

HALLIBURTON

iCem[®] Service

Terra Energy Partners

For: H&P 318

Date: Friday, April 21, 2017

TR 343-27-597 Production Cementing Program

API# 05-045-23334-00

Sincerely,

Grand Junction Cement Engineering

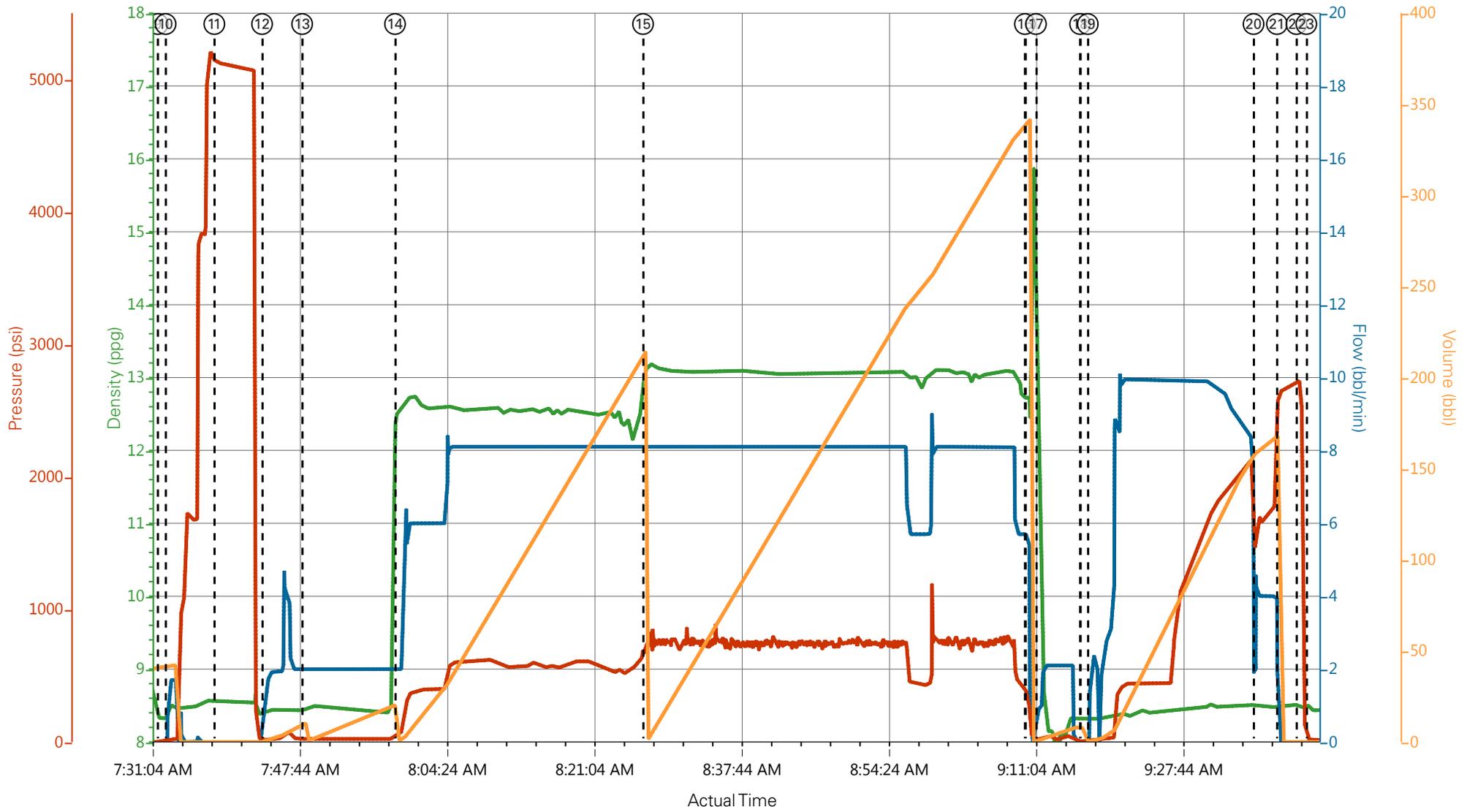
1.0 Real-Time Job Summary

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	4/20/2017	16:30:00	USER					REQUESTED ON LOCATION @ 0001
Event	2	Pre-Convoy Safety Meeting	4/20/2017	18:30:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	4/20/2017	18:45:00	USER					1 F550, 1 PUMP TRUCK & 1 660 BULK TURCK
Event	4	Arrive At Loc	4/20/2017	22:00:00	USER					RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	4/20/2017	22:15:00	USER					MET WITH COMP REP, L. GONZOLEZ, AND WENT OVER NUMBERS AND JOB PROCEDURE. WALKED AROUND LOCATION AND COLLECTED WATER SAMPLE (PH- 7, CHLORIDES- 0, TEMP- 49F). COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES.
Event	6	Pre-Rig Up Safety Meeting	4/21/2017	00:45:00	USER					ALL HES PRESENT
Event	7	Rig-Up Equipment	4/21/2017	01:00:00	USER					HES RIGGED UP EQUIPMENT WITHOUT ENTERING RED ZONE.
Event	8	Pre-Job Safety Meeting	4/21/2017	07:00:00	USER					ALL HES AND RIG CREW PRESENT
Event	9	Start Job	4/21/2017	07:32:00	COM6					TD 10070', TP 10060', SJ 32', OH 8.75'', CSG 4.5'' 11.6#, MUD 9.1 PPG. RIG CIRCULATED WELL FOR APPROX 3 HRS. AIR ON PARACITE AT 1400 UNITS.
Event	10	Prime Pumps	4/21/2017	07:32:53	COM6	8.55	1.70	26.00	40.9	8.33 PPG FRESH WATER
Event	11	Test Lines	4/21/2017	07:38:24	COM6	8.56	0.00	5128.00	0.0	ALL LINES HELD PRESSURE AT 5128 PSI
Event	12	Pump Spacer 1	4/21/2017	07:43:47	COM6	8.44	0.90	17.00	0.2	FRESH WATER (10 BBL), 8.33 PPG

Event	13	Pump Spacer 2	4/21/2017	07:48:20	COM6	8.43	2.00	24.00	0.0	MUD FLUSH III (20 BBL), 8.4 PPG
Event	14	Pump Lead Cement	4/21/2017	07:58:50	COM6	12.53	2.00	62.00	0.6	NEOCEM CEMENT 585 SKS (202 BBLS), 12.5 PPG, 1.94 FT3/SK, 9.58 GAL/SK
Event	15	Pump Tail Cement	4/21/2017	08:26:55	COM6	13.13	8.00	713.00	2.00	NEOCEM CEMENT 830 SKS (305 BBLS), 13 PPG, 2.07 FT3/SK, 9.43 GAL/SK.
Event	16	Shutdown	4/21/2017	09:10:08	USER					END OF CMT, KILL AIR TP PARACITE WITH 20 BBL LEFT ON TAIL CEMENT.
Event	17	Clean Lines	4/21/2017	09:11:23	USER					WASH UP PUMPS AND LINES TO PIT
Event	18	Drop Top Plug	4/21/2017	09:16:23	USER					PLUG WENT, VERIFIED BY CO REP.
Event	19	Pump Displacement	4/21/2017	09:17:16	COM6	8.34	1.80	24.00	0.3	8.34 PPG KCL WATER (155.4 BBLS) 1 GAL MMCR & 3 BAGS BEG
Event	20	Slow Rate	4/21/2017	09:36:01	USER	8.48	4.00	1642.00	159.0	SLOW RATE TO 4 BPM PER CO REP TO LAND PLUG
Event	21	Bump Plug	4/21/2017	09:38:40	USER	8.50	0.00	2659.00	0.0	LAND PLUG AT 1750 PSI, BROUGHT UP TO 2659 PSI
Event	22	Check Floats	4/21/2017	09:40:52	USER	8.51	0.00	2734.00	0.0	FLOATS HELD, 1 BBL BACK TO TRUCK
Event	23	End Job	4/21/2017	09:42:00	USER					PIPE WAS NOT RECIPROCATED DURING THE JOB, 0 BBL SPACER OR CEMENT BACK TO SURFACE
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	4/21/2017	09:50:00	USER					ALL HES PRESENT
Event	25	Rig-Down Equipment	4/21/2017	10:00:00	USER					ALL HES PRESENT
Event	26	Pre-Convoy Safety Meeting	4/21/2017	11:00:00	USER					ALL HES PRESENT
Event	27	Crew Leave Location	4/21/2017	11:15:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT, CHRIS SMITH AND CREW

TEP - TR 343-27-597 - 4.5" PRODUCTION

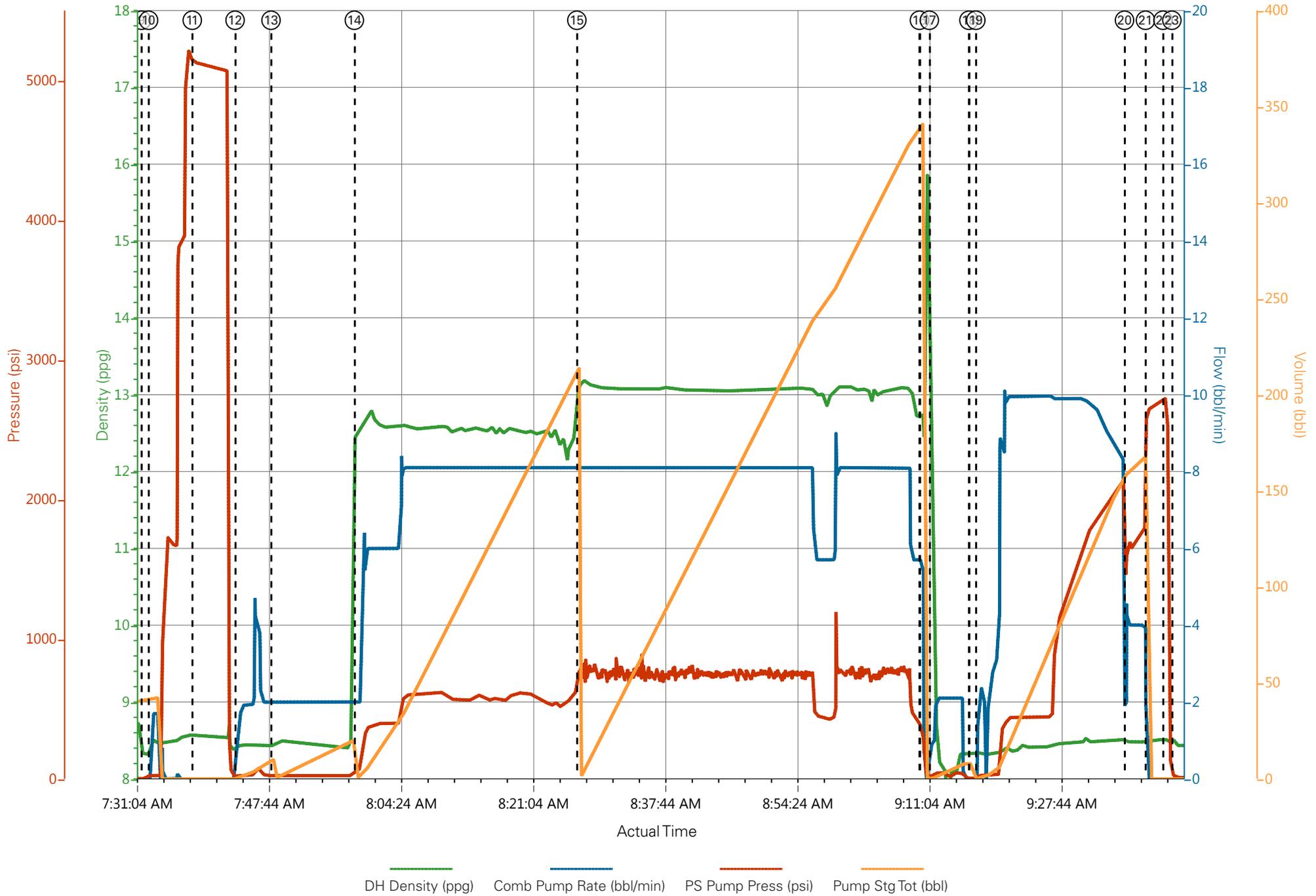


— DH Density (ppg)
 — Comb Pump Rate (bbl/min)
 — PS Pump Press (psi)
 — Pump Stg Tot (bbl)

- | | | | | |
|---|---|-------------------------------------|---------------------------------|--------------------------|
| ① Call Out n/a;n/a;n/a;n/a | ④ Arrive At Loc n/a;n/a;n/a;n/a | ⑦ Rig-Up Equipment n/a;n/a;n/a;n/a | ⑩ Prime Pumps 8.55;1.7;26;40.9 | ⑬ Pump Spacer 2 8.43;2;2 |
| ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a | ⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a | ⑧ Pre-Job Safety Meeting 0.28;0;1;0 | ⑪ Test Lines 8.56;0;5128;0 | ⑭ Pump Lead Cement 12.1 |
| ③ Crew Leave Yard n/a;n/a;n/a;n/a | ⑥ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a | ⑨ Start Job 8.33;0;1;40.6 | ⑫ Pump Spacer 1 8.44;0.9;17;0.2 | ⑮ Pump Tail Cement 13.14 |



TEP - TR 343-27-597 - 4.5" PRODUCTION



Job Information

Request/Slurry	2380653/1	Rig Name	H&P 318	Date	17/APR/2017
Submitted By	Patrick Ealey	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Terra Energy Partners	Location	Garfield	Well	TR 343-27-597

Well Information

Casing/Liner Size	4.5 in	Depth MD	10106 ft	BHST	118°C / 245°F
Hole Size	8.75 in	Depth TVD	9728 ft	BHCT	79°C / 175°F
Pressure	6110 psi				

Drilling Fluid Information

Mud Supplier Name	Baroid	Mud Trade Name	BARADRIL-N	Density	10.4 lbm/gal
--------------------------	--------	-----------------------	------------	----------------	--------------

Cement Information - Lead Design

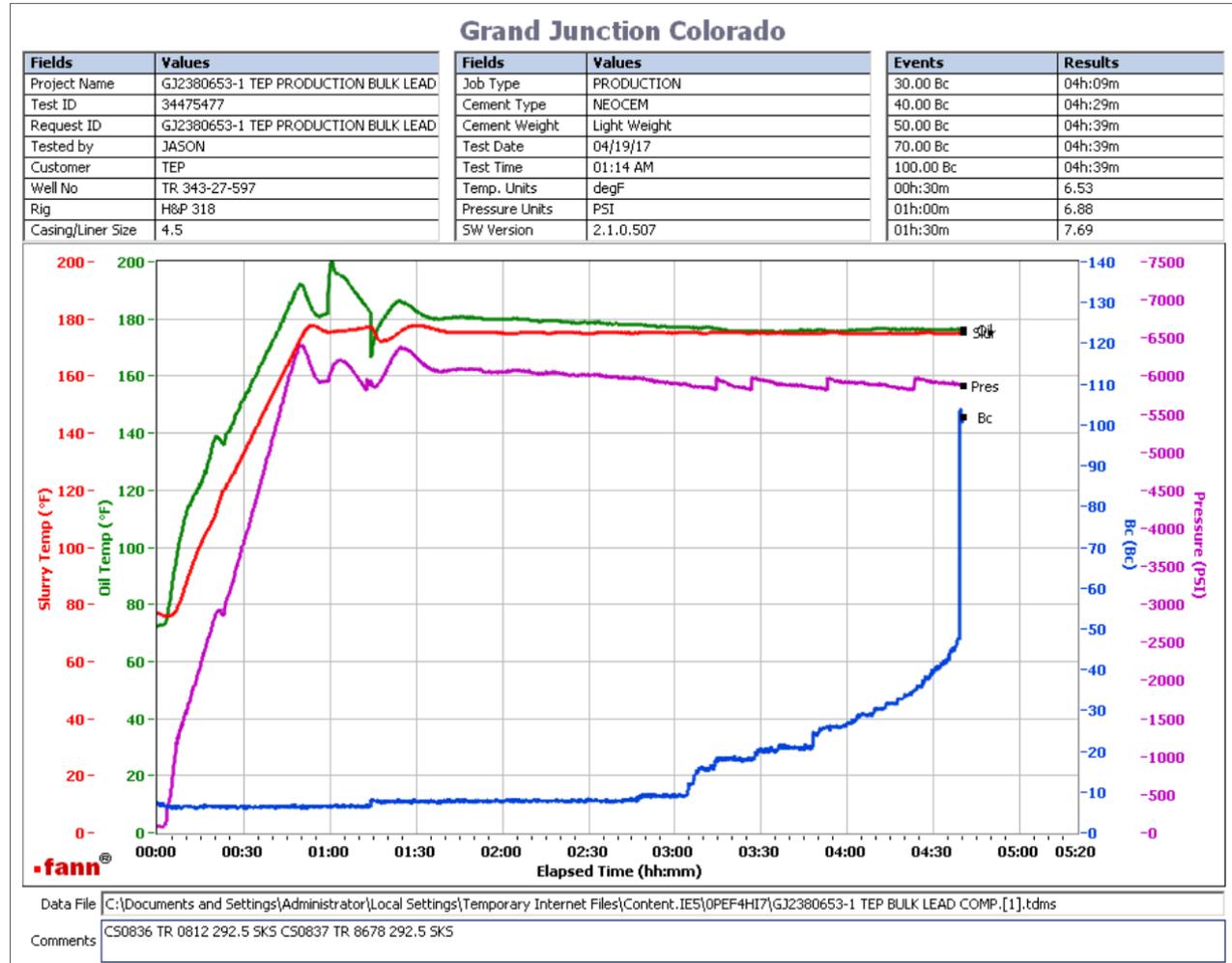
<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	<u>Cement Properties</u>		
		NeoCem Lead				Slurry Density	12.5	lbm/gal
						Slurry Yield	1.941	ft3/sack
						Water Requirement	9.623	gal/sack
						Total Mix Fluid	9.623	gal/sack
						Water Source	Fresh Water	
						Water Chloride		

This report is the property of Halliburton Energy Services and neither it nor any part thereof, nor a copy thereof, is to be published or disclosed without first securing the expressed written approval of Halliburton. It may however be used in the course of regular business operations by any person or concern receiving such report from Halliburton. This report is for information purposes only and the content is limited to the sample described. Halliburton makes no warranties, expressed or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage regardless of cause, including any act or omission of Halliburton, resulting from the use hereof.

Thickening Time - ON-OFF-ON

18/APR/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)
175	6110	49	4:09	4:39	4:39	4:39	8	59	15	8



Total sks = 585
 CS0836 TR 0812 292.5 SKS
 CS0837 TR 8678 292.5 SKS
 Composite
 Deflected 7-- > 8

This report is the property of Halliburton Energy Services and neither it nor any part thereof, nor a copy thereof, is to be published or disclosed without first securing the expressed written approval of Halliburton. It may however be used in the course of regular business operations by any person or concern receiving such report from Halliburton. This report is for information purposes only and the content is limited to the sample described. Halliburton makes no warranties, expressed or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage regardless of cause, including any act or omission of Halliburton, resulting from the use hereof.

Job Information

Request/Slurry	2380654/1	Rig Name	H&P 318	Date	17/APR/2017
Submitted By	Patrick Ealey	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Terra Energy Partners	Location	Garfield	Well	TR 343-27-597

Well Information

Casing/Liner Size	4.5 in	Depth MD	10109 ft	BHST	118°C / 245°F
Hole Size	8.75 in	Depth TVD	9728 ft	BHCT	79°C / 175°F
Pressure	6110 psi				

Drilling Fluid Information

Mud Supplier Name	Baroid	Mud Trade Name	BARADRIL-N	Density	10.4 lbm/gal
--------------------------	--------	-----------------------	------------	----------------	--------------

Cement Information - Tail Design

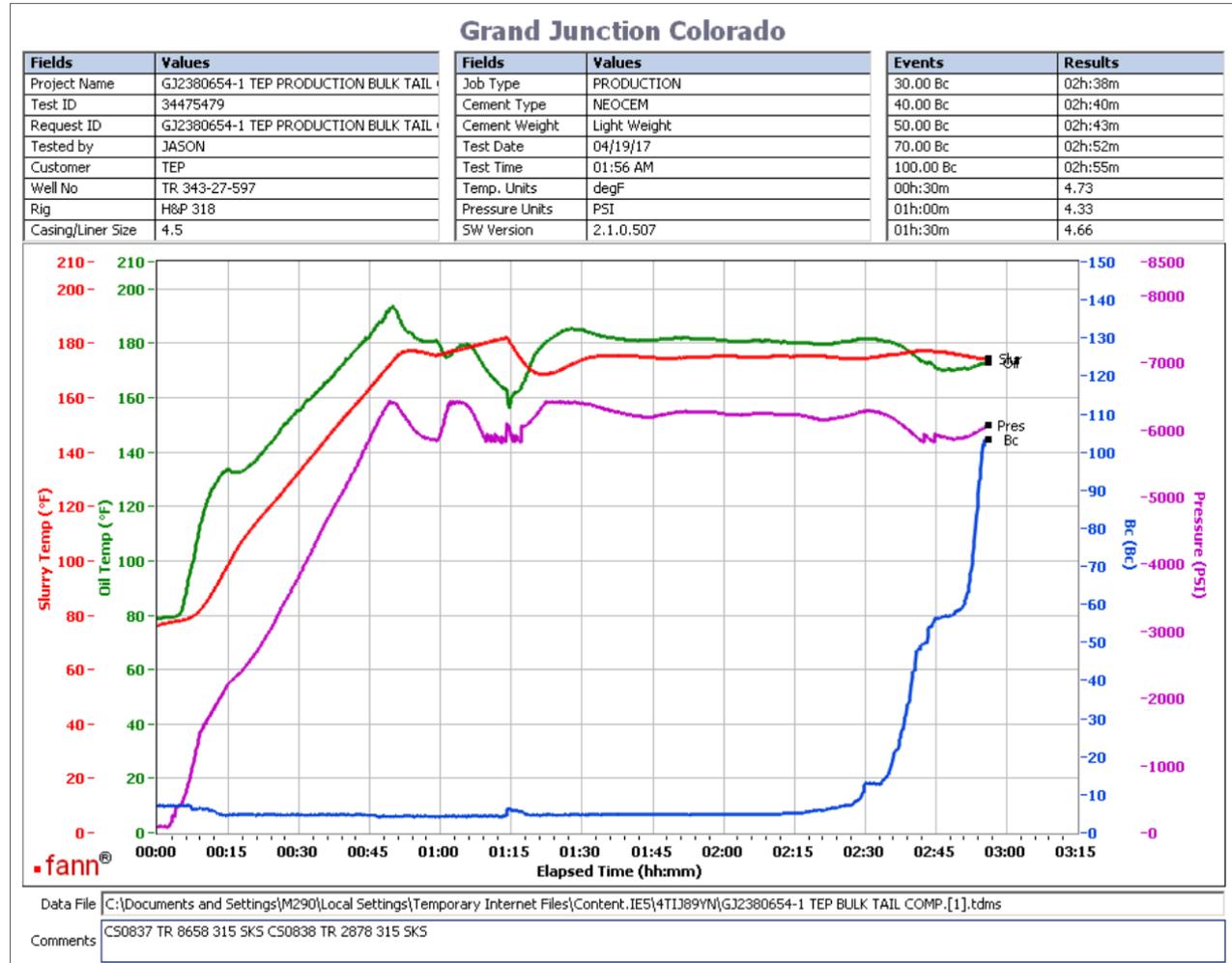
<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	Cement Properties		
		NeoCem Tail				Slurry Density	13	lbm/gal
						Slurry Yield	2.065	ft ³ /sack
						Water Requirement	9.429	gal/sack
						Total Mix Fluid	9.429	gal/sack
						Water Source	Fresh Water	
						Water Chloride		

This report is the property of Halliburton Energy Services and neither it nor any part thereof, nor a copy thereof, is to be published or disclosed without first securing the expressed written approval of Halliburton. It may however be used in the course of regular business operations by any person or concern receiving such report from Halliburton. This report is for information purposes only and the content is limited to the sample described. Halliburton makes no warranties, expressed or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage regardless of cause, including any act or omission of Halliburton, resulting from the use hereof.

Thickening Time - ON-OFF-ON

18/APR/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)
175	6110	49	2:38	2:43	2:52	2:55	7	59	15	6



Total sks = 830
 CS0838 TR 8658 315 SKS
 CS0839 TR 2878 315 SKS
 Composite
 Deflected 4-- > 6

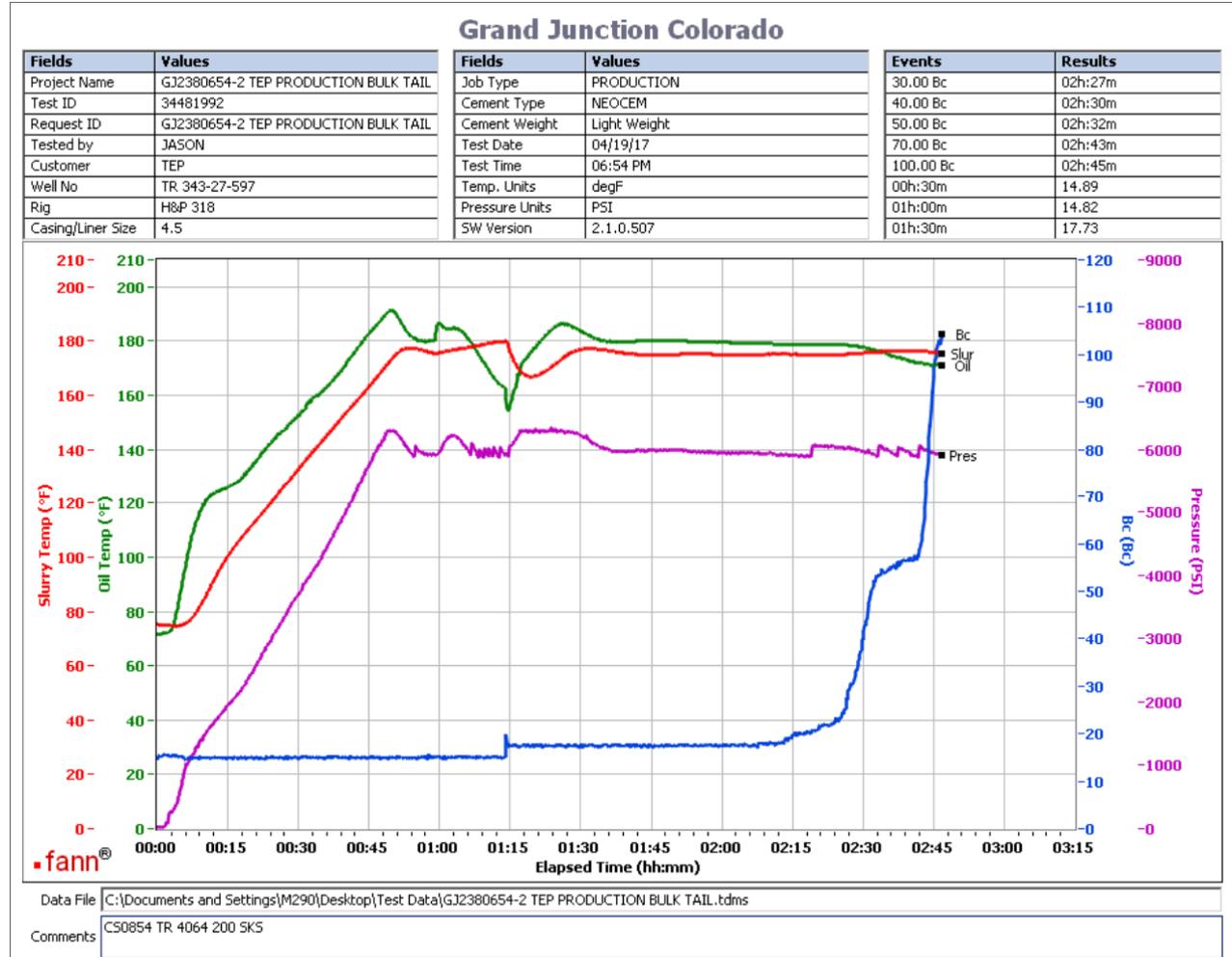
This report is the property of Halliburton Energy Services and neither it nor any part thereof, nor a copy thereof, is to be published or disclosed without first securing the expressed written approval of Halliburton. It may however be used in the course of regular business operations by any person or concern receiving such report from Halliburton. This report is for information purposes only and the content is limited to the sample described. Halliburton makes no warranties, expressed or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage regardless of cause, including any act or omission of Halliburton, resulting from the use hereof.

Operation Test Results Request ID 2380654/2

Thickening Time - ON-OFF-ON

20/APR/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)
175	6110	49	2:27	2:32	2:43	2:45	15	59	15	20



Total sks = 830
 CS0854 TR 4064 200 SKS
 Deflection 15 - 20

This report is the property of Halliburton Energy Services and neither it nor any part thereof, nor a copy thereof, is to be published or disclosed without first securing the expressed written approval of Halliburton. It may however be used in the course of regular business operations by any person or concern receiving such report from Halliburton. This report is for information purposes only and the content is limited to the sample described. Halliburton makes no warranties, expressed or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage regardless of cause, including any act or omission of Halliburton, resulting from the use hereof.