21/2018 10:22:42.068		
Well No	SUP&SHEP FED 25-14V	Temp. Units	degF		



Data File C:\Users\hx25273\Desktop\new Graph M290\GJ2516728-1 LARAMIE PRODUCTION BULK LEAD.tdms

Comments Standard

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HALLIBURTON

Rockies, Grand Junction

Lab Results- Tail

Job Information

Request/Slurry	2516729/1	Rig Name	H&P 522	Date	21/NOV/2018
Submitted By	Connor Matthews	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Laramie Energy	Location	Garfield	Well	Sup & Shep Federal 25-14W

Well Information

Casing/Liner Size	4.5 in	Depth MD	8811 ft	BHST	114°C / 237°F
Hole Size	7.875 in	Depth TVD	8668 ft	BHCT	74°C / 166°F
Pressure	5368 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				Slurry Density	13.3	lbm/gal
						Slurry Yield	1.738	ft3/sack
						Water Requirement	7.795	gal/sack
						Total Mix Fluid	7.795	gal/sack
						Water Source	Field (Fresh) Water	
						Water Chloride		

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Operation Test Results Request ID 2516729/1

Thickening Time - ON-OFF-ON

21/NOV/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)
166	5368	44	3:21	3:32	3:41	3:53	12	54	15	18

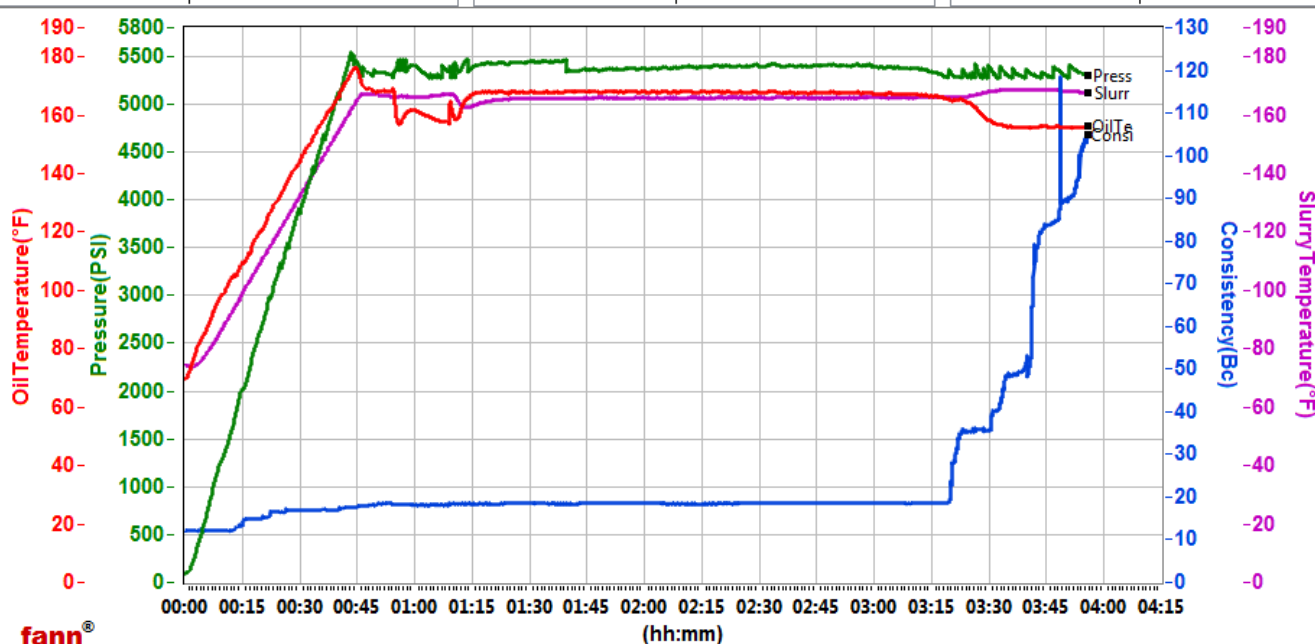
Total sks = 362

CS2503 TR#1513 362 SKS

no deflection, 18Bc--- > 18Bc

GRAND JUNCTION

Fields	Values	Fields	Values	Events	Results
Project Name	TempTest	Rig	H&P 522		
SW Version	1.0	Casing/Liner Size	4.5 INCHES		
Test ID	36000436- TT	Job Type	PRODUCTION CASING		
Request ID	2516729-1	Cement Weight	MOUNTAIN G		
Tested by	DS	Comments	Standard		
Customer	LARAMIE ENERGY	Date Time	11/21/2018 11:09:29.24		
Well No	SUP&SHEP FED 25-14V	Temp. Units	degF		



Data File C:\Users\hx25273\Desktop\new Graph M290\GJ2516729-1 LARAMIE PRODUCTION BULK TAIL.tdms

Comments Standard

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