
WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

**FEDERAL 298-34-1
SULFUR CREEK
Rio Blanco County , Colorado**

**Squeeze Perfs
10-Feb-2014**

Post Job Report

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 2934841	Quote #:	Sales Order #: 901102072
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Customer Rep:		
Well Name: FEDERAL	Well #: 298-34-1	API/UWI #:	
Field: SULFUR CREEK	City (SAP): RANGELY	County/Parish: Rio Blanco	State: Colorado
Contractor: WPX	Rig/Platform Name/Num: Workover		
Job Purpose: Squeeze Perfs			
Well Type: Development Well	Job Type: Squeeze Perfs		
Sales Person: MAYO, MARK	Srvc Supervisor: PONDER, THOMAS	MBU ID Emp #:	427112

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BLANCHETTE, JAMES George	6	371360	BROWN, JUSTIN Michael	27	549296	LAULAINEN, ROGER Edward	24	524413
PONDER, THOMAS Lynn	24	427112	WOLFE, JON P	27	485217			

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10567589C	60 mile	11006314	60 mile	11021972	60 mile	11583926	60 mile
11808829	60 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
02/07/2014	3	2	02/07/2014	8	4	02/08/2014	8	4

TOTAL Total is the sum of each column separately

Job

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	07 - Feb - 2014	01:00	MST
Form Type		BHST	Job Started	07 - Feb - 2014	14:00	MST
Job depth MD	740. ft	Job Depth TVD	Job Started	07 - Feb - 2014	15:27	MST
Water Depth		Wk Ht Above Floor	Job Completed	10 - Feb - 2014	12:43	MST
Perforation Depth (MD)	From	To	Departed Loc	10 - Feb - 2014	15:00	MST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
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Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
CALCIUM CHLORIDE, PELLET	2	SK		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

Fluid Data

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk

Stage/Plug #: 1

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water		14.00	bbl	8.33	.0	.0	.0	
2	15.8 ppg PlugCem	PLUGCEM (TM) SYSTEM (452969)	490	sacks	15.8	1.15	5.01		5.01
	2 %	CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
	5.01 Gal	FRESH WATER							
3	Displacement Fluid		1.00	bbl	8.34	.0	.0	.0	
Calculated Values		Pressures		Volumes					
Displacement		Shut In: Instant		Lost Returns		Cement Slurry	93.9	Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement		Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	153.1
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount	0 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature					

The Road to Excellence Starts with Safety

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Field: SULFUR CREEK	City (SAP): RANGELY	County/Parish: Rio Blanco	State: Colorado
Legal Description:			
Lat:	Long:		
Contractor: WPX	Rig/Platform Name/Num: Workover		
Job Purpose: Squeeze Perfs	Ticket Amount:		
Well Type: Development Well	Job Type: Squeeze Perfs		
Sales Person: MAYO, MARK	Srv Supervisor: PONDER, THOMAS	MBU ID Emp #: 427112	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	02/07/2014 01:00							ELITE # E3
Depart Yard Safety Meeting	02/07/2014 04:30							SAFETY MEETING WITH ALL HES
Arrive At Loc	02/07/2014 14:00							HES ARRIVED ONTIME AND RIG WAS IN THE HOLE WITH TUBING READY TO PUMP
Assessment Of Location Safety Meeting	02/07/2014 14:10							ALL HES EMPLOYEES
Pre-Rig Up Safety Meeting	02/07/2014 14:15							ALL HES EMPLOYEES
Rig-Up Equipment	02/07/2014 14:20							1 450 PICK UP TRUCK 1 HT-400 PUMP TRUCK 1 660 BULK TRUCK RIG UP IRON TO RIG FLOOR , WASH UP TANK, SUCTION HOSE TO FRESH WATER FRAC TANK, BULK LINE TO BULK TRUCK
Pre-Job Safety Meeting	02/07/2014 15:10							ALL PERSONNEL ON LOCATION
Start Job	02/07/2014 15:27							TUBING: 2 3/8 4.6# SF CSG: 9 5/8 36# @ 625 INT CSG: 7" 26# PRO CSG: 4 1/2 10.6# TUBING SET @ 740' PERF@ 675' CO REP REQUESTED FOR A 315' CMT PLUG
Pressure Test	02/07/2014 15:34					2842.0		PRESSURE TEST OK
Pump Spacer	02/07/2014 15:44		2	13.7	13.7		77.0	FRESH WATER SPACER

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Tail Cement	02/07/2014 15:52		2	20.2	20.2		52.0	SQUEEZE CEM 99 SKS 15.8 PPG 1.15 YEILD 5 GAL / SK TAIL CEMENT WEIGHT VERIFIED VIA MUD SCALES THROUGH OUT TAIL CEMENT HES ADDED 2 BAGS OF CALCIUM CLORIDE WHILE PUMPING DOWN HOLE PER CO REP REQUEST
Pump Displacement	02/07/2014 16:01		2	1	1		20.0	FRESH WATER DISPLACEMENT HES SHUTDOWN EARLY PER CO REP REQUEST
Shutdown	02/07/2014 16:02							SHUTDOWN
Other	02/07/2014 16:03							RIG PULL OUT OF HOLE WITH TUBING
End Job	02/07/2014 16:04							WELL HAD GOOD RETURNS PLUG BALANCED RIG USED NO SUGAR
Pre-Rig Down Safety Meeting	02/07/2014 16:15							ALL HES EMPLOYEES
Rig-Down Equipment	02/07/2014 16:20							RIG DOWN RIG FLOOR, RACK UP IRON ON GROUND, SUCTION HOSE, BULK LINES, WASH UP PUMP
Pre-Convoy Safety Meeting	02/07/2014 16:50							ALL HES EMPLOYEES
Crew Leave Location	02/07/2014 17:00							THANK YOU FOR USING HALLIBURTON CEMENT CHRIS KUKUS AND CREW
Call Out	02/08/2014 02:30							SECOND CREW CALLED OUT
Crew Leave Yard	02/08/2014 04:00							ALL HES PRESENT FOR PRE-CONVOY SAFETY HUDDLE
Arrive At Loc	02/08/2014 06:30							RIG RAN IN TO TAG PLUG @ 0700, TAGGED CEMENT AT 683', 8' BELOW PERFORATIONS

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Other	02/08/2014 06:58							RIG POOH WITH TUBING, ALL STANDS PULLED DRY
Assessment Of Location Safety Meeting	02/08/2014 07:00							TBG- 2 3/8" 4.7# SET @ 675', OPEN HOLE- 8 3/4", SURFACE CASING- 9 5/8" 36# H-40 SET @ 625', INTERMEDIATE CASING- 7" 26#, PRODUCTION CASING- 4 1/2" 10.5#
Rig-Up Equipment	02/08/2014 07:30							1-550 PICKUP, 1-ELITE PUMP, 1-660 CUFT BULK TRUCK, EQUIPMENT WAS ON LOCATION AND PARTIALLY RIGGED UP
Safety Meeting	02/08/2014 08:30							ALL HES PRESENT, RIG CREW PRESENT, RIG FILLED WELL THROUGH ALL CASINGS
Start Job	02/08/2014 08:59		1	2		20.0		FILL LINES
Test Lines	02/08/2014 09:06		0.5	0.5		3660.0		PRESSURE TEST OK, NO LEAKS IN THE LINES
Pump Spacer	02/08/2014 09:15		2	7		107.0		FRESH WATER, RIG PUMPED THROUG CASING VALVE UNTIL CIRCULATION WAS ESTABLISHED BEFORE HES STARTED SPACER TO TRY AND MAINTAIN FULL CIRCULATION TO HELP BALANCE PLUG
Pump Cement	02/08/2014 09:26		2.2	16.4		125.0		80 SKS 15.8 PPG 1.15 FT3/SK 5.01 GAL/SK 3% CaCl2 USED 5 SKS
Pump Displacement	02/08/2014 09:34		2.2	1.6		25.0		FRESH WATER
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

Shutdown	02/08/2014 09:35							SHUTDOWN AT CALCULATED DISPLACEMENT, WELL WAS ON A VACUUM TOOK 2 MORE BBLS OF WATER OUT OF MEASURING TANKS BEFORE PULLING TUBING
End Job	02/08/2014 09:37							WAIT 4 HOURS ON CEMENT, WILL DECIDE WHAT TO DO NEXT AFTER ATTEMPTING TO TAG CEMENT
Comment	02/08/2014 14:00							TAGGED CEMENT AT 683' DID NOT GAIN ANY HEIGHT FROM PLUG, WILL PUMP ANOTHER 250' PLUG AS PER CUSTOMER REQUEST
Safety Meeting	02/08/2014 14:30							ALL HES PRESENT, RIG CREW PRESENT, RIG FILLED WELL THROUGH ALL CASINGS
Start Job	02/08/2014 14:47		1	2		28.0		FILL LINES
Test Lines	02/08/2014 14:48		0.5	0.5		2800. 0		PRESSURE TEST GOOD, NO LEAKS IN THE LINES
Pump Spacer	02/08/2014 14:53		3.2	8		330.0		FRESH WATER, RIG PUMPED THROUG CASING VALVE UNTIL CIRCULATION WAS ESTABLISHED BEFORE HES STARTED SPACER TO TRY AND MAINTAIN FULL CIRCULATION TO HELP BALANCE PLUG
Pump Cement	02/08/2014 15:02		3.2	16.4		335.0		80 SKS 15.8 PPG 1.15 FT3/SK 5.01 GAL/SK 3% CaCl2 USED 5 SKS
Pump Displacement	02/08/2014 15:08		1	1.6		50.0		FRESH WATER
Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

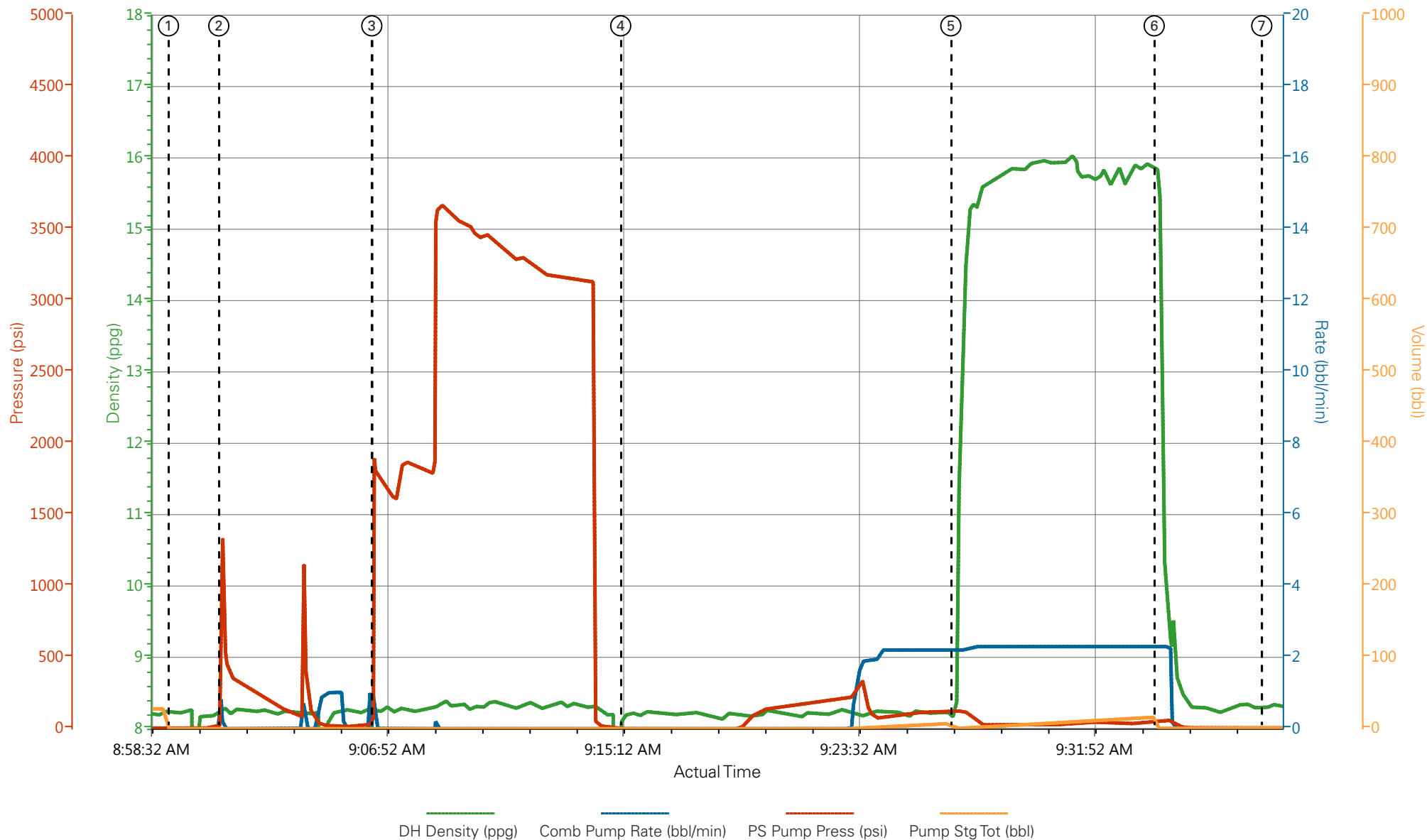
Shutdown	02/08/2014 15:08							SHUTDOWN AT CALCULATED DISPLACEMENT, WELL WAS ON A VACUUM TOOK 2 MORE BBLS OF WATER OUT OF MEASURING TANKS BEFORE PULLING TUBING
Other	02/08/2014 15:09							RIG POOH WITH TUBING, ALL STANDS PULLED DRY
End Job	02/08/2014 15:10							CREW REMAINED ON LOCATION THROUGH THE NIGHT TO BE READY NEXT MORNING
Comment	02/09/2014 07:00							TAGGED CEMENT AT 683' DID NOT GAIN ANY HEIGHT FROM PLUG, WILL PUMP ANOTHER 250' PLUG AS PER CUSTOMER REQUEST
Safety Meeting	02/09/2014 08:00							ALL HES PRESENT, RIG CREW PRESENT, RIG FILLED WELL THROUGH ALL CASINGS
Start Job	02/09/2014 08:13		1	2		18.0		FILL LINES
Test Lines	02/09/2014 08:15		0.5	0.5		3511. 0		PRESSURE TEST GOOD, NO LEAKS IN THE LINES
Pump Spacer	02/09/2014 08:25		1	7		.0		FRESH WATER
Pump Cement	02/09/2014 08:29		1	16.4		63.0		80 SKS 15.8 PPG 1.15 FT3/SK 5.01 GAL/SK 4% CaCl2 USED 6 SKS, USED REMAINING 40 SKS OF CEMENT ON THE BULK TRUCK, THEN USED CEMENT FROM THE BULK TRUCK FROM PRIOR PTA ON THE GOVERNMENT WELL
Pump Displacement	02/09/2014 08:40		1	1.6		.0		FRESH WATER, DID NOT HAVE ANY RETURNS UNTIL WE WENT TO DISPLACEMENT

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Shutdown	02/09/2014 08:40							SHUTDOWN AT CALCULATED DISPLACEMENT, WELL WAS ON A VACUUM TOOK 3/4 BBL OF WATER OUT OF MEASURING TANKS BEFORE PULLING TUBING
Other	02/09/2014 08:41							RIG POOH WITH TUBING, ALL STANDS PULLED DRY
End Job	02/09/2014 08:42							WAIT 4 HOURS ON CEMENT, WILL DECIDE WHAT TO DO NEXT AFTER ATTEMPTING TO TAG CEMENT
Comment	02/09/2014 12:30							TAGGED CEMENT @ 683', WENT TO CIRCULATE WELL THROUGH 4 1/2" CASING STRING THROUGH 9 5/8" CASING AND PRESSURED UP TO 500 PSI, POOH WITH TUBING, PRESSURED UP CASING TO 1700 PSI, PRESSURE BROKE OFF, RIG PUMP HAD AN INJECTION RATE OF 2 BPM @ 700 PSI
Safety Meeting	02/09/2014 13:30							ALL HES PRESENT, RIG CREW PRESENT
Start Job	02/09/2014 14:04		1.5	2		170.0		FILL LINES
Test Lines	02/09/2014 14:06		0.5	0.5		2665.0		PRESSURE TEST GOOD, NO LEAKS IN THE LINES
Pump Spacer	02/09/2014 14:10		1	10		160.0		FRESH WATER, CLOSED 4 1/2" CASING VALVE TO HELP PUSH CEMENT UP INTO THE 9 5/8" CASING
Activity Description	Date/Time	Cht	Rate bbl/min	Volume bbl		Pressure psig		Comments

		#		Stage	Total	Tubing	Casing	
Pump Cement	02/09/2014 14:21		1.5	16.4		293.0		80 SKS 15.8 PPG 1.15 FT3/SK 5.01 GAL/SK DID NOT USE ANY CaCl ₂ , AFTER 10 BBL WAY OF CEMENT OPENED UP 4 1/2" CASING VALVE TO ALLOW PLUG TO BALANCE OUT
Pump Displacement	02/09/2014 14:32		1	1.2		29.0		FRESH WATER
Shutdown	02/09/2014 14:33							SHUTDOWN AT CALCULATED DISPLACEMENT, WELL WAS ON A VACUUM TOOK 3/4 BBL OF WATER OUT OF MEASURING TANKS BEFORE PULLING TUBING, DID NOT HAVE ANY CIRCULATION THROUGH THE 7" CASING
Other	02/09/2014 14:34							RIG POOH WITH TUBING, ALL STANDS PULLED DRY
End Job	02/09/2014 14:34							DONE FOR THE DAY, WILL TAG CEMENT IN THE MORNING TO DETERMINE WHAT TO DO NEXT, CREW STAYED ON LOCATION DUE TO DOT RESTRICTIONS IN ORDER TO BE ON LOCATION AT THE RIGHT TIME
Comment	02/10/2014 07:30							TAGGED CEMENT @ 409', RIG CREW RIGGED DOWN RIG, BOP'S, REMOVED EQUIPMENT AND THEN RAN IN 1" TUBING TO TOP OUT AND CAP THE WELL
Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

Comment	02/10/2014 11:30							REMOVED WELL HEAD AND OPENED UP TO ALL CASING STRINGS, RIG RAN IN 50' OF 1" TUBING TO TOP OUT BETWEEN ALL CASINGS
Rig-Up Equipment	02/10/2014 12:00							RIGGED UP FROM PUMP TO 1" TUBING
Safety Meeting	02/10/2014 12:10							ALL HES PRESENT, RIG CREW PRESENT
Start Job	02/10/2014 12:22			0.5				USED 6X5 CETRIFUGAL PUMP TO MAKE SURE LINES ARE CLEAR WITH WATER
Pump Cement	02/10/2014 12:23		0.5	1.5		43.0		15.8 PPG 1.15 FT3/SK 5.01 GAL/SK
Shutdown	02/10/2014 12:25							
Other	02/10/2014 12:26							RIG PULLED OUT OF 9 5/8" CASING AND RAN TUBING INTO 7" CASING
Pump Cement	02/10/2014 12:28		0.5	1.5		42.0		15.8 PPG 1.15 FT3/SK 5.01 GAL/SK
Shutdown	02/10/2014 12:30							
Other	02/10/2014 12:31							RIG PULLED OUT OF 7" CASING AND RAN TUBING INTO 4 1/2" CASING
Pump Cap Cement	02/10/2014 12:32		0.5	2		41.0		15.8 PPG 1.15 FT3/SK 5.01 GAL/SK
Shutdown	02/10/2014 12:33							
Pump Water	02/10/2014 12:37		0.5	2				PUMPED FRESH WATER TO CLEAR ALL LINES OF CEMENT
Shutdown	02/10/2014 12:40							BLM GAVE THE OK THAT WELL WAS CAPPED CORRECTLY
End Job	02/10/2014 12:43							THANK YOU FOR CHOOSING HALLIBURTON, THOMAS PONDER AND CREW

WPX - FEDERAL 298-34-1 - PTA PLUG 1



- ① Start Job 8.22;0;4;0
- ② Fill Lines 8.25;0.2;1354;0.1
- ③ Test Lines 8.23;0;1828;1.1
- ④ Pump Spacer 1 8.22;0;-1;0
- ⑤ Pump Tail Cement 8.16;2.2;121;0.1
- ⑥ Pump Displacement 15.85;2.3;55;0.2
- ⑦ End Job 8.31;0;6;1.3

▼ **HALLIBURTON** | iCem® Service

Created: 2014-02-08 08:23:42, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 2/8/2014

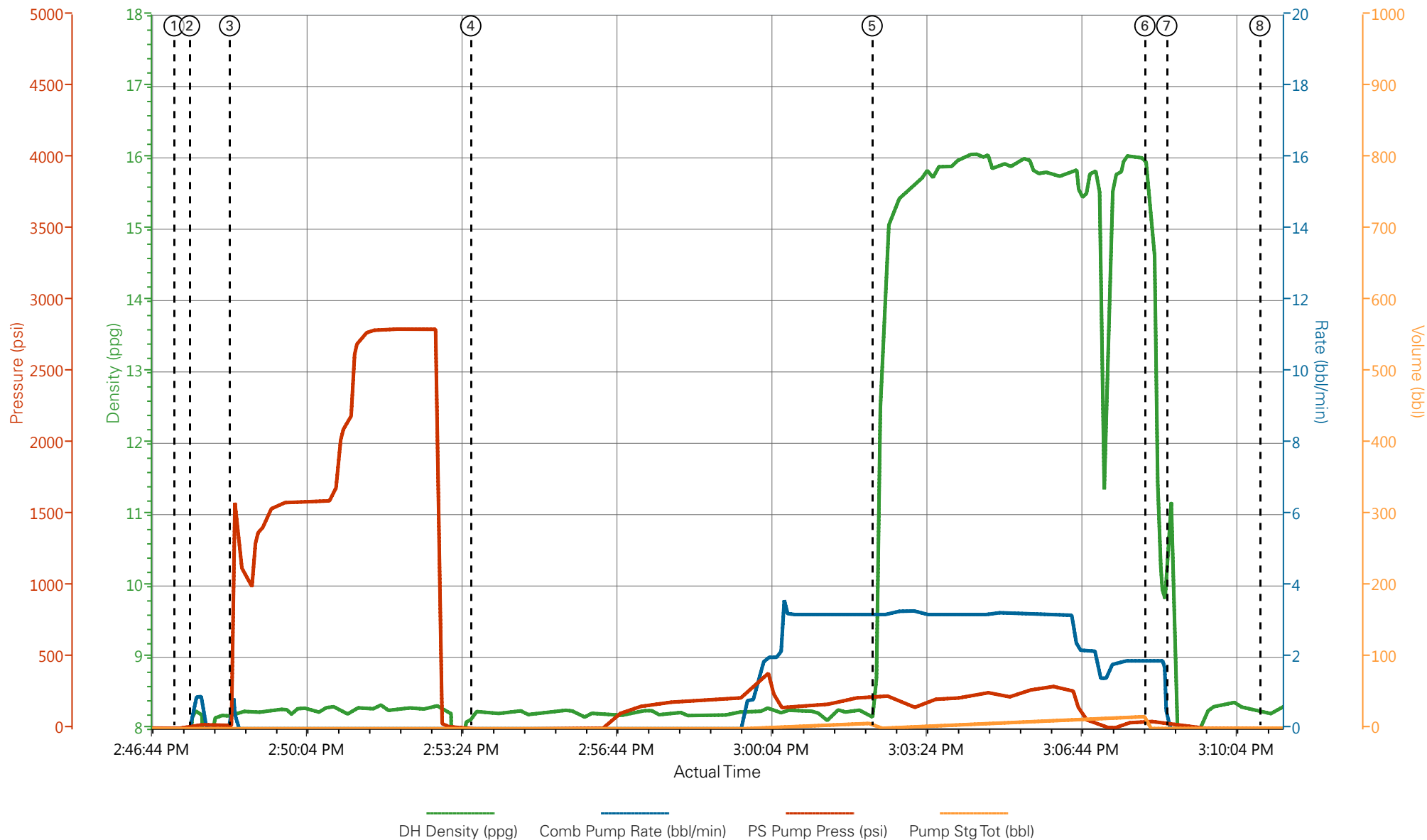
Well: FEDERAL 298-34-1

Representative: BILLY

Sales Order #: 901102072

ELITE #3: ROGER LAULAINEN / THOMAS PONDER

WPX - FEDERAL 298-34-1 - PTA PLUG 2



- | | | |
|-----------------------------|------------------------------------|---------------------------|
| ① Start Job -0.13;0;3;0 | ④ Pump Spacer 1 8.25;0;-4;0 | ⑦ Shutdown 11.01;0;38;0.7 |
| ② Fill Lines 8.28;0.3;20;0 | ⑤ Pump Cement 8.22;3.2;220;0.1 | ⑧ End Job 8.24;0;2;0.7 |
| ③ Test Lines 8.2;0.9;29;0.2 | ⑥ Pump Displacement 15.68;1.9;50;0 | |

▼ **HALLIBURTON** | iCem® Service

Created: 2014-02-08 09:48:56, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 2/8/2014 2:05:23 PM

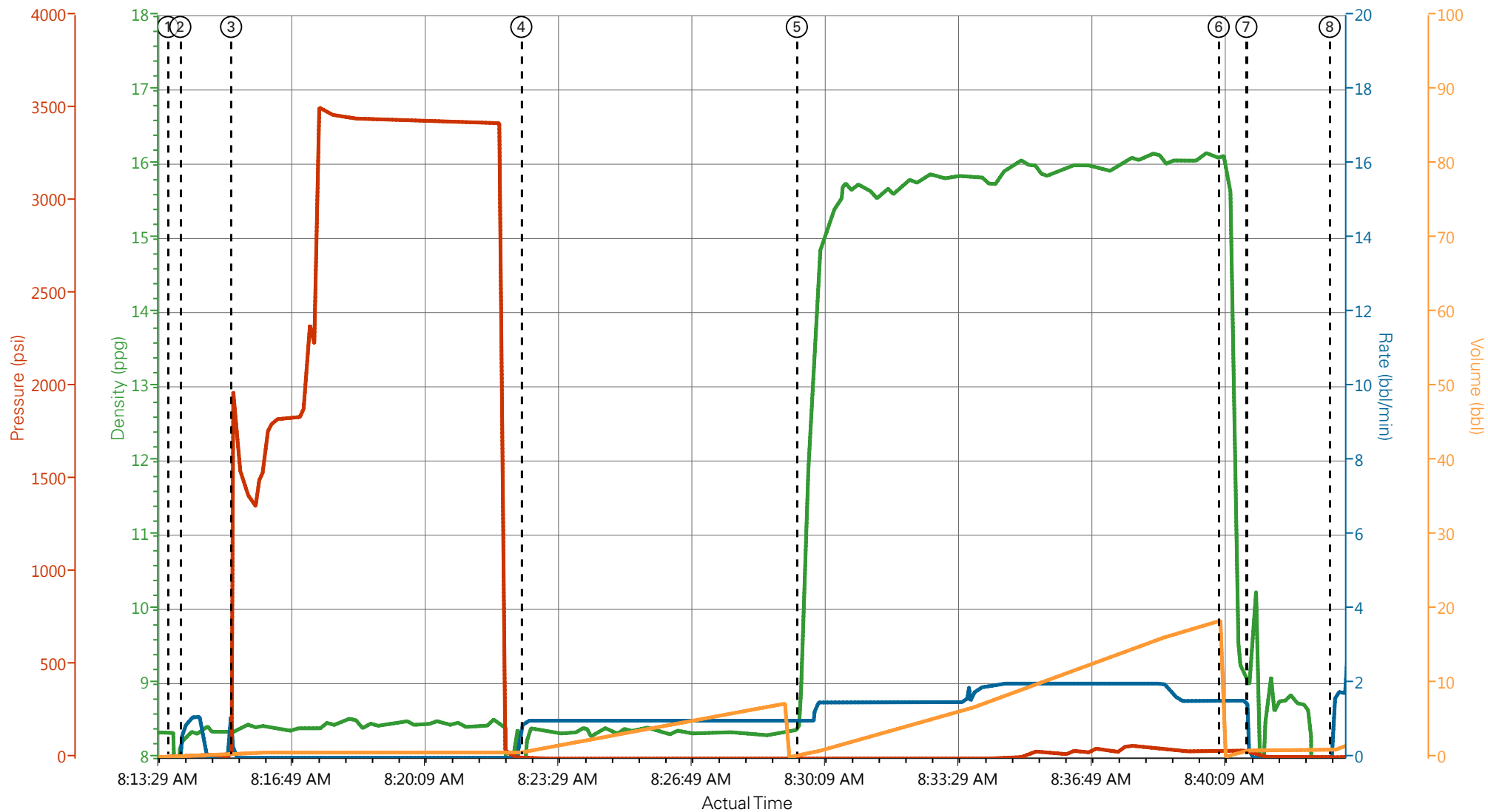
Well: FEDERAL 298-34-1

Representative: BILLY ROREX

Sales Order #: 901102072

ELITE #3: ROGER LAULAINEN / THOMAS PONDER

WPX - FEDERAL 298-34-1 - PTA PLUG 3



DH Density (ppg) 0.81 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 56 Pump Stg Tot (bbl) 15.6

- | | | |
|------------------------------|------------------------------------|------------------------|
| ① Start Job 8.33;0;0;0 | ④ Pump Spacer 7.87;0.9;-2;0.8 | ⑦ Shutdown 8.98;0;38;1 |
| ② Fill Lines 8.26;0.9;10;0.1 | ⑤ Pump Tail Cement 8.74;1;-2;0.4 | ⑧ End Job 0.03;0;3;1 |
| ③ Test Lines 8.35;0;1860;0.6 | ⑥ Pump Displacement 16.13;1.5;29;0 | |

▼ **HALLIBURTON** | iCem® Service

Created: 2014-02-09 06:34:38, Version: 3.0.121

Edit

Customer : WPX ENERGY ROCKY MOUNTAIN LLC-
EBUS

Job Date : 2/9/2014 6:34:38 AM

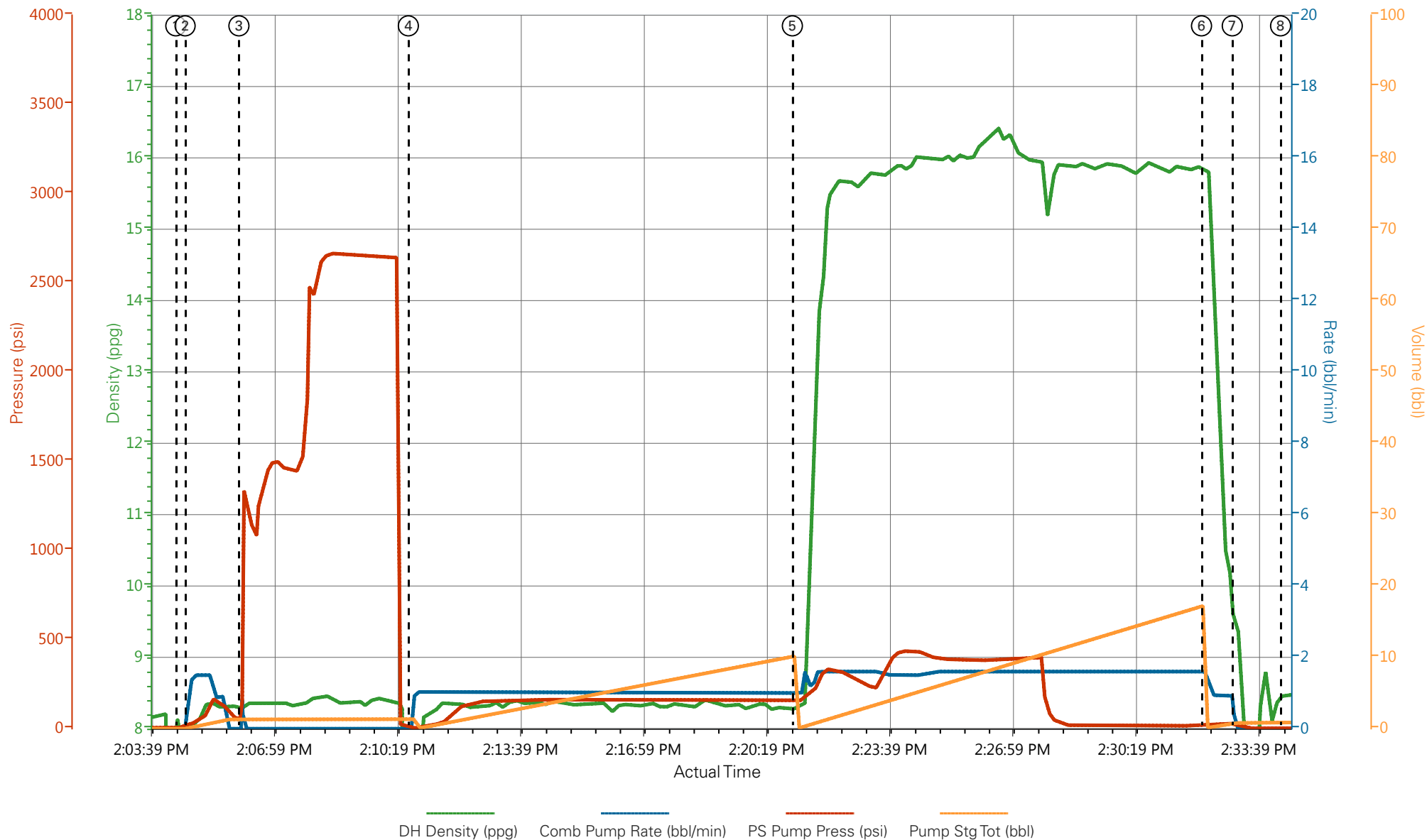
Well : FEDERAL 298-34-1

Representative : BILLY ROREX

Sales Order # : 901102072

ELITE #3 : ROGER LAULAINEN / THOMAS
PONDER

WPX - FEDERAL 298-34-1 - PTA PLUG 4



- | | | |
|-------------------------------|------------------------------------|--------------------------|
| ① Start Job 8.01;0;5;0 | ④ Pump Spacer 10.12;0;3;1.3 | ⑦ Shutdown 9.59;0;23;0.8 |
| ② Fill Lines 8.12;0.9;25;0 | ⑤ Pump Cement 8.27;1;161;0 | ⑧ End Job 8.45;0;1;0.8 |
| ③ Test Lines 8.29;0.8;149;1.3 | ⑥ Pump Displacement 15.82;1.6;26;0 | |

▼ **HALLIBURTON** | iCem® Service

Created: 2014-02-09 12:29:06, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 2/9/2014 12:29:05 PM

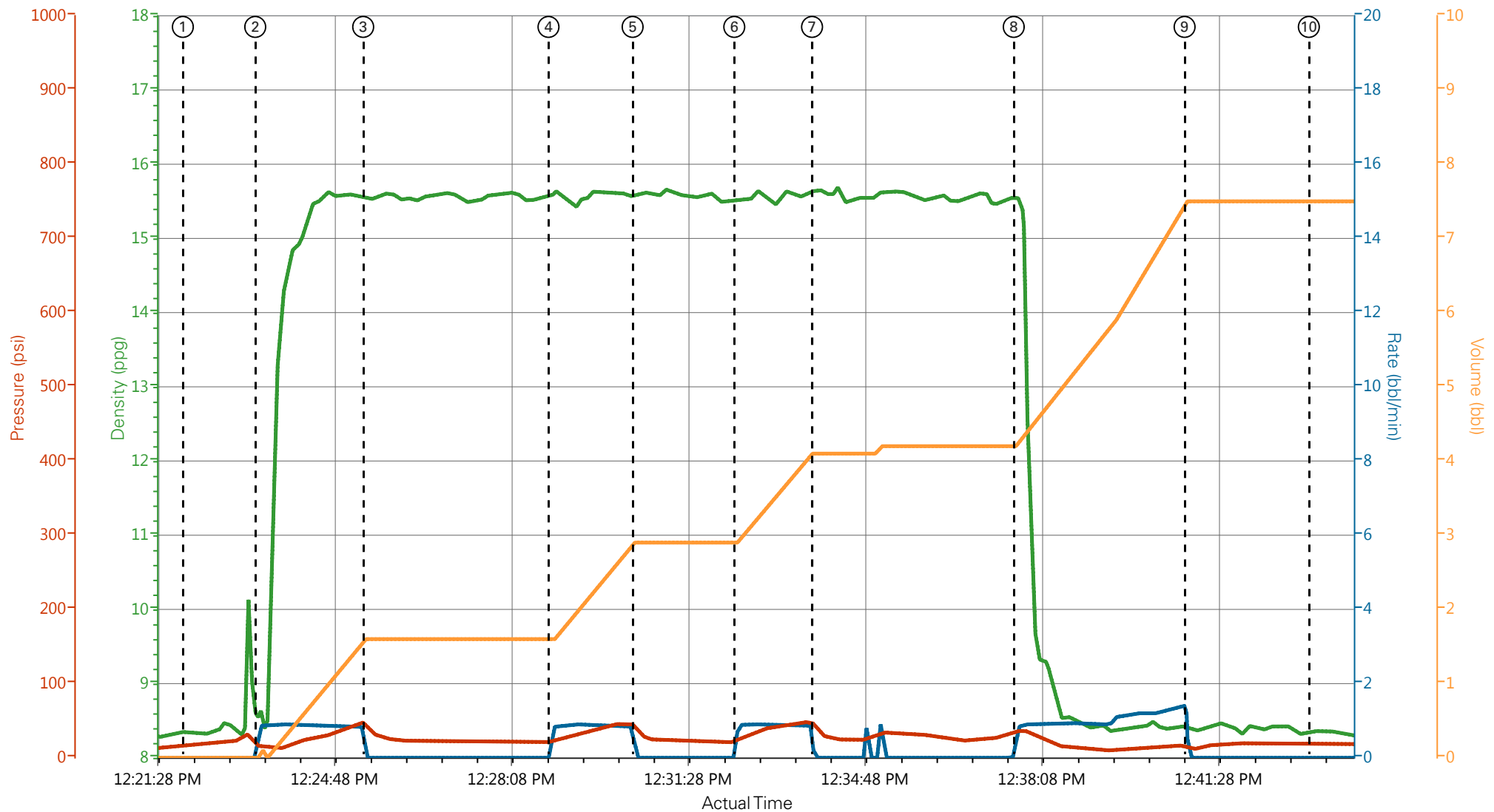
Well: FEDERAL 298-34-1

Representative: BILLY ROREX

Sales Order #: 901102072

ELITE #3: ROGER LAULAINEN / THOMAS PONDER

WPX - FEDERAL 298-34-1 - PTA TOP OUT



- ① Start Job 8.34;0;19;0
- ② Pump Tail Cement 8.59;0.9;16;0
- ③ Shutdown 15.54;0;41;1.6
- ④ Pump Tail Cement 15.55;0.8;23;1.6
- ⑤ Shutdown 15.59;0;39;2.9
- ⑥ Pump Tail Cement 15.51;0.9;24;2.9
- ⑦ Shutdown 15.62;0;40;4.1
- ⑧ Pump Water 15.55;0.9;36;4.2
- ⑨ Shutdown 8.38;0;15;7.5
- ⑩ End Job 8.37;0;19;7.5

▼ **HALLIBURTON** | iCem® Service

Created: 2014-02-10 11:53:20, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 2/10/2014 11:53:20 AM

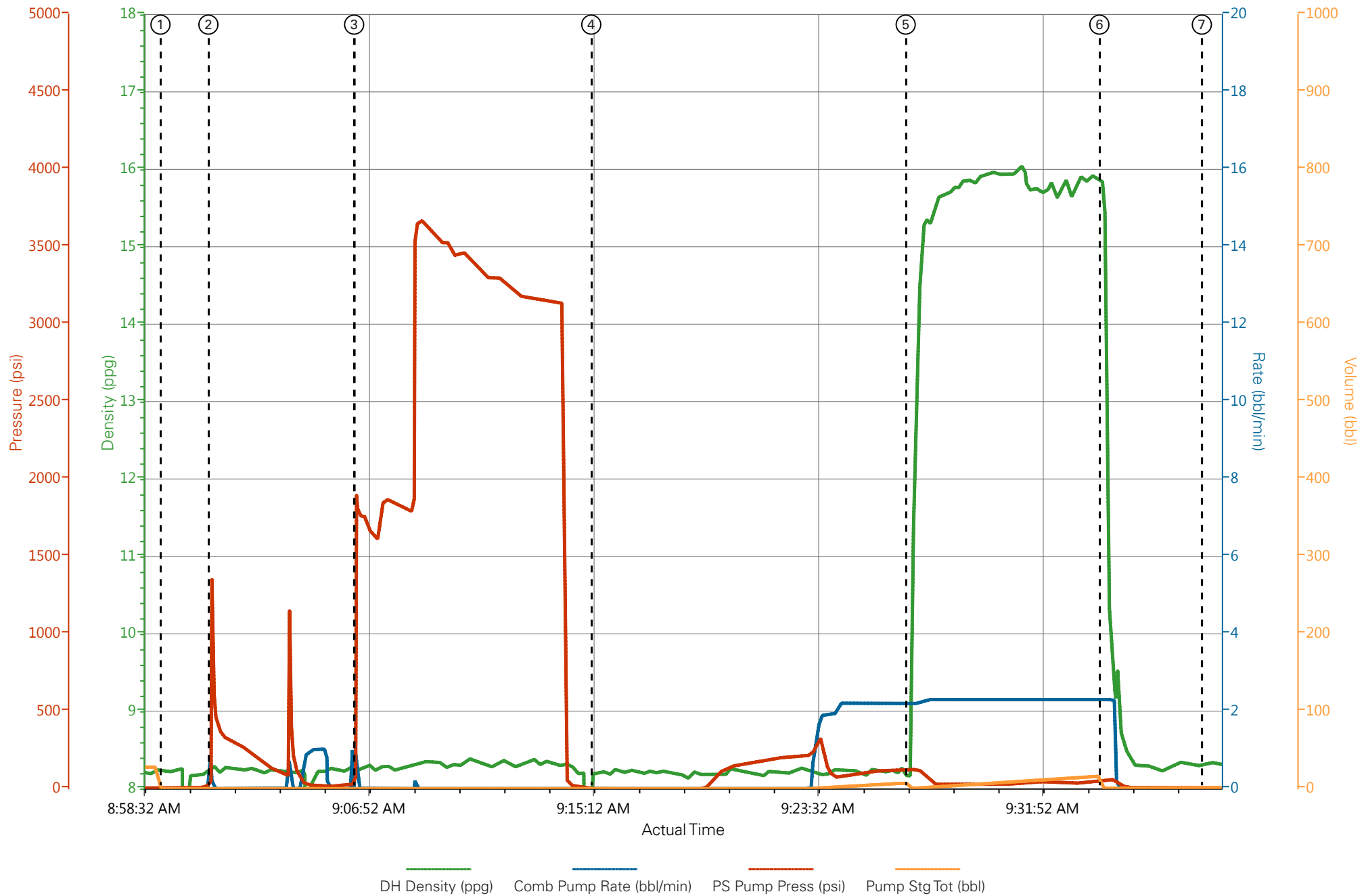
Well: FEDERAL 298-34-1

Representative: BILLY ROREX

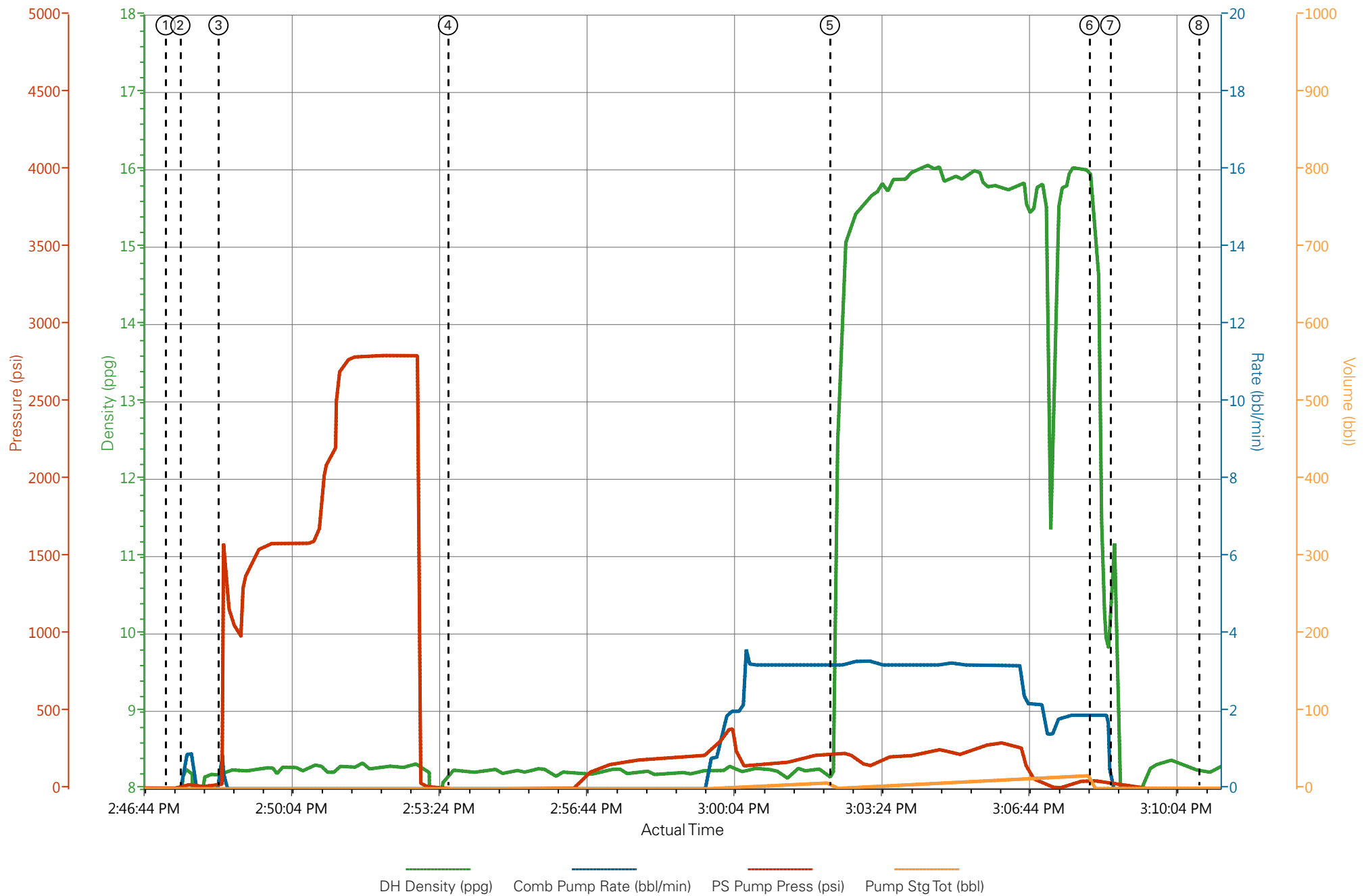
Sales Order #: 901102072

ELITE #3: ROGER LAULAINEN / THOMAS PONDER

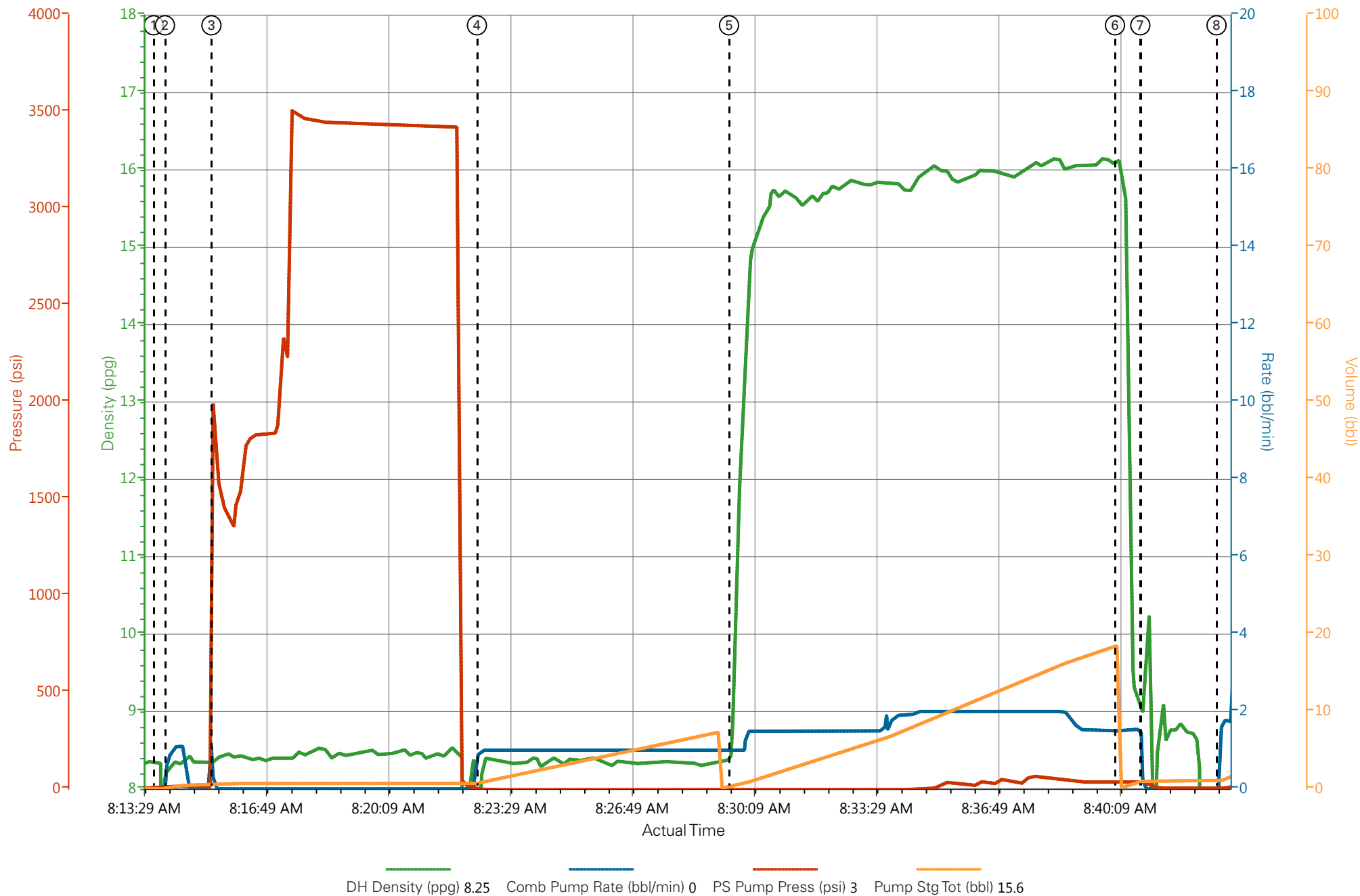
WPX - FEDERAL 298-34-1 - PTA PLUG 1



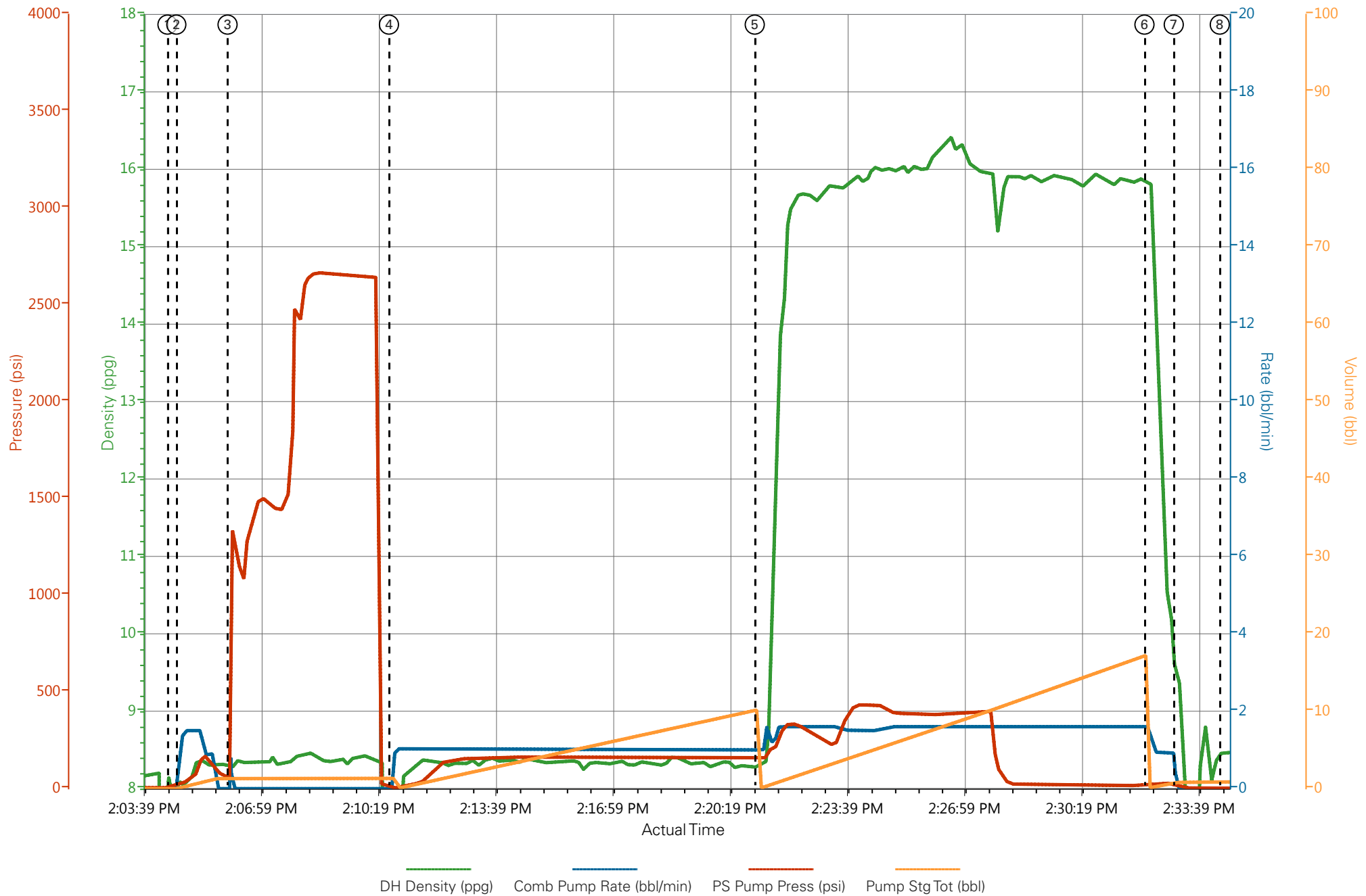
WPX - FEDERAL 298-34-1 - PTA PLUG 2



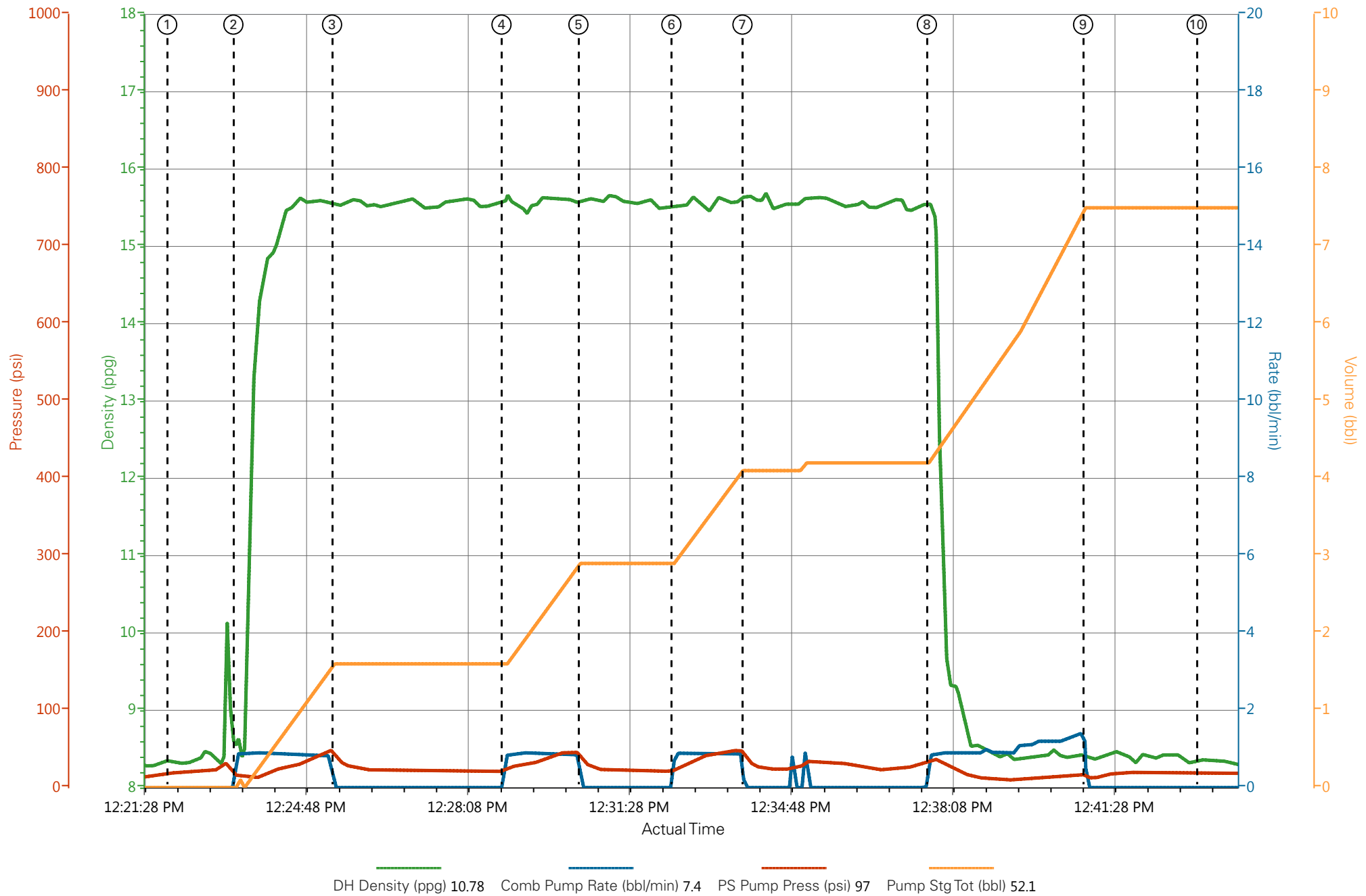
WPX - FEDERAL 298-34-1 - PTA PLUG 3



WPX - FEDERAL 298-34-1 - PTA PLUG 4



WPX - FEDERAL 298-34-1 - PTA TOP OUT



HALLIBURTON

Company:	<u>WPX</u>	Date:	<u>2/9/2014</u>
Submitted by:	<u>THOMAS PONDER</u>	Date Rec.:	<u>2/9/2014</u>
Attention:	<u>LARRY COOKSEY</u>	S.O.#	<u>901102072</u>
Lease	<u>FEDERAL</u>	Job Type:	<u>PTA</u>
Well #	<u>298-34-1</u>		

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>250</i> Mg / L
Calcium (Ca)	<i>500</i>	<i>120</i> Mg / L
Iron (FE2)	<i>300</i>	<i>0</i> Mg / L
Chlorides (Cl)	<i>3000</i>	<i>500</i> Mg / L
Sulfates (SO ₄)	<i>1500</i>	<i><200</i> Mg / L
Carbonates hardness		
Temp	<i>40-80</i>	<i>38</i> Deg
Total Dissolved Solids		Mg / L

Respectfully: THOMAS PONDER

Title: CEMENTING SUPERVISOR

Location: GRAND JCT, CO