

HALLIBURTON

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TERRA ENERGY PARTNERS

United States of America, COLORADO

For: TEP

Date: Tuesday, November 20, 2018

SG 323-26 Production PJR

API #: 05-045-23943

Sincerely,

Grand Junction Cement Engineering

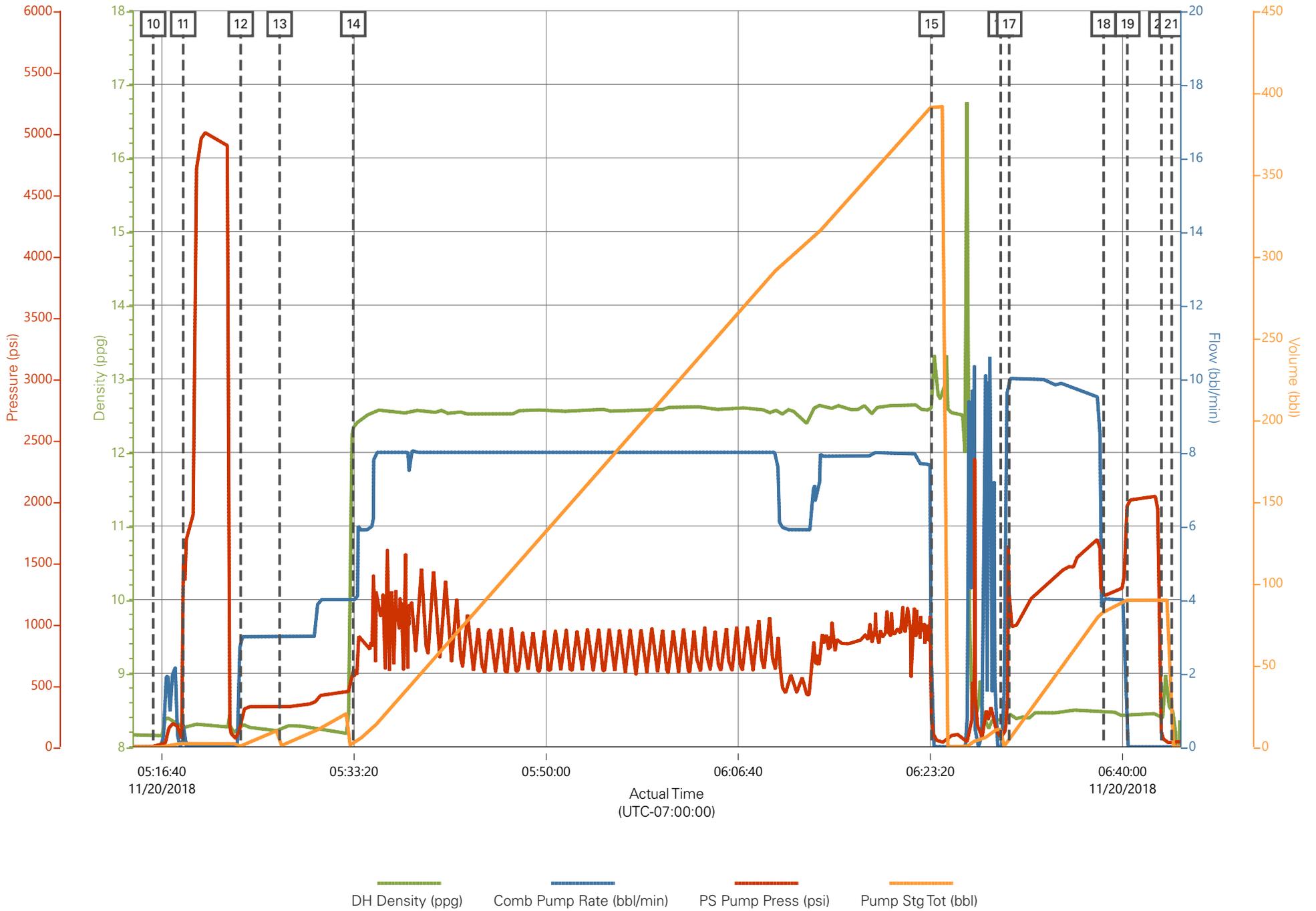
1.0 Real-Time Job Summary

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	11/19/2018	20:30:00	USER					
Event	2	Pre-Convoy Safety Meeting	11/19/2018	23:10:00	USER					
Event	3	Crew Leave Yard	11/19/2018	23:15:00	USER					
Event	4	Arrive At Loc	11/20/2018	00:30:00	USER					REQUESTED ON LOC TIME WAS 0230, CREW ARRIVED @ 00:30, RIG RUNNING CASING.
Event	5	Assessment Of Location Safety Meeting	11/20/2018	00:40:00	USER					
Event	6	Spot Equipment	11/20/2018	00:45:00	USER					
Event	7	Pre-Rig Up Safety Meeting	11/20/2018	00:50:00	USER					
Event	8	Rig-Up Equipment	11/20/2018	00:55:00	USER					
Event	9	Pre-Job Safety Meeting	11/20/2018	04:30:00	USER					
Event	10	Start Job	11/20/2018	05:15:55	COM5					TD: 5526 TP: 5520 SJ: 32.5 MW: 10.3 PPG 4 1/2" 11.6#/FT CSG IN 8 3/4" OH WATER TEST: PH: 7 POTASSIUM: 700 CHLORIDES: 0 SULFATES: <200 TEMP: 70 DEGREES
Event	11	Test Lines	11/20/2018	05:18:31	COM5			5000.00		5000 PSI TEST SUCCESSFUL
Event	12	Pump Spacer 1	11/20/2018	05:23:30	COM5	8.33	3.00	215.00	10.00	FRESH H2O SPACER
Event	13	Pump Spacer 2	11/20/2018	05:26:53	COM5	8.33	3.00	335.00	20.00	MUDFLUSH SPACER
Event	14	Pump Lead Cement	11/20/2018	05:33:16	COM5	12.50	8.00	780.00	349.10	1000 SKS @ 12.5 PPG 1.96 YLD 9.4 GAL/SK H2O
Event	15	Clean Lines	11/20/2018	06:23:26	COM5					SHUTDOWN/ CLEAN LINES

Event	16	Drop Top Plug	11/20/2018	06:29:26	COM5					PLUG AWAY
Event	17	Pump Displacement	11/20/2018	06:30:10	COM5	8.49	10.00	1700.00	85.10	FRESH H2O DISPLACEMENT W/ 1 GAL MMCR, 3# BE-6, KCL
Event	18	Slow Rate	11/20/2018	06:38:22	USER	8.47	4.00	1229.00	75.00	
Event	19	Bump Plug	11/20/2018	06:40:25	COM5	8.45	4.00	1969.00	85.10	PLUG BUMPED AT CALCULATED DISPLACEMENT
Event	20	Check Floats	11/20/2018	06:43:22	USER					FLOATS HELD, GAINED 0.5 BBL BACK TO PUMP
Event	21	End Job	11/20/2018	06:44:16	COM5					
Event	22	Post-Job Safety Meeting (Pre Rig-Down)	11/20/2018	07:00:00	USER					GOOD CIRCULATION THROUGHOUT JOB. PIPE WAS RECIPROCATED THROUGHOUT JOB. NO ADD HOURS CHARGED, ALL CHEMS EXCEPT SUGAR USED. TOP PLUG USED. CIRCULATED 20 BBL MUDFLUSH TO SURFACE
Event	23	Rig-Down Equipment	11/20/2018	07:05:00	USER					
Event	24	Pre-Convoy Safety Meeting	11/20/2018	08:25:00	USER					
Event	25	Crew Leave Location	11/20/2018	08:30:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENTING ANTHONY ANDREWS AND CREW

TEP - SG 323-26 - 4 1/2" PRODUCTION



Job Information

Request/Slurry	2515536/1	Rig Name	H&P 271	Date	15/NOV/2018
Submitted By	Connor Matthews	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Terra Energy Partners	Location	Garfield	Well	SG 323-26

Well Information

Casing/Liner Size	4.5 in	Depth MD	5549 ft	BHST	76°C / 168°F
Hole Size	8.75 in	Depth TVD	5176 ft	BHCT	45°C / 113°F
Pressure	3006 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

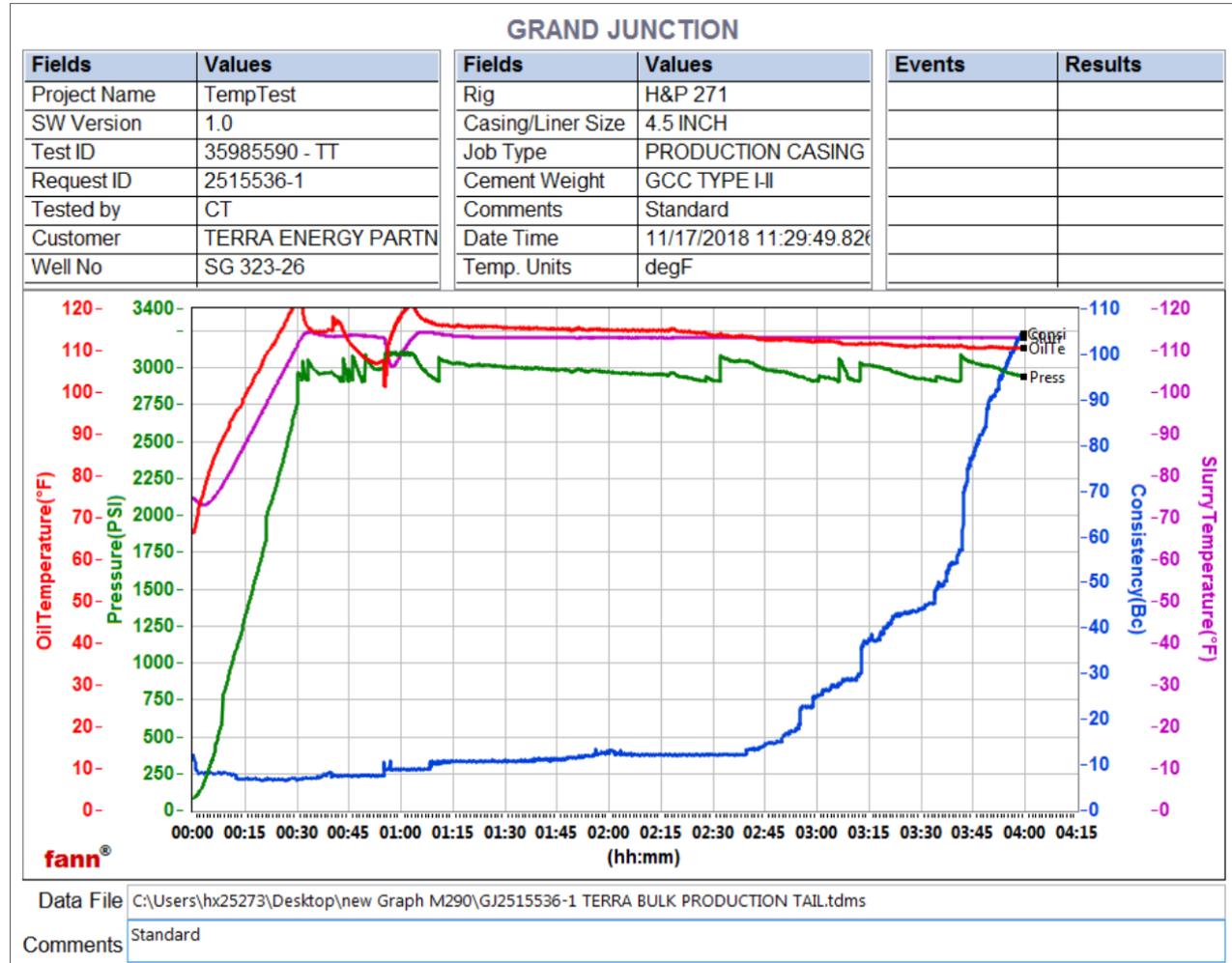
<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	Cement Properties		
		NeoCem Primary				Slurry Density	12.5	lbm/gal
						Slurry Yield	1.962	ft3/sack
						Water Requirement	9.434	gal/sack
						Total Mix Fluid	9.434	gal/sack
						Water Source	Fresh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

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Thickening Time - ON-OFF-ON

18/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	3006	30	3:12	3:36	3:42	3:55	13	40	15	10



Total SKS 1000
 CS2476, Trailer 8658, 400 sks
 CS2478, Trailer 8677, 400 sks
 CS2480, Trailer 4080, 200 sks
 Deflection: 8 - 10

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