

HALLIBURTON

iCem[®] Service

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

For: Mark Mewshaw

Date: Friday, June 03, 2016

GM 43-8 Production

Job Date: Thursday, June 02, 2016

Sincerely,

Evan Russell

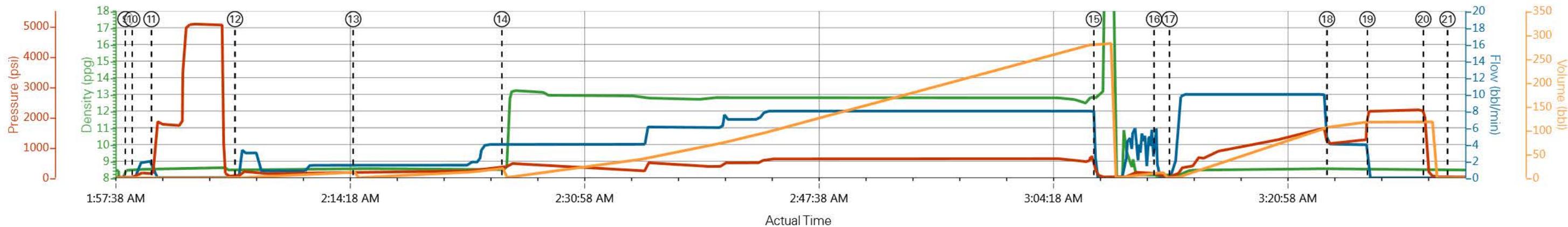
1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	6/1/2016	07:45:00	USER					Requested on Location @ 12:30
Event	2	Pre-Convoy Safety Meeting	6/1/2016	10:00:00	USER					
Event	3	Crew Leave Yard	6/1/2016	10:05:00	USER					1 Elite, 1 660, 1 pickup
Event	4	Arrive At Loc	6/1/2016	11:30:00	USER					Rig still running casing
Event	5	Assessment Of Location Safety Meeting	6/1/2016	11:45:00	USER					JSA completed - Customer offered/received SDS - water test pH 7.0, Cl <200, temp 68 degrees
Event	6	Pre-Rig Up Safety Meeting	6/1/2016	14:30:00	USER					
Event	7	Rig-Up Equipment	6/1/2016	14:45:00	USER					1 hardline to standpipe, manifold on ground, hardline to pit, water hoses to upright and day tank, bulk hoses to silo and 660.
Event	8	Pre-Job Safety Meeting	6/2/2016	01:30:00	USER					All HES personnel, rig crew, and company rep
Event	9	Start Job	6/2/2016	01:58:30	USER					TD 7247', TP 7240.5', SJ 29', OH 8.75", Csg 4.5" 11.6 lb/ft P-110, Mud 10.0 ppg.
Event	10	Prime Pumps	6/2/2016	01:58:59	USER	8.4	2	220	2	Fresh water
Event	11	Test Lines	6/2/2016	02:00:21	COM6	8.4	.5	5072	.5	Press held at 5072 psi
Event	12	Pump Spacer 1	6/2/2016	02:06:17	COM6	8.4	1.5	245	10	Fresh water

Event	13	Pump Spacer 2	6/2/2016	02:14:42	COM6	8.50	1.5	260	20	Mud Flush III
Event	14	Pump Cement	6/2/2016	02:25:16	COM6	12.7	8	670	268.1	805 Sks 12.7 ppg 1.87 yield 8.74 gal/sk
Event	15	Shutdown	6/2/2016	03:07:21	USER					Wash lines to pit
Event	16	Drop Top Plug	6/2/2016	03:11:38	COM6					Verify Plug Launched
Event	17	Pump Displacement	6/2/2016	03:12:44	COM6	8.45	10	1670	111.8	3 lbs BE-6, 1 gal MMCR, 2% KCl
Event	18	Other	6/2/2016	03:23:56	COM6	8.45	4.00	1270	102	Slow Rate 10 bbls prior to Calculated Displacement
Event	19	Bump Plug	6/2/2016	03:26:48	USER	8.50	4	2170	111.8	Plug Bumped at psi, Brought up to psi
Event	20	Check Floats	6/2/2016	03:30:47	USER					Floats held – 1 bbl back to the truck
Event	21	End Job	6/2/2016	03:32:30	COM6					Good Returns Throughout job, Pipe was reciprocated during cement
Event	22	Other	6/2/2016	03:41:16	USER					Rig Circulated 2 hrs prior to cement job at 16 bpm 1093 psi. Mud report PV 12 YP 21 Gel 8,12,15. Gas 63
Event	23	Pre-Rig Down Safety Meeting	6/2/2016	3:50:00	USER					40 lbs Sugar used, Bottom plug not used and removed from ticket. 7 add hrs charged
Event	24	Rig-Down Equipment	6/2/2016	4:00:00	USER					
Event	25	Pre-Convoy Safety Meeting	6/2/2016	4:30:00	USER					
Event	26	Crew Leave Location	6/2/2016	4:45:00	USER					Thank you for using Halliburton – Ryan Muhlestein and crew.

WPX Energy Rocky Mtn. - Federal GM 43-8 - Production



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

- | | | | | |
|--|--|-------------------------------|-----------------------------------|---|
| ① Call Out <i>n/a;n/a;n/a;n/a</i> | ⑥ Pre-Rig Up Safety Meeting <i>n/a;n/a;n/a;n/a</i> | ⑩ Test Lines 8.52;0.8;119;2.1 | ⑭ Drop Top Plug 8.16;5.8;161;10.2 | 21 End Job 8.45;0;26;0 |
| ② Pre-Convoy Safety Meeting <i>n/a;n/a;n/a;n/a</i> | ⑦ Rig-Up Equipment <i>n/a;n/a;n/a;n/a</i> | ⑫ Pump Spacer 1 8.48;0;64;0 | ⑮ Pump Displacement 7.83;1;38;0.1 | 22 Pre-Rig Down Safety Meeting <i>n/a;n/a;n/a;n/a</i> |
| ③ Crew Leave Yard <i>n/a;n/a;n/a;n/a</i> | ⑧ Pre-Job Safety Meeting 8.45;0;19;21.2 | ⑬ Pump Spacer 2 8.5;1.5;186;0 | ⑯ Slow Rate 8.53;4;1121;106.6 | 23 Rig-Down Equipment <i>n/a;n/a;n/a;n/a</i> |
| ④ Arrive At Loc <i>n/a;n/a;n/a;n/a</i> | ⑨ Start Job 8.47;0;15;0 | ⑰ Pump Cement 8.49;4;358;0 | ⑲ Bump Plug 8.5;0;2179;117.3 | 24 Pre-Convoy Safety Meeting <i>n/a;n/a;n/a;n/a</i> |
| ⑤ Assessment Of Location Safety Meeting <i>n/a;n/a;n/a;n/a</i> | ⑪ Prime Pumps 8.49;0;33;0 | ⑱ Shutdown 12.71;0;148;282 | 20 Check Floats 8.48;0;1595;117.3 | 25 Crew Leave Location <i>n/a;n/a;n/a;n/a</i> |

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Created: 2016-06-01 13:35:29, Version: 4.2.393

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Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 6/2/2016 12:57:23 AM

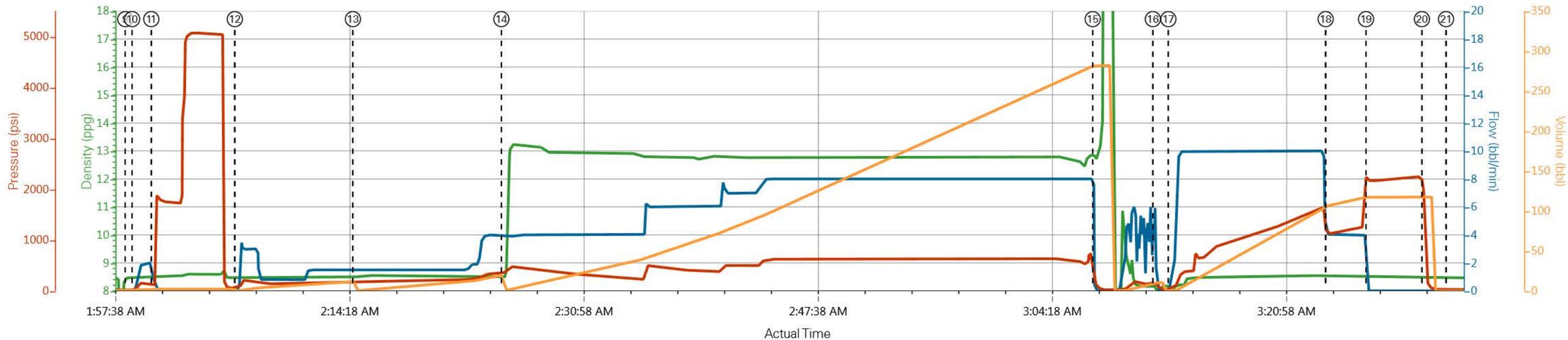
Well: Fed GM 43-8

Representative: Ted Ragsdale

Sales Order #: 903343367

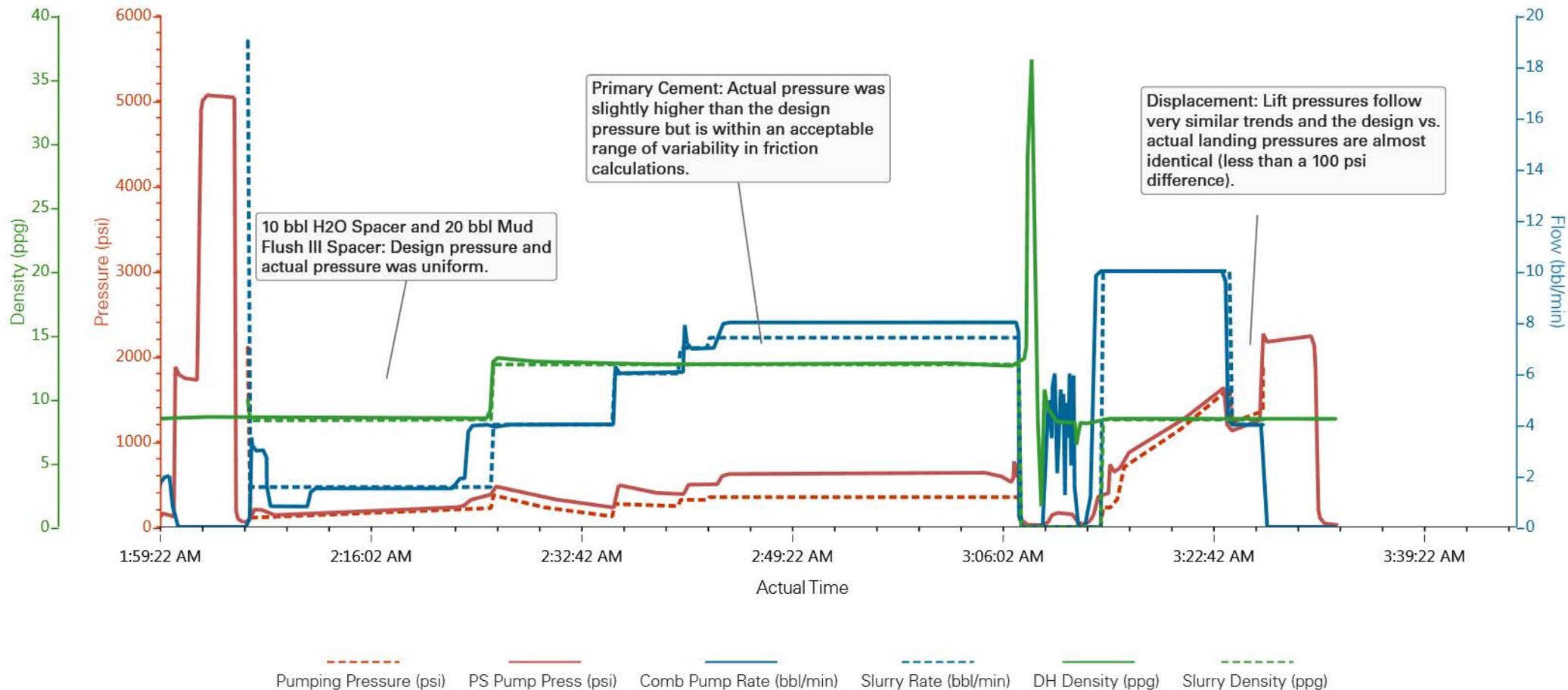
Elite 4: Muhlestein/Kukus

WPX Energy Rocky Mtn. - Federal GM 43-8 - Production



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

GM 43-8 Production Re-Calculation



Job Information

Request/Slurry	2322399/3	Rig Name	H&P 318	Date	31/MAY/2016
Submitted By	Evan Russell	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	WPX Energy, Inc.	Location	Garfield	Well	GM 43-8

Well Information

Casing/Liner Size	4.5 in	Depth MD	7219 ft	BHST	88°C / 190°F
Hole Size	8.75 in	Depth TVD	6471 ft	BHCT	52°C / 126°F
Pressure	3830 psi				

Drilling Fluid Information

Mud Supplier Name	Mud Trade Name	Density
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Cement Information - Primary Design

Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.	Cement Properties	
NeoCem	GJ1					Slurry Density	12.7 lbm/gal
						Slurry Yield	1.869 ft ³ /sack
						Water Requirement	8.744 gal/sack
						Total Mix Fluid	8.744 gal/sack
8.74	gal/sack	Fresh Water	Lab	12.03.13			
		Bentonite Wyoming - PB	Bulk Blend	31.05.16	Tank 17		
		Econolite (Powder - PB)	Bulk Blend	31.05.16	U052815	Water Source	Fresh Water
		Na ₂ SO ₄ (Sodium Sulfate) Salt	Bulk Blend	31.05.16	100615	Water Chloride	
		HALAD-344 (PB)	Bulk Blend	31.05.16	15062040		
		NaCl (Sodium Chloride) Salt	Bulk Blend	31.05.16	Tank 14		
		HALAD-567	Bulk Blend	31.05.16	081115-139		
		Fe-2 (citric acid)	Bulk Blend	31.05.16	G84M308K5B		

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Operation Test Results Request ID 2322399/3

Thickening Time

01/JUN/2016

Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	40 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)
126	3830	35	9	5:02	5:14	5:16	5:22	5:32

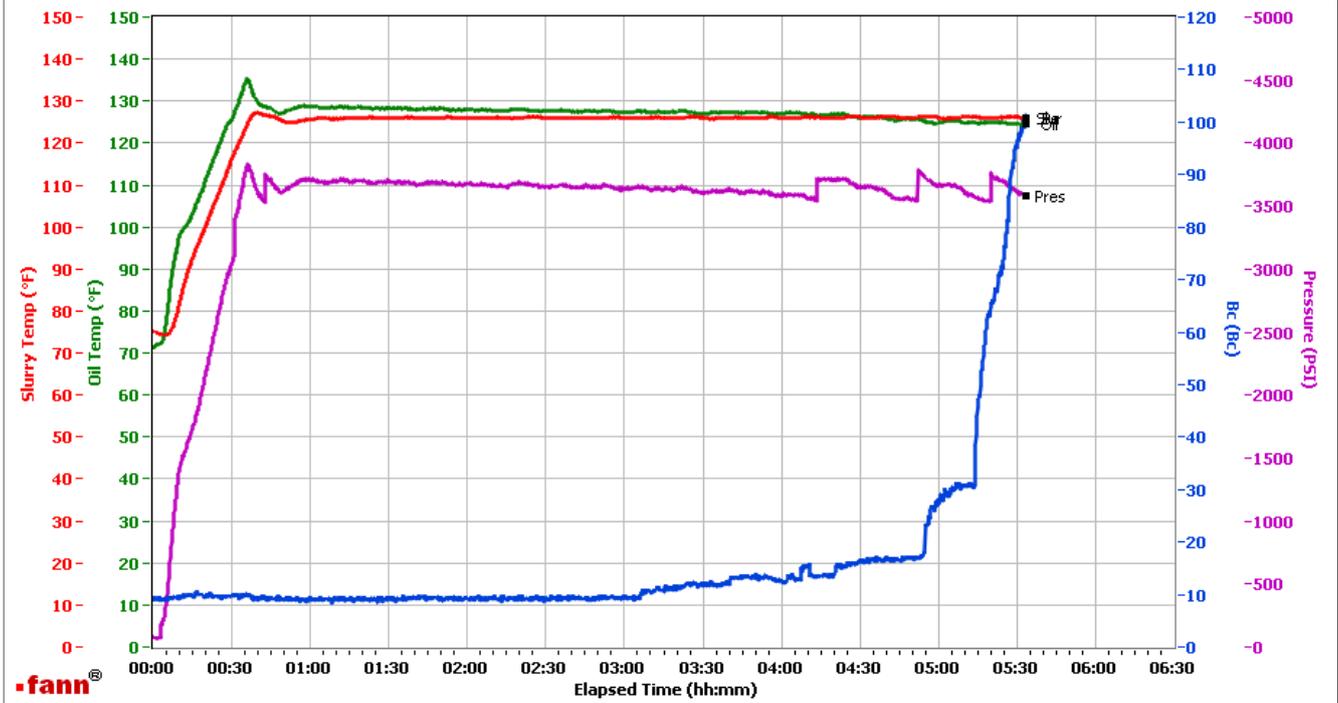
CS0435 TR 7094: 205 sacks of 805 total sacks

Grand Junction Colorado

Fields	Values
Project Name	GJ2322399-3 TERRA PRODUCTION BULK PR
Test ID	GJ2322399-3 TERRA
Request ID	
Tested by	JASON
Customer	TERRA
Well No	GM 43-8
Rig	H&P 318
Casing/Liner Size	4.5

Fields	Values
Job Type	PRODUCTION
Cement Type	
Cement Weight	Light Weight
Test Date	06/01/16
Test Time	06:40 PM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	05h:02m
40.00 Bc	05h:14m
50.00 Bc	05h:16m
70.00 Bc	05h:22m
100.00 Bc	05h:32m
00h:30m	9.96
01h:00m	8.67
01h:30m	9.28



Data File C:\Documents and Settings\Administrator\Local Settings\Temporary Internet Files\Content.IE5\AFGSUB25\GJ2322399-3 TERRA BULK PRIMARY RE-TEST[1].tdms
 Comments CS0435 TR 7094 205 SKS

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Operation Test Results Request ID 2322399/2

UCA Comp. Strength (Composite sample of all 3 trucks)

03/JUN/2016

End Temp (°F)	Pressure (psi)	50 psi (hh:mm)	100 psi (hh:mm)	500 psi (hh:mm)	1000 psi(hh:mm)	12 hr CS (psi)	24 hr CS (psi)	48 hr CS (psi)	End CS (psi)	End Time (hrs)
190	3000	6:45	7:05	8:43	9:46	1569	1966	2292	2444	72

Thickening Time

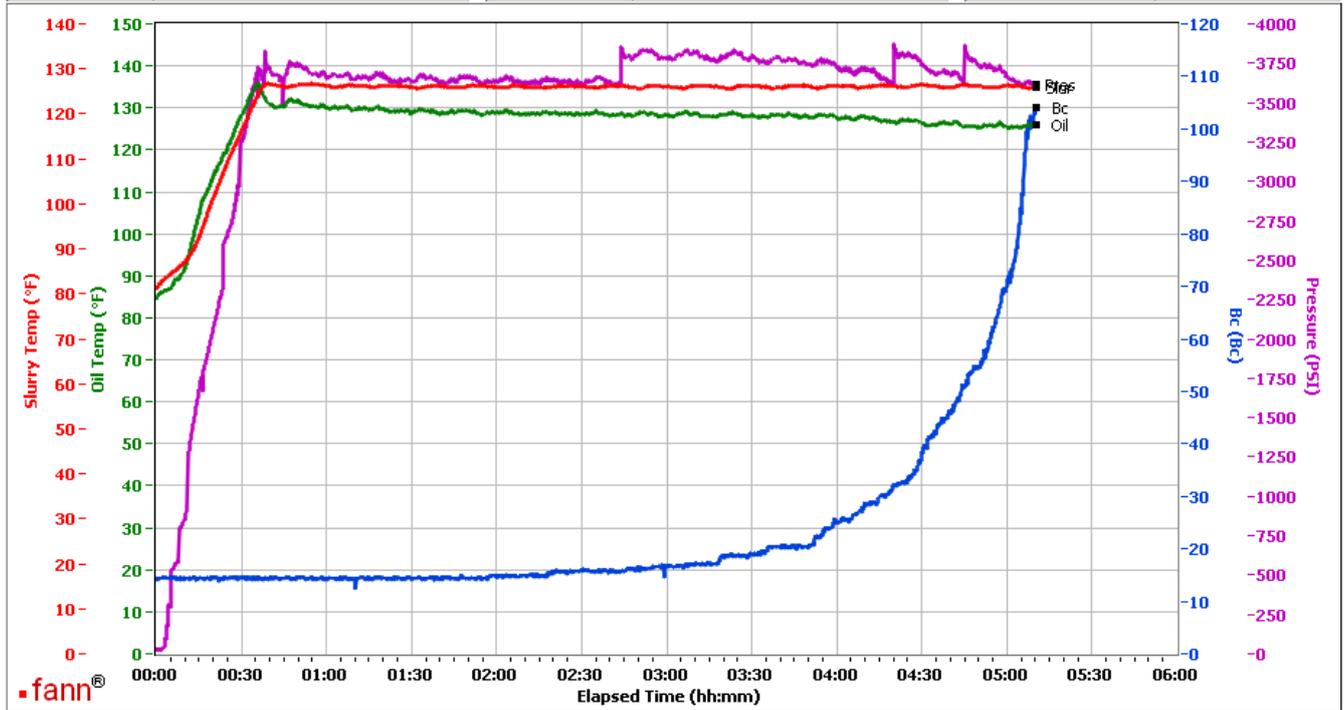
01/JUN/2016

Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	40 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)
126	3830	35	14	4:15	4:31	4:44	5:00	5:07

CS0433 TR 813: 300 sacks of 805 sacks

Grand Junction, Colorado

Fields	Values	Fields	Values	Events	Results
Project Name	GJ2322399-2 WPX BULK PRIMARY	Job Type		30.00 Bc	04h:15m
Test ID	GJ2322399-2 WPX BULK PRIMARY	Cement Type		40.00 Bc	04h:31m
Request ID		Cement Weight	Standard	50.00 Bc	04h:44m
Tested by	DEBA	Test Date	05/31/16	70.00 Bc	05h:00m
Customer	WPX	Test Time	09:50 PM	100.00 Bc	05h:07m
Well No		Temp. Units	degF	00h:30m	14.96
Rig		Pressure Units	PSI	01h:00m	14.44
Casing/Liner Size		SW Version	2.1.0.507	01h:30m	14.51



Data File C:\Documents and Settings\M290\Desktop\Test Data\GJ2322399-2 WPX BULK PRIMARY1.tdms
 Comments CS0433

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Operation Test Results Request ID 2322399/1

Thickening Time

31/MAY/2016

Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	40 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)
126	3830	35	12	4:33	4:44	5:09	5:09	5:09

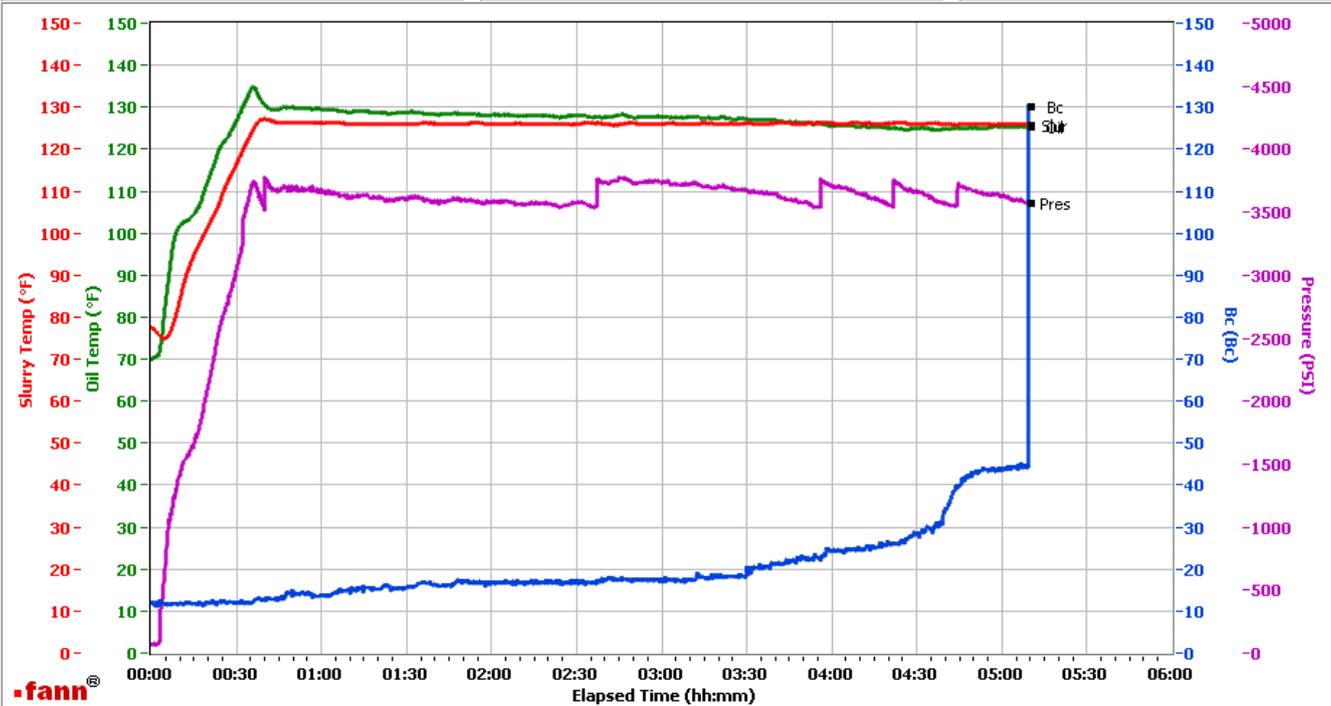
CS0432 TR 1513: 300 sacks of 805 total sacks

Grand Junction Colorado

Fields	Values
Project Name	GJ2322399-1 TERRA PRODUCTION BULK PR
Test ID	GJ2322399-1 TERRA
Request ID	
Tested by	JASON
Customer	TERRA
Well No	GM 43-8
Rig	H&P 318
Casing/Liner Size	4.5

Fields	Values
Job Type	PRODUCTION
Cement Type	
Cement Weight	Light Weight
Test Date	05/31/16
Test Time	07:29 PM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	04h:33m
40.00 Bc	04h:44m
50.00 Bc	05h:09m
70.00 Bc	05h:09m
100.00 Bc	05h:09m
00h:30m	12.46
01h:00m	14.14
01h:30m	15.89



Data File C:\Documents and Settings\Administrator\Desktop\Test Data\GJ2322399-1 TERRA BULK PRIMARY.tdms

Comments CS0432 TR 1513 300 SKS

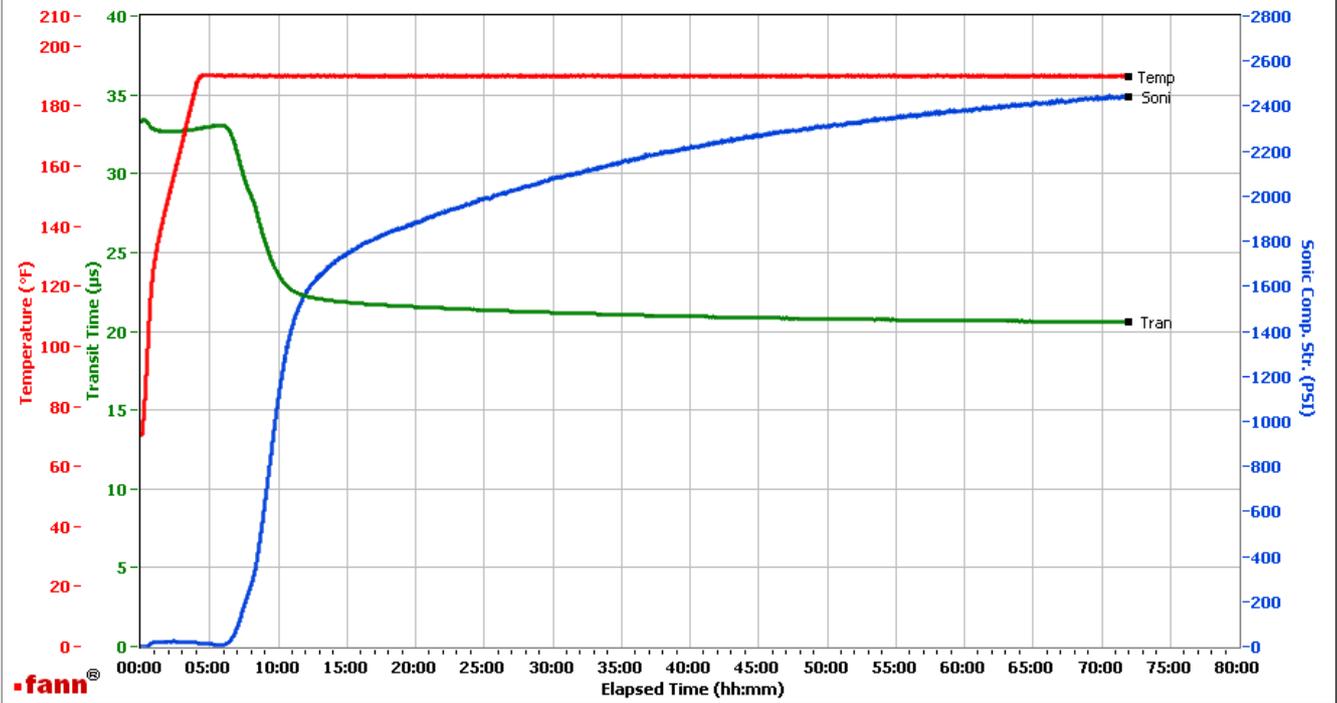
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GRAND JUNCTION, COLORADO USA

Fields	Values
Project Name	2322399-2
Test ID	2322399-2 WPX GM COMPOSITE BULK UCA
Request ID	
Tested by	JASON
Customer	WPX
Well No	GM 43-8
Rig	
Casing/Liner Size	

Fields	Values
Job Type	
Cement Type	
Cement Weight	Light Weight
Test Date	5/31/2016
Test Time	12:58 PM
Temp. Units	degF
Pressure Units	PSI

Events	Results
50.00 PSI	06h:45m
100.00 PSI	07h:05m
500.00 PSI	08h:43m
1000.00 PSI	09h:46m
12h:00m	1569.02
24h:00m	1965.68
48h:00m	2292.09
72h:00m	2444.00



Data File: C:\Documents and Settings\UCA\My Documents\2016\2322399-2 WPX GM COMPOSITE BULK UCA @190.tdms
 Comments: CS0432 AND cs0433 COMPOSITE

*UCA sample of all three tucks

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