

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

For: TEP

Date: Friday, November 23, 2018

SG 23-26 Production PJR

API #: 05-045-23944

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

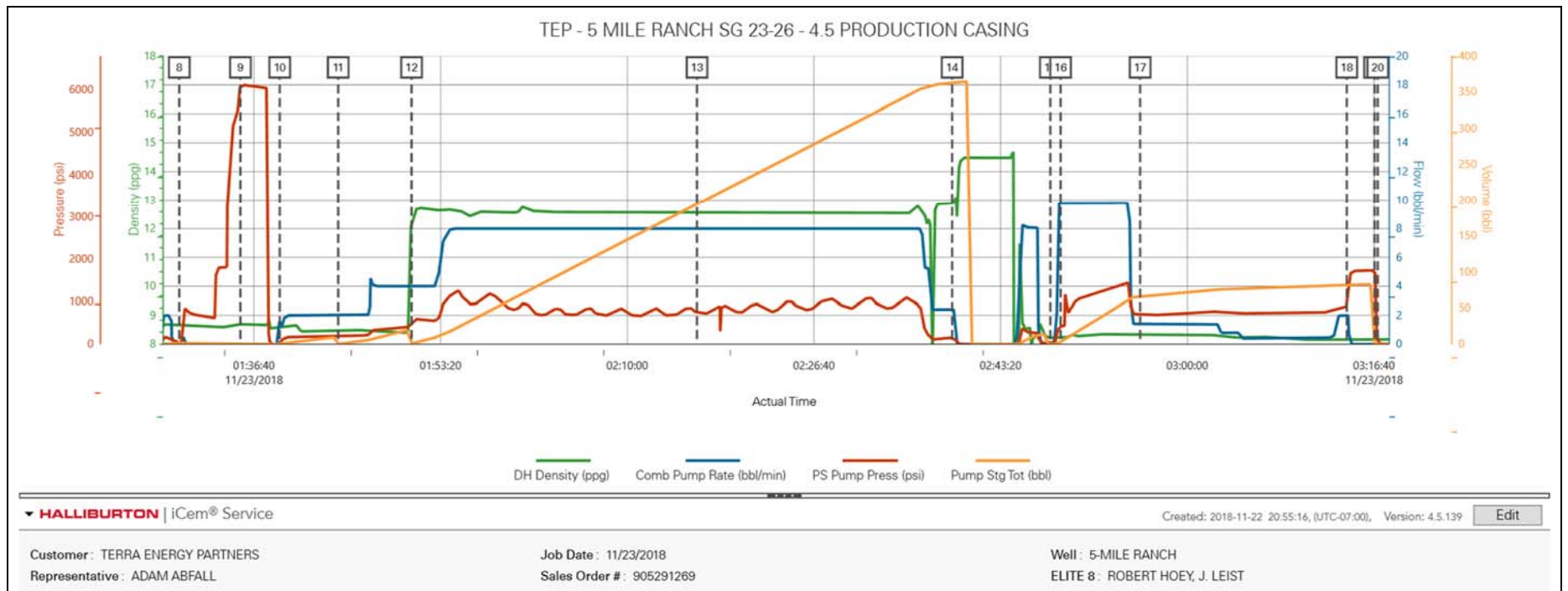
2.1 Job Event Log

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	11/22/2018	19:30:00	USER					
Event	2	Pre-Convoy Safety Meeting	11/22/2018	21:30:00	USER					JOURNEY MANAGEMENT COMPLETE, AS WELL AS JSA
Event	3	Crew Leave Yard	11/22/2018	22:00:00	USER					
Event	4	Arrive At Loc	11/22/2018	23:00:00	USER					JOURNEY MANAGEMENT CLOSED OUT. RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	11/22/2018	23:30:00	USER					
Event	6	Pre-Rig Up Safety Meeting	11/23/2018	00:01:02	USER					JSA COMPLETE
Event	7	Rig-Up Equipment	11/23/2018	00:10:00	USER					1 SILOS, 1 ELITE, 1 BULK TRUCK, 1 UPRIGHT WATER TANK
Event	8	Other	11/23/2018	00:20:00	USER					WATER TEST: PH-7, CL-0, TEMP-67 WELL INFO: 4.5 11.6# SET AT 5419.77, TD-5427, S.J.- 31.31, HOLE- 8 3/4, MUD#- 10.3, 9 5/8 32.3# SET @ 1033
Event	9	Other	11/23/2018	00:25:00	USER					MUD SCALES CHECKED WITH WATER PRIOR TO JOB.
Event	10	Pre-Job Safety Meeting	11/23/2018	00:30:00	USER					JSA COMPLETE
Event	11	Start Job	11/23/2018	01:30:00	USER					
Event	12	Test Lines	11/23/2018	01:35:27	USER			6129.00		6129 PSI
Event	13	Pump Spacer	11/23/2018	01:38:58	USER	8.33	2.00	175.00	10.00	FRESH WATER
Event	14	Pump Spacer 1	11/23/2018	01:44:11	USER	8.33	4.00	300.00	20.00	MUD FLUSH
Event	15	Pump Tail Cement	11/23/2018	01:50:44	USER	12.50	8.00	525.00	349.10	1000 SKS NEOCEM, 12.5 PPG, 1.96 FT3/SK, 9.4 GAL/SK

Event	16	Check Weight	11/23/2018	02:16:13	COM5	12.50				WEIGHT UP GOOD 12.5 PPG
Event	17	Shutdown	11/23/2018	02:39:00	USER					TO WASH UP PUMPS AND LINES, AND DROP TOP PLUG
Event	18	Drop Top Plug	11/23/2018	02:47:46	USER					AWAY
Event	19	Pump Displacement	11/23/2018	02:48:41	USER	8.33	10.00	1330.00	83.50	KCL WATER WITH , 3 BAGS BE-6, 1 GAL MMCR
Event	20	Slow Rate	11/23/2018	02:55:47	USER	8.33	1.40	697.00	65.60	TO BUMP PLUG, RAN OUT OF WATER, RIG HAD TO TRANSFER OVER WATER.
Event	21	Bump Plug	11/23/2018	03:14:14	USER	8.33	2.00	873.00	83.50	PLUG BUMPED
Event	22	Check Floats	11/23/2018	03:16:43	USER			1737.00		FLOATS HELD, 1.5 BBLS BACK TO TRUCK
Event	23	End Job	11/23/2018	03:17:00	USER					GOOD CIRCULATION THROUGHOUT JOB, PIPE RECIPROCATED 5-10 FT. THROUGH OUT JOB.
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	11/23/2018	03:20:00	USER					JSA COMPLETE
Event	25	Crew Leave Location	11/23/2018	05:00:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT, JAMES LEIST AND CREW

3.0 Attachments

3.1 CHART.png



Job Information

Request/Slurry	2515846/1	Rig Name	H&P 271	Date	17/NOV/2018
Submitted By	Connor Matthews	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Terra Energy Partners	Location	Garfield	Well	SG 23-26

Well Information

Casing/Liner Size	4.5 in	Depth MD	5443 ft	BHST	76°C / 168°F
Hole Size	8.75 in	Depth TVD	5189 ft	BHCT	45°C / 113°F
Pressure	3013 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



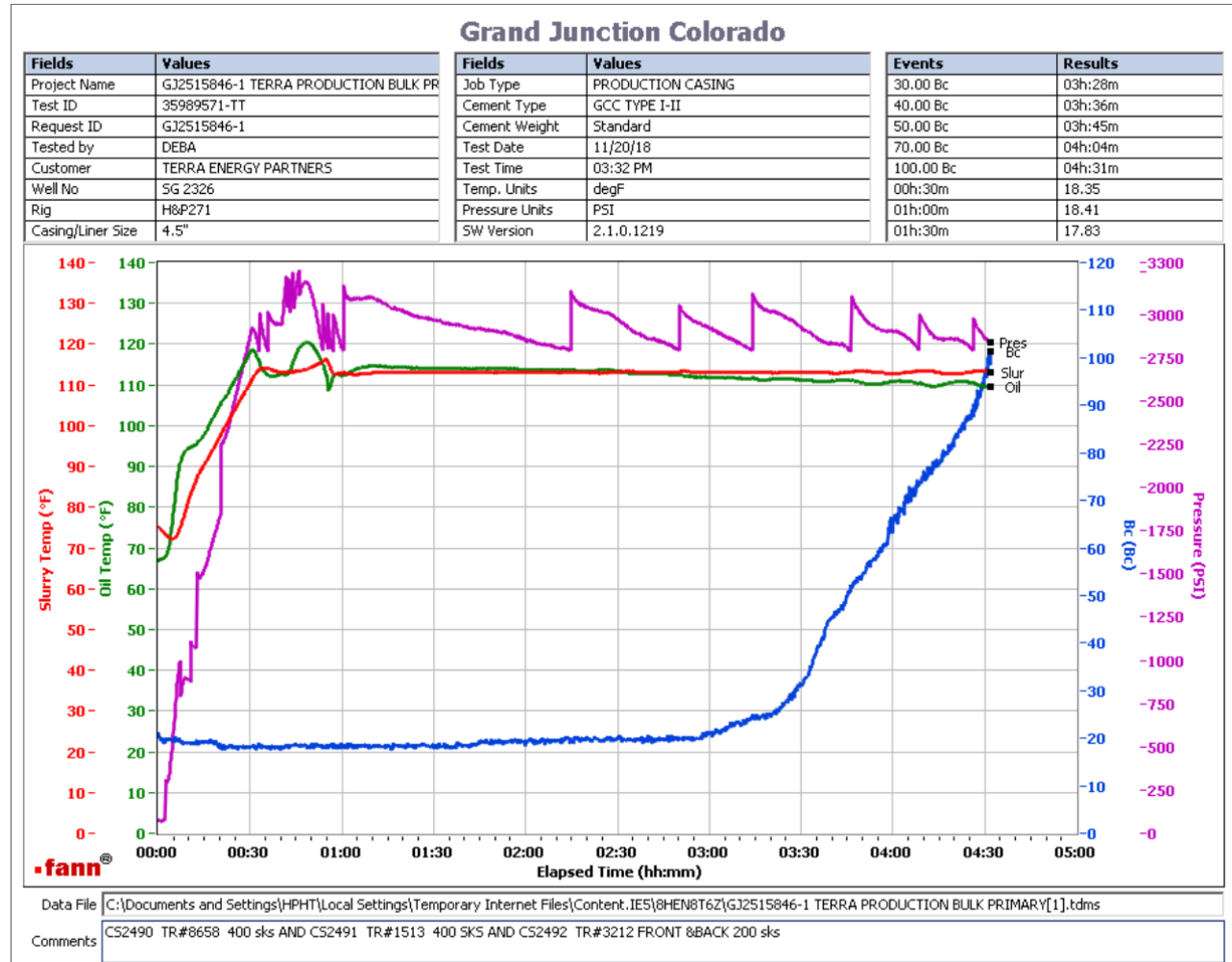
<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	Cement Properties		
		NeoCem Primary				Slurry Density	12.5	lbm/gal
						Slurry Yield	1.962	ft3/sack
						Water Requirement	9.434	gal/sack
						Total Mix Fluid	9.434	gal/sack
						Water Source	Fresh Water	
						Water Chloride		

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Thickening Time - ON-OFF-ON

20/NOV/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)
113	3013	30	3:28	3:45	4:04	4:31	19	40	15	18



Total SKS 1000
 CS2490 TR#8658 400 SKS
 CS2491 TR#1513 400 SKS
 CS2492 TR#3212 Front & Back 200 SKS
 no deflection, 18Bc--- > 18Bc

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