

HALLIBURTON

iCem[®] Service

Terra Energy Partners

For: Terra

Date: Sunday, October 01, 2017

SR 541-12 Production PJR

API# 05-045-23432-00

Sincerely,

Grand Junction Cement Engineering

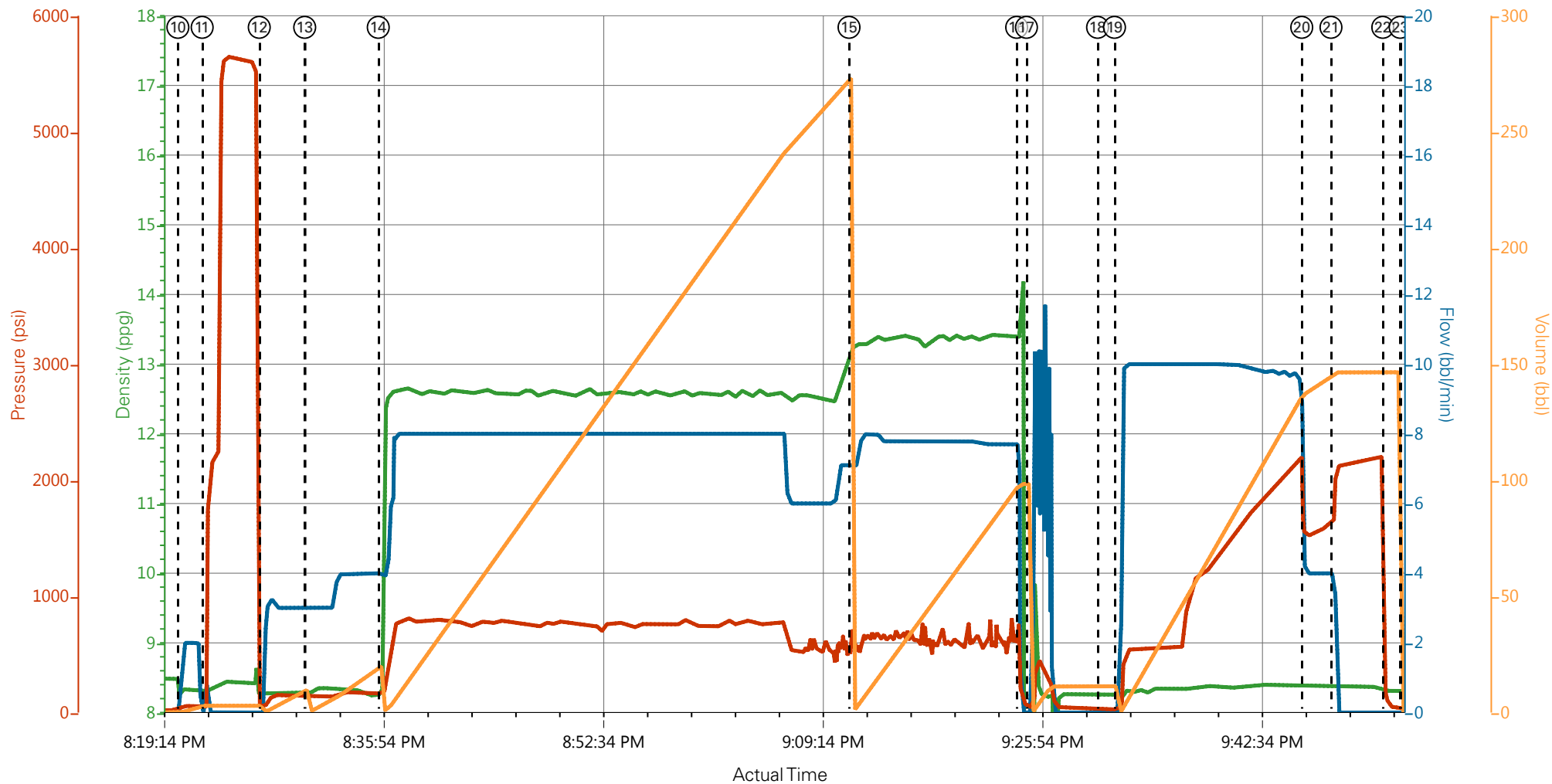
2.0 Real-Time Job Summary

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	10/1/2017	10:00:00	USER					ELITE #1, REQUESTED ON LOCATION TIME 1700
Event	2	Pre-Convoy Safety Meeting	10/1/2017	10:20:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	10/1/2017	16:00:00	USER					ARRIVED ON LOCATION 1 HOUR EARLY, RIG RUNNING CASING
Event	4	Meet With Company Rep	10/1/2017	16:15:00	USER					COMPANY REP OFFERED SDS, WATER TEST
Event	5	Assessment Of Location Safety Meeting	10/1/2017	16:30:00	USER					ALL HES EMPLOYEES
Event	6	Pre-Rig Up Safety Meeting	10/1/2017	16:45:00	USER					ALL HES EMPLOYEES
Event	7	Rig-Up Equipment	10/1/2017	17:00:00	USER					1 HT-400 PUMP TRUCK 1 660 BULK TRUC 1 SILO 1 F-550 PICKUP
Event	8	Pre-Job Safety Meeting	10/1/2017	19:00:00	USER					ALL HES EMPLOYEES AND RIG CREW RIG CIRCULATED @ 500 GPM PRIOR TO THE JOB
Event	9	Start Job	10/1/2017	20:18:00	COM5					TD: 9554 TP: 9547.65 SJ: 28.71 CSG: 4 1/2 11.6# P-110 OH: 8 3/4 SURFACE SHOE @ 1149 9 5/8 32.3# MUD WT: 9.7 PPG
Event	10	Prime Lines	10/1/2017	20:20:31	USER	8.33	2.0	61	3.0	PRIME LINES WITH 3 BBLs FRESH WATER
Event	11	Test Lines	10/1/2017	20:22:22	COM5	8.33	0.0	5650	3.0	PRESSURE TEST OK
Event	12	Pump Fresh Water Spacer	10/1/2017	20:26:42	COM5	8.33	3.0	140	10	PUMP 10 BBL FRESH WATER SPACER

Event	13	Pump Mud Flush III	10/1/2017	20:30:09	COM5	8.4	4.0	175	20	PUMP 20 BBL MUD FLUSH III SPACER
Event	14	Pump Lead Cement	10/1/2017	20:35:44	COM5	12.5	8.0	790	275	795 SKS 12.5 PPG 1.94 YIELD 9.6 GAL/SK LEAD CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	15	Pump Tail Cement	10/1/2017	21:11:28	COM5	13.3	8.0	670	81.7	265 SKS 13.3 PPG 1.73 YIELD 7.81 GAL/SK TAIL CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	16	Shutdown	10/1/2017	21:24:12	USER					SHUTDOWN TO CLEAN PUMPS AND LINES
Event	17	Clean Lines	10/1/2017	21:24:56	COM5	8.33			10	CLEAN PUMPS AND LINES TO THE PIT, RIG BLEW DOWN LINE FROM HEAD TO PIT WITH AIR AND REPRIMED WITH WATER
Event	18	Drop Top Plug	10/1/2017	21:30:20	COM5					PLUG AWAY NO PROBLEMS
Event	19	Pump Displacement	10/1/2017	21:31:37	COM5	8.4	10	2210	147.5	1 GAL MMCR 3#S BE-6 15 BAGS KCL, FRESH WATER DISPLACEMENT
Event	20	Slow Rate	10/1/2017	21:45:50	USER	8.4	4.0	1600	137	SLOW RATE TO BUMP PLUG
Event	21	Bump Plug	10/1/2017	21:48:03	COM5	8.4	4.0	2210	147.5	PSI BEFORE BUMPING PLUG @ 1600 BUMPED PLUG UP TO 2210 PSI
Event	22	Check Floats	10/1/2017	21:51:59	USER					FLOATS HELD, 1 BBL BACK TO DISPLACEMENT TANKS
Event	23	End Job	10/1/2017	21:53:18	COM5					MAINTAINED RETURNS THROUGHOUT JOB, PIPE RECIPROCATED THROUGHOUT JOB
Event	24	Pre-Rig Down Safety Meeting	10/1/2017	22:00:00	USER					ALL HES EMPLOYEES
Event	25	Rig-Down Equipment	10/1/2017	22:05:00	USER					
Event	26	Pre-Convoy Safety Meeting	10/1/2017	23:45:00	USER					ALL HES EMPLOYEES
Event	27	Crew Leave Location	10/2/2017	00:00:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT, DUSTIN SMITH AND CREW

TEP - YOUNBERG SR 541-12 - 4 1/2 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	⑧ Pre-Job Safety Meeting 8.29;0;28;21.4	⑮ Pump Tail Cement 13.23;7.1;571;0.1	②② Check Floats 8.31;0;122;146.5
② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a	⑨ Start Job 8.49;0;19;0	⑯ Shutdown 13.44;0;208;98.4	②③ End Job 8.31;0;32;0
③ Arrive At Loc n/a;n/a;n/a;n/a	⑩ Prime Lines 8.33;2;45;0.1	⑰ Clean Lines 0.06;0;44;98.4	②④ Pre-Rig Down Safety Meeting n/a;n/a;n/a;n/a
④ Meet With Company Rep n/a;n/a;n/a;n/a	⑪ Test Lines 8.3;0;50;2.9	⑱ Drop Top Plug 8.26;0;26;11.3	②⑤ Rig-Down Equipment n/a;n/a;n/a;n/a
⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a	⑫ Pump Fresh Water Spacer 8.26;0;45;0	⑲ Pump Displacement 8.26;0;27;4.92	②⑥ Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a
⑥ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a	⑬ Pump Mud Flush III 8.28;3;138;10.1	⑳ Slow Rate 8.37;4;1523;137.4	②⑦ Crew Leave Location n/a;n/a;n/a;n/a
⑦ Rig-Up Equipment n/a;n/a;n/a;n/a	⑭ Pump Lead Cement 8.27;4;159;0	⑳ Bump Plug 8.36;3.9;1768;146.3	

▼ **HALLIBURTON** | iCem® Service

Created: 2017-10-01 10:21:12, Version: 4.2.393

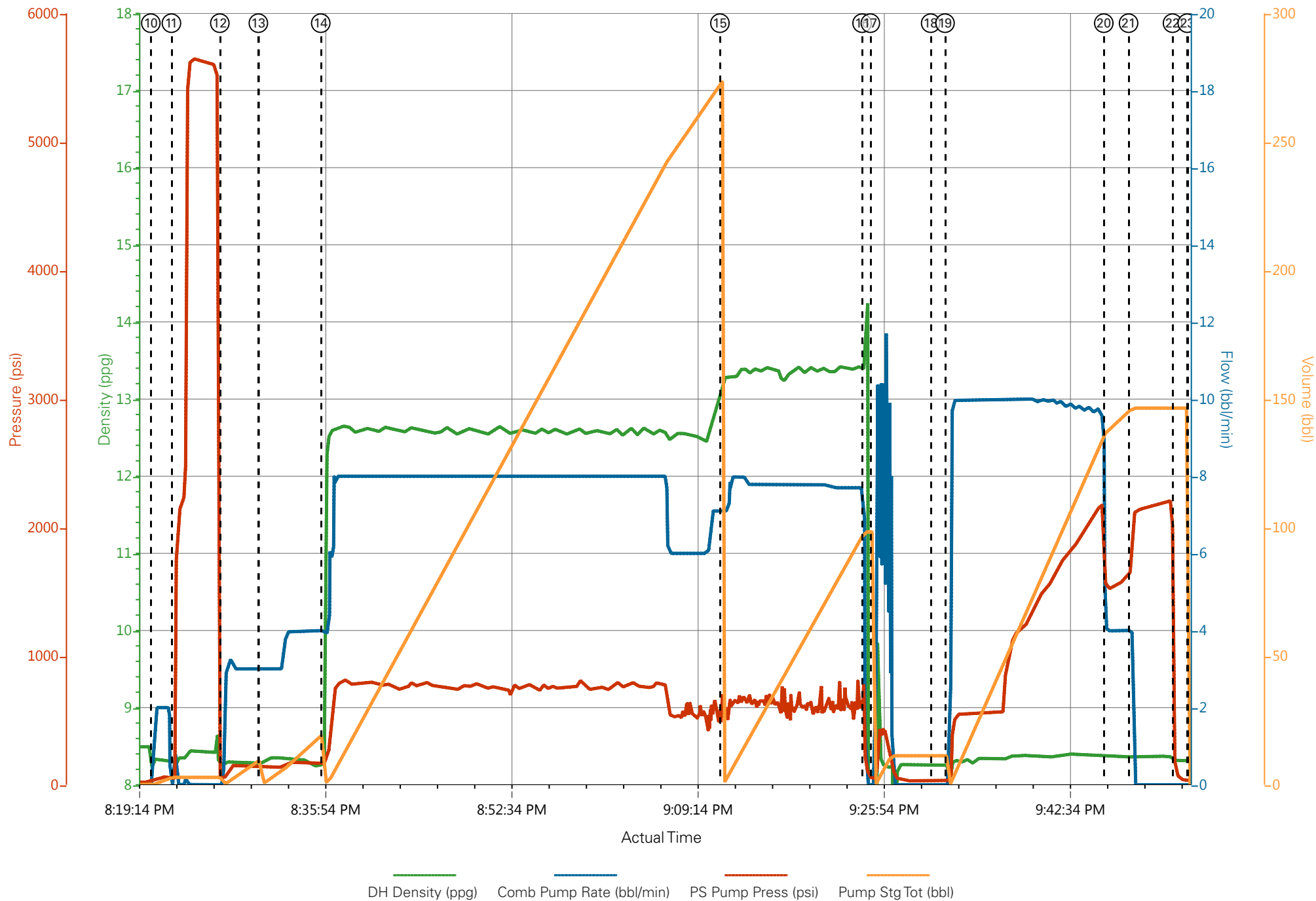
Edit

Customer: TEP ROCKY MOUNTAIN LLC
 Representative: CLAY ANDERWALD / JOSH PHILLIPS

Job Date: 10/1/2017 6:25:34 PM
 Sales Order #: 0904335069

Well: YOUNBERG SR 541-12
 ELITE # 1: DUSTIN SMITH / TRAVIS BROWN

TEP - YOUNBERG SR 541-12 - 4 1/2 PRODUCTION



Job Information

Request/Slurry	2419777/1	Rig Name	H&P 318	Date	28/SEP/2017
Submitted By	Aaron Katz	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Terra Energy Partners	Location	Garfield	Well	SR 541-12

Well Information

Casing/Liner Size	4.5 in	Depth MD	9594 ft	BHST	115°C / 239°F
Hole Size	8.75 in	Depth TVD	9388 ft	BHCT	76°C / 169°F
Pressure	5870 psi				

Drilling Fluid Information

Mud Supplier Name	Mud Trade Name	Density
-------------------	----------------	---------

Cement Information - Lead Design



Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.	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	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.

Operation Test Results Request ID 2419777/1

Thickening Time - ON-OFF-ON

29/SEP/2017

Test Temp (°F)	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)
169	5870	47	3:36	3:51	4:10	4:46	3	57	15	11

Total sks= 795

Composite:

CS2687, Trailer 2878, 397.5 sks

CS2689, Trailer 8678, 397.5 sks

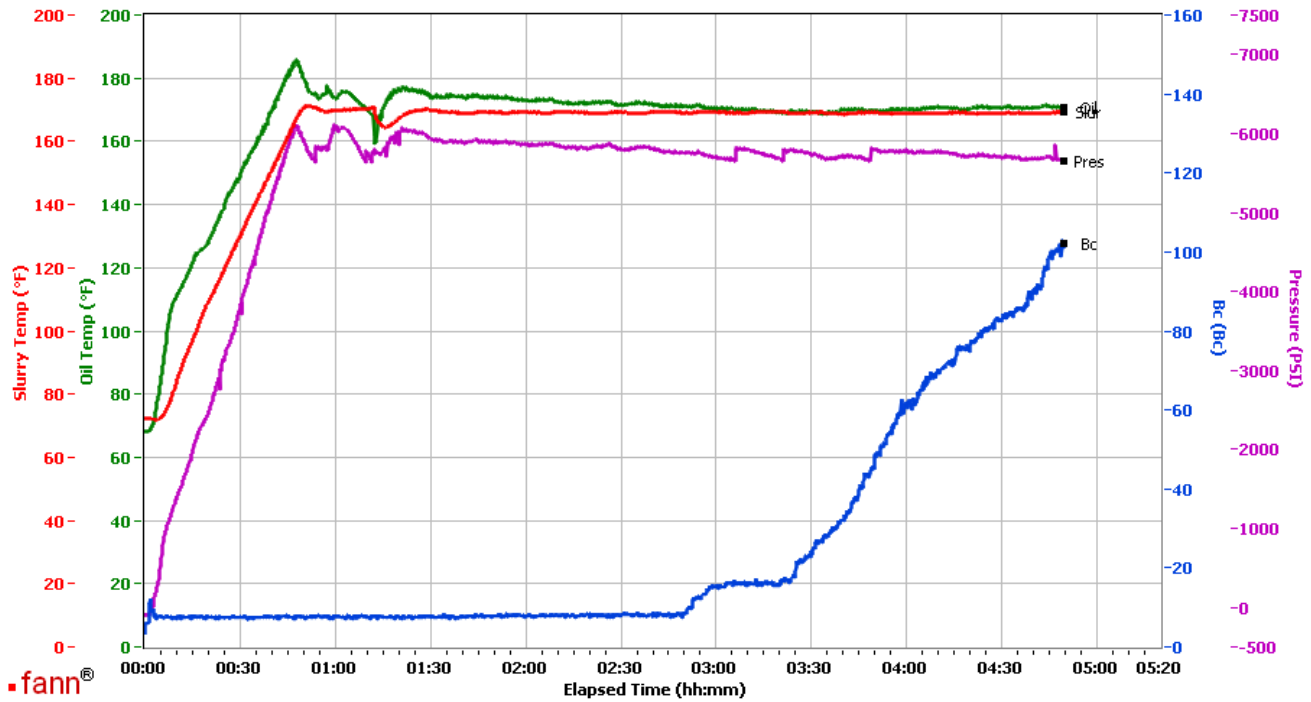
Deflected 8-- > 11

Grand Junction, Colorado

Fields	Values
Project Name	2419777-1 TERRA ENERGY BULK PRODUCTI
Test ID	34901282 - TT
Request ID	2419777-1
Tested by	CT
Customer	TERRA ENERGY
Well No	SR 541-12
Rig	H&P 318
Casing/Liner Size	4.5 INCH

Fields	Values
Job Type	PRODUCTION CASING
Cement Type	TYPE I-II
Cement Weight	Standard
Test Date	09/29/17
Test Time	07:08 PM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	03h:36m
40.00 Bc	03h:45m
50.00 Bc	03h:51m
70.00 Bc	04h:10m
100.00 Bc	04h:46m
00h:30m	7.60
01h:00m	8.06
01h:30m	7.47



Data File C:\Documents and Settings\M290\Desktop\Test Data\GJ2419777-1 TERRA BULK PRODUCTION LEAD.tdms

Comments CS2687, TRAILER 2878, 397.5 SKS - CS2689, TRAILER 8678, 397.5 SKS

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.

HALLIBURTON

Rockies, Grand Junction

Lab Results- Tail

Job Information

Request/Slurry	2419778/1	Rig Name	H&P 318	Date	28/SEP/2017
Submitted By	Aaron Katz	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Terra Energy Partners	Location	Garfield	Well	SR 541-12

Well Information

Casing/Liner Size	4.5 in	Depth MD	9594 ft	BHST	115°C / 239°F
Hole Size	8.75 in	Depth TVD	9388 ft	BHCT	76°C / 169°F
Pressure	5870 psi				

Drilling Fluid Information

Mud Supplier Name	Mud Trade Name	Density
-------------------	----------------	---------

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>	<u>Cement Properties</u>	
						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	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.

Operation Test Results Request ID 2419778/1

Thickening Time - ON-OFF-ON

29/SEP/2017

Test Temp (°F)	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)
169	5870	47	2:34	2:51	3:18	3:49	18	57	15	18

265 sks tail

CS2691, Trailer 1972, 265 sks

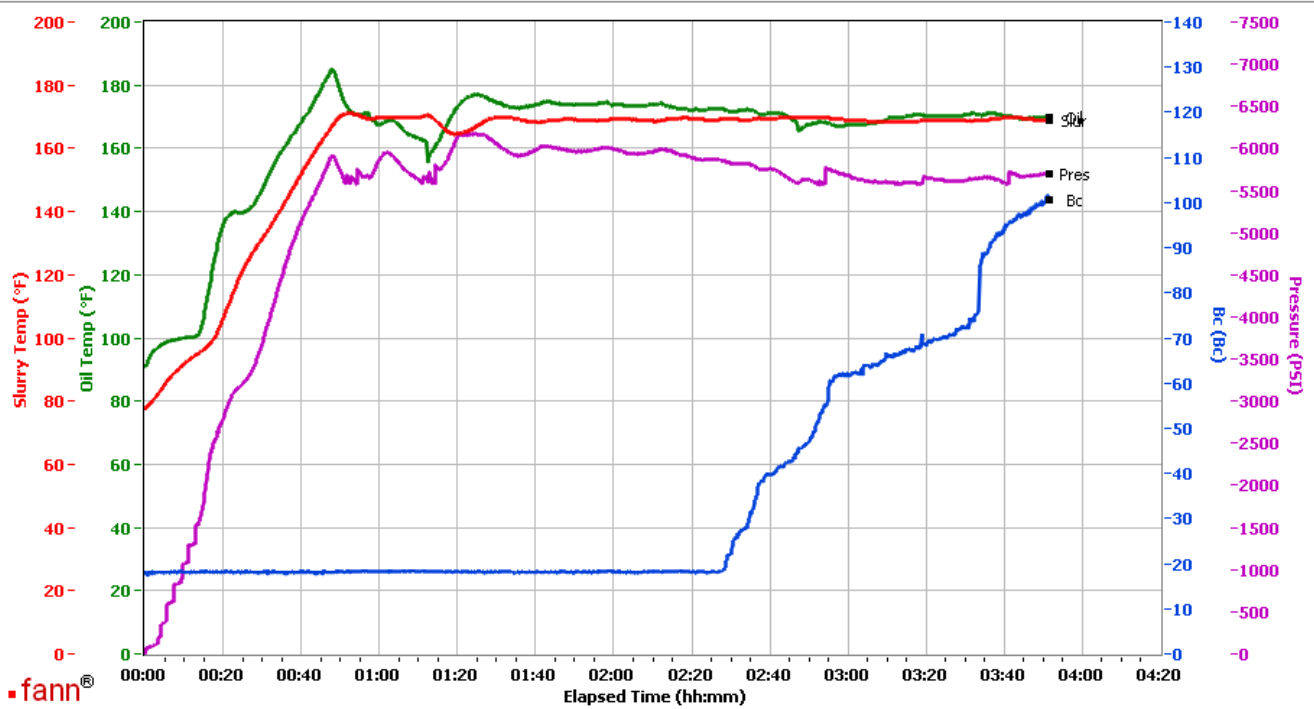
No deflection

Grand Junction Colorado

Fields	Values
Project Name	2419778-1 TERRA BULK PRODUCTION TAIL
Test ID	34901284 - TT
Request ID	2419778-1
Tested by	CT
Customer	TERRA ENERGY
Well No	SR 541-12
Rig	H&P 318
Casing/Liner Size	4.5 INCH

Fields	Values
Job Type	PRODUCTION CASING
Cement Type	MOUNTAIN G
Cement Weight	Standard
Test Date	09/29/17
Test Time	08:57 PM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	02h:34m
40.00 Bc	02h:41m
50.00 Bc	02h:51m
70.00 Bc	03h:18m
100.00 Bc	03h:49m
00h:30m	17.88
01h:00m	18.24
01h:30m	18.24



Data File C:\Documents and Settings\M290\Desktop\Test Data\GJ2419778-1 TERRA BULK PRODUCTION TAIL.tdms

Comments CS2691, TRAILER 1972, 265 SKS

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.