

WPX Energy Rocky Mountain LLC - EBUS

RGU 333-26-198

**Cyclone 29**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 11/2/2015  
Job Date: 12/07/2014

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

*The Road to Excellence Starts with Safety*

Sold To #: 300721	Ship To #: 3124461	Quote #:	Sales Order #: 0901906655
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Customer Rep: TOM BOWEN / RICK MORTIMER		
Well Name: FEDERAL	Well #: RGU 333-26-198	API/UWI #: 05-103-11988-00	
Field: SULPHUR CREEK	City (SAP): MEEKER	County/Parish: RIO BLANCO	State: COLORADO
Legal Description: 26-1S-98W-2455FNL-914FEL			
Contractor: CYCLONE	Rig/Platform Name/Num: CYCLONE 29		
Job BOM: 392189			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180	Srvs Supervisor: Dustin Smith		
Job			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	4065ft Job Depth TVD
Water Depth	Wk Ht Above Floor 5 FT
Perforation Depth (MD)	From To

Well Data										
Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Open Hole Section			14.75				0	1800		0
Casing		9.625	8.921	36			0	4065		0
Open Hole Section			13.5				1800	4075	0	0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	9.625	1		4065		Top Plug	9.625	1	
Float Shoe	9.625	1							
Float Collar	9.625	1		4038.21					
Insert Float	9.625	1				Plug Container	9.625	1	HES
Stage Tool	9.625	1		1841.31		Centralizers	9.625		

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/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water	Fresh Water	40	bbl	8.33			4.0		
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	VersaCem GJ1	VERSACEM (TM) SYSTEM	600	sack	12.8	1.77		8.0	9.31	

**Comment**

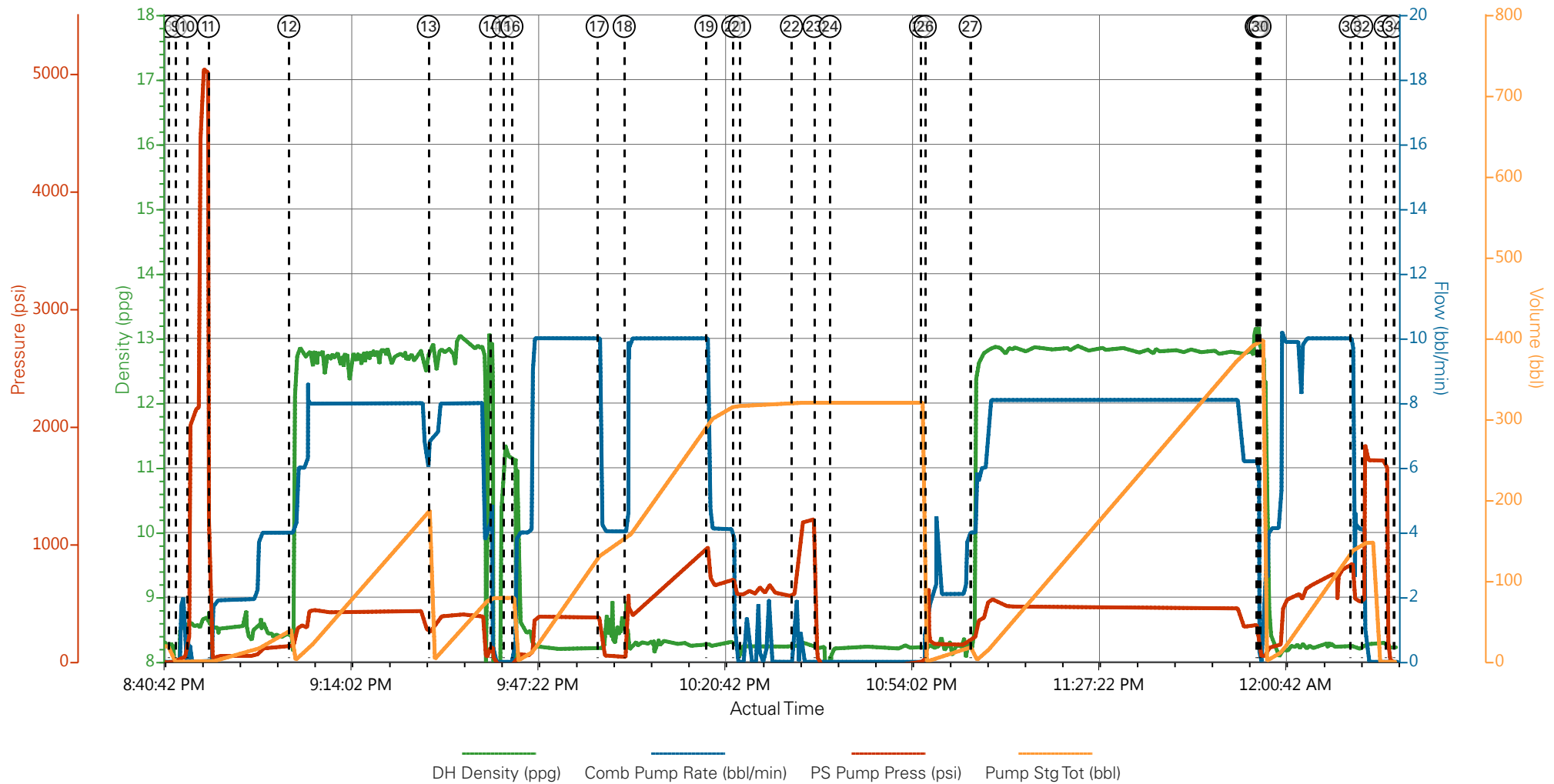
## 3.5 Job Event Log

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	12/7/2014	07:00:00	USER					ELITE #8
Event	2	Pre-Convoy Safety Meeting	12/7/2014	10:00:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	12/7/2014	12:30:00	USER					ARRIVED ON LOCATION 1 1/2 HOURS EARLY DIDNT START CHARGING TIME UNTIL REQUESTED ON LOCATION TIME RIG RIGGING UP CASING CREW UPON HES ARRIVAL
Event	4	Assessment Of Location Safety Meeting	12/7/2014	12:35:00	USER					ALL HES EMPLOYEES
Event	5	Pre-Rig Up Safety Meeting	12/7/2014	12:45:00	USER					ALL HES EMPLOYEES
Event	6	Rig-Up Equipment	12/7/2014	13:00:00	USER					1 HT-400 PUMP TRUCK (ELITE #8) 2 660 BULK TRUCKS 2 SILOS 1 F-550 PICKUP
Event	7	Pre-Job Safety Meeting	12/7/2014	20:30:00	USER					ALL HES EMPLOYEES AND RIG CREW RIG CIRCULATED @ 12 BPM PRIOR TO THE JOB
Event	8	Start Job	12/7/2014	20:42:00	USER					TD: 4075 TP: 4065 SJ: 26.79 CSG: 439.43' OF 9 5/8 40# CSG REST 9 5/8 36# J-55 OH: 14 3/4 TO 1800 13 1/2 FROM 1800 TO TD STAGE TOOL @ 1841.31 MUD WT: 9.4 PPG
Event	9	Prime Pumps	12/7/2014	20:43:19	COM5	8.33	2.0	57	2.0	PRIME LINES WITH 2 BBLS FRESH WATER
Event	10	Test Lines	12/7/2014	20:45:19	COM5	8.33	0.00	5058	2.0	PRESSURE TEST OK
Event	11	Pump Spacer 1	12/7/2014	20:49:09	COM5	8.33	4.0	125	40	PUMP 40 BBL FRESH WATER SPACER
Event	12	Pump Lead Cement	12/7/2014	21:03:30	COM5	12.8	8.0	447	189.1	600 SKS 12.8 PPG 1.77 YIELD 9.31 GAL/SK LEAD CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES 3 1/2 BOXES TUFF FIBER ADDED TO THE 1ST 100 BBLS OF LEAD CEMENT
Event	13	Pump Tail Cement	12/7/2014	21:28:23	COM5	12.8	8.0	394	78.9	210 SKS 12.8 PPG 2.11 YIELD 11.77 GAL/SK TAIL CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	14	Shutdown	12/7/2014	21:39:28	COM5					SHUTDOWN TO DROP PLUG
Event	15	Drop Top Plug	12/7/2014	21:41:43	COM5					PLUG AWAY NO PROBLEMS

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	16	Pump Displacement	12/7/2014	21:43:17	COM5	8.33	10	967	311.6	FRESH WATER DISPLACEMENT
Event	17	Other	12/7/2014	21:58:29	COM5	8.33	4.0	42	132	SLOW RATE FOR PLUG TO GO THROUGH MSC
Event	18	Other	12/7/2014	22:03:18	COM5	8.33	10.0	402	152	INCREASE RATE 10 BBLS AFTER CALCULATED DISPLACEMENT TO TOOL
Event	19	Other	12/7/2014	22:17:53	COM5	8.33	4.0	700	311.6	SLOW RATE TO BUMP PLUG
Event	20	Shutdown	12/7/2014	22:22:40	USER	8.33	4.0	700	311.6	SHUTDOWN @ CALCULATED DISPLACEMENT
Event	21	Pump Displacement	12/7/2014	22:23:53	USER	8.33	2.0	700	311.6	AS PER COMPANY REP CONTINUED PUMPING DISPLACEMENT
Event	22	Bump Plug	12/7/2014	22:33:08	COM5	8.33	1.50	1208		PSI BEFORE BUMPING PLUG @ 700 PSI BUMPED PLUG UP TO 1208 PSI
Event	23	Check Floats	12/7/2014	22:37:10	USER					FLOATS HELD 1 1/2 BBLS BACK TO DISPLACEMENT TANKS
Event	24	Other	12/7/2014	22:40:00	COM5					DROP OPENING DEVICE AND WAIT 15 MINUTES
Event	25	Open Multiple Stage Cementer	12/7/2014	22:56:09	COM5	8.33	1	655	1	PRESURED UP TO 655 PSI TO OPEN MSC
Event	26	Pump Spacer 1	12/7/2014	22:57:00	USER	8.33	4.0	200	20	PUMP 20 BBL FRESH WATER SPACER
Event	27	Pump Lead Cement	12/7/2014	23:05:00	COM5	12.8	8.0	530	380.5	980 SKS 12,8 PPG 2.18 YIELD 12.11 GAL/SK LEAD CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES 3 1/2 BOXES TUFF FIBER ADDED TO LAST 100 BBLS OF LEAD CEMENT
Event	28	Shutdown	12/7/2014	23:56:01	COM5					SHUTDOWN TO DROP CLOSING PLUG
Event	29	Drop Top Plug	12/7/2014	23:56:19	COM5					PLUG AWAY NO PROBLEMS
Event	30	Pump Displacement	12/7/2014	23:56:41	COM5	8.33	10.0	833	142.3	FRESH WATER DISPLACEMENT
Event	31	Other	12/8/2014	00:12:47	COM5	8.33	4.0	520	132	SLOW RATE TO BUMP PLUG
Event	32	Bump Plug	12/8/2014	00:14:50	COM5	8.33	4.0	1712	142.3	PSI BEFORE BUMPING PLUG @ 520 BUMPED PLUG UP TO 1712 PSI TO CLOSE TOOL
Event	33	Check Floats	12/8/2014	00:19:00	USER					FLOATS HELD 1 BBL BACK TO DISPLACEMENT TANKS
Event	34	End Job	12/8/2014	00:20:30	COM5					GOOD RETURNS THROUGHOUT BOTH STAGES, RETURNED 40 BBLS OF CEMENT TO SURFACE OFF THE TOP OF THE STAGE TOOL FROM STAGE 1 RETURNED 117 BBLS OF CEMENT TO SURFACE ON

Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
2ND STAGE										
Event	35	Comment	12/8/2014	00:23:00	USER					TOPPED OUT WELL 543-26-198 WITH 6 SKS OF CEMENT AND WELL 433-26-198 WITH 11 SKS OF CEMENT BOTH WELLS TOPPED OUT WITH CEMENT RETURNS
Event	36	Pre-Rig Down Safety Meeting	12/8/2014	00:25:00	USER					ALL HES EMPLOYEES
Event	37	Rig-Down Equipment	12/8/2014	00:35:00	USER					
Event	38	Pre-Convoy Safety Meeting	12/8/2014	02:25:00	USER					ALL HES EMPLOYEES
Event	39	Crew Leave Location	12/8/2014	02:30:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT DUSTIN SMITH AND CREW

# WPX - FEDERAL RGU 333-26-198 - 9 5/8 2 STAGE SURFACE



- |   |                           |                        |                                 |                                |
|---|---------------------------|------------------------|---------------------------------|--------------------------------|
| ① Call Out                              | ⑨ Prime Lines             | ⑰ Slow Rate            | 25 Open Multiple Stage Cementer | 33 Check Floats                |
| ② Pre-Convoy Safety Meeting             | ⑩ Test Lines              | ⑱ Increase Rate        | 26 Pump Fresh Water Spacer      | 34 End Job                     |
| ③ Arrive At Loc                         | ⑪ Pump Fresh Water Spacer | ⑲ Slow Rate            | 27 Pump Lead Cement             | 35 Pre-Rig Down Safety Meeting |
| ④ Assessment Of Location Safety Meeting | ⑫ Pump Lead Cement        | 20 Shutdown            | 28 Shutdown                     | 36 Rig-Down Equipment          |
| ⑤ Pre-Rig Up Safety Meeting             | ⑬ Pump Tail Cement        | 21 Pump Displacement   | 29 Drop Top Plug                | 37 Pre-Convoy Safety Meeting   |
| ⑥ Rig-Up Equipment                      | ⑭ Shutdown                | 22 Bump Plug           | 30 Pump Displacement            | 38 Crew Leave Location         |
| ⑦ Pre-Job Safety Meeting                | ⑮ Drop Top Plug           | 23 Check Floats        | 31 Slow Rate                    |                                |
| ⑧ Start Job                             | ⑯ Pump Displacement       | 24 Drop Opening Device | 32 Bump Plug / Close Tool       |                                |

▼ **HALLIBURTON** | iCem® Service

Created: 2014-12-07 09:08:33, Version: 4.0.248

Edit

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Job Date: 12/7/2014 5:10:46 PM

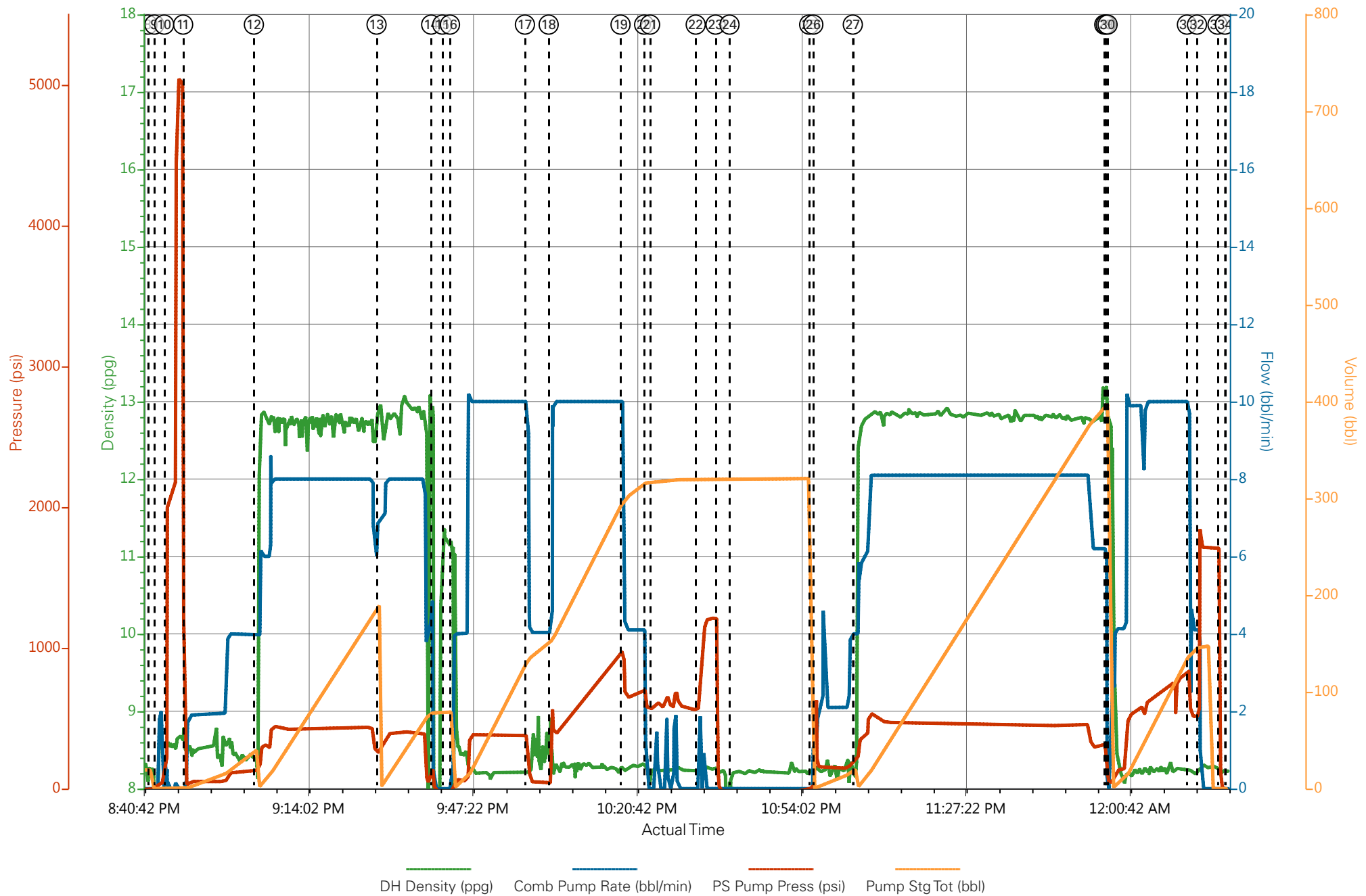
Well: FEDERAL RGU 333-26-198

Representative: TOM BOWEN / RICK MORTIMER

Sales Order #: 0901906655

ELITE # 8: DUSTIN SMITH / BEN ROSE

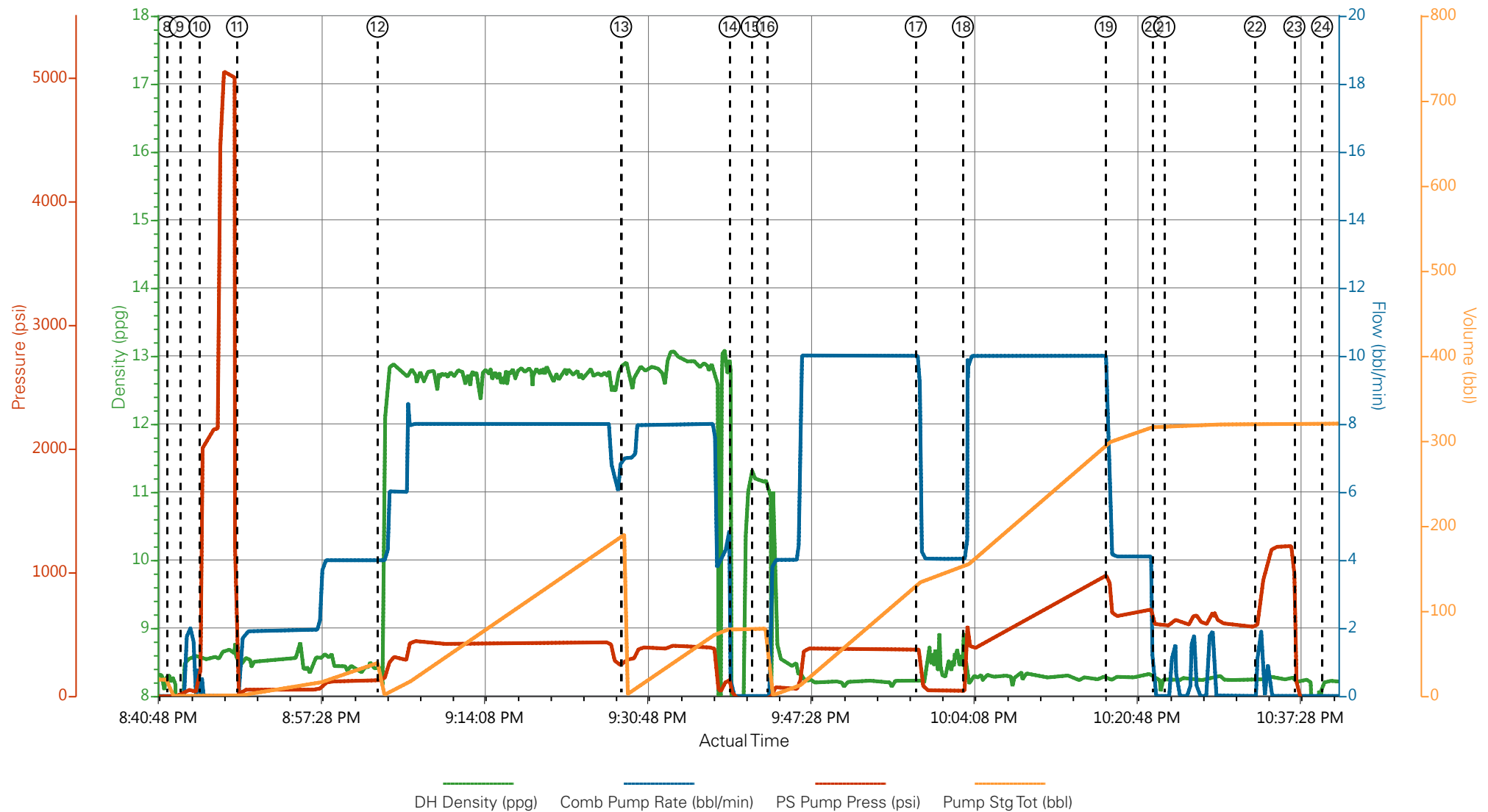
# WPX - FEDERAL RGU 333-26-198 - 9 5/8 2 STAGE SURFACE



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



# WPX - FEDERAL RGU 333-26-198 - 1ST STAGE



- |   |                           |                     |                        |                                 |                 |
|---|---------------------------|---------------------|------------------------|---------------------------------|-----------------|
| ① Call Out                              | ⑦ Pre-Job Safety Meeting  | ⑬ Pump Tail Cement  | ⑰ Slow Rate            | 25 Open Multiple Stage Cementer | 31 Other        |
| ② Pre-Convoy Safety Meeting             | ⑧ Start Job               | ⑭ Shutdown          | 20 Shutdown            | 26 Pump Fresh Water Spacer      | 32 Bump Plug    |
| ③ Arrive At Loc                         | ⑨ Prime Lines             | ⑮ Drop Top Plug     | 21 Pump Displacement   | 27 Pump Lead Cement             | 33 Check Floats |
| ④ Assessment Of Location Safety Meeting | ⑩ Test Lines              | ⑯ Pump Displacement | 22 Bump Plug           | 28 Shutdown                     | 34 End Job      |
| ⑤ Pre-Rig Up Safety Meeting             | ⑪ Pump Fresh Water Spacer | ⑰ Slow Rate         | 23 Check Floats        | 29 Drop Top Plug                |                 |
| ⑥ Rig-Up Equipment                      | ⑫ Pump Lead Cement        | ⑱ Increase Rate     | 24 Drop Opening Device | 30 Pump Displacement            |                 |

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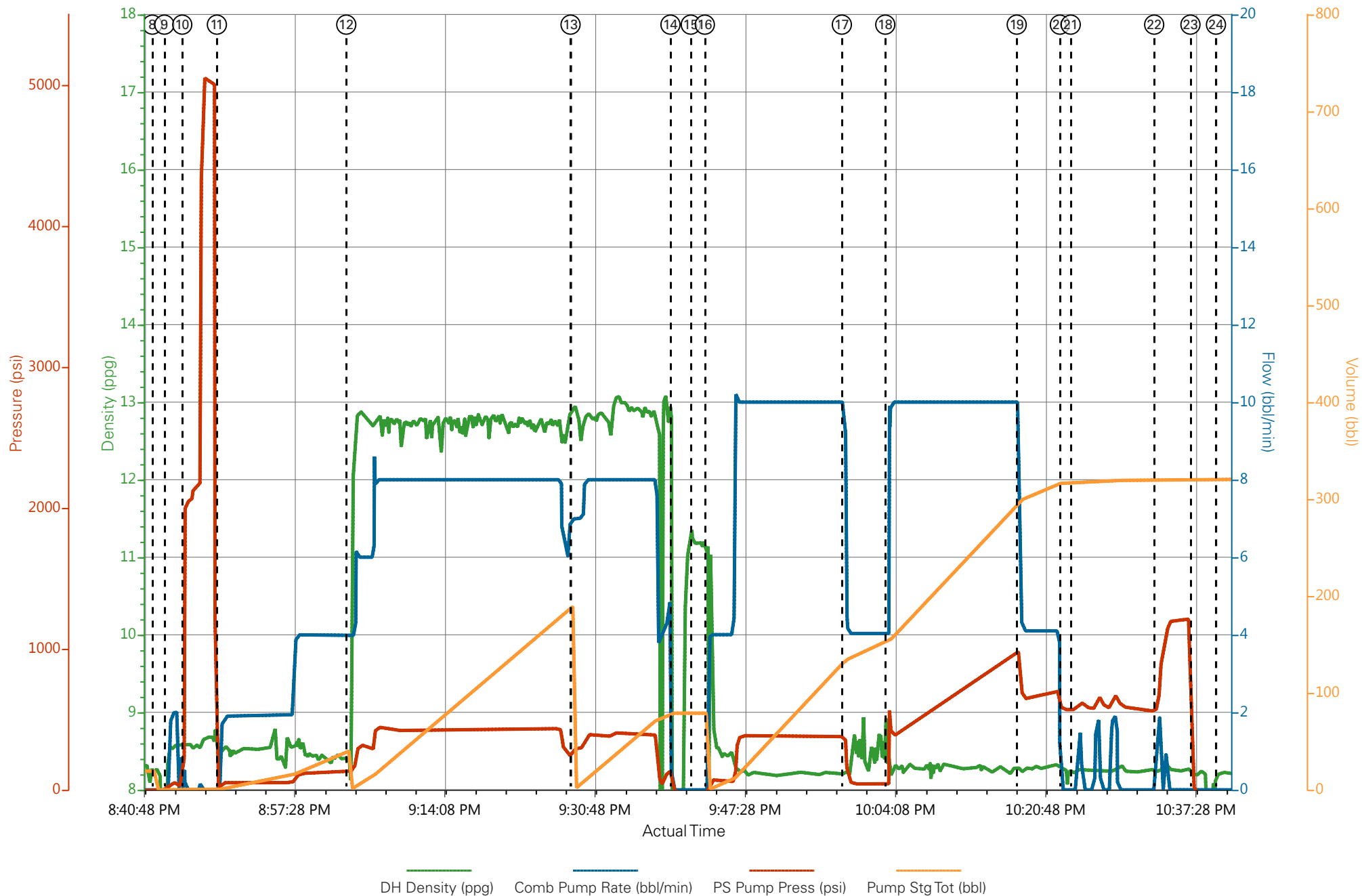
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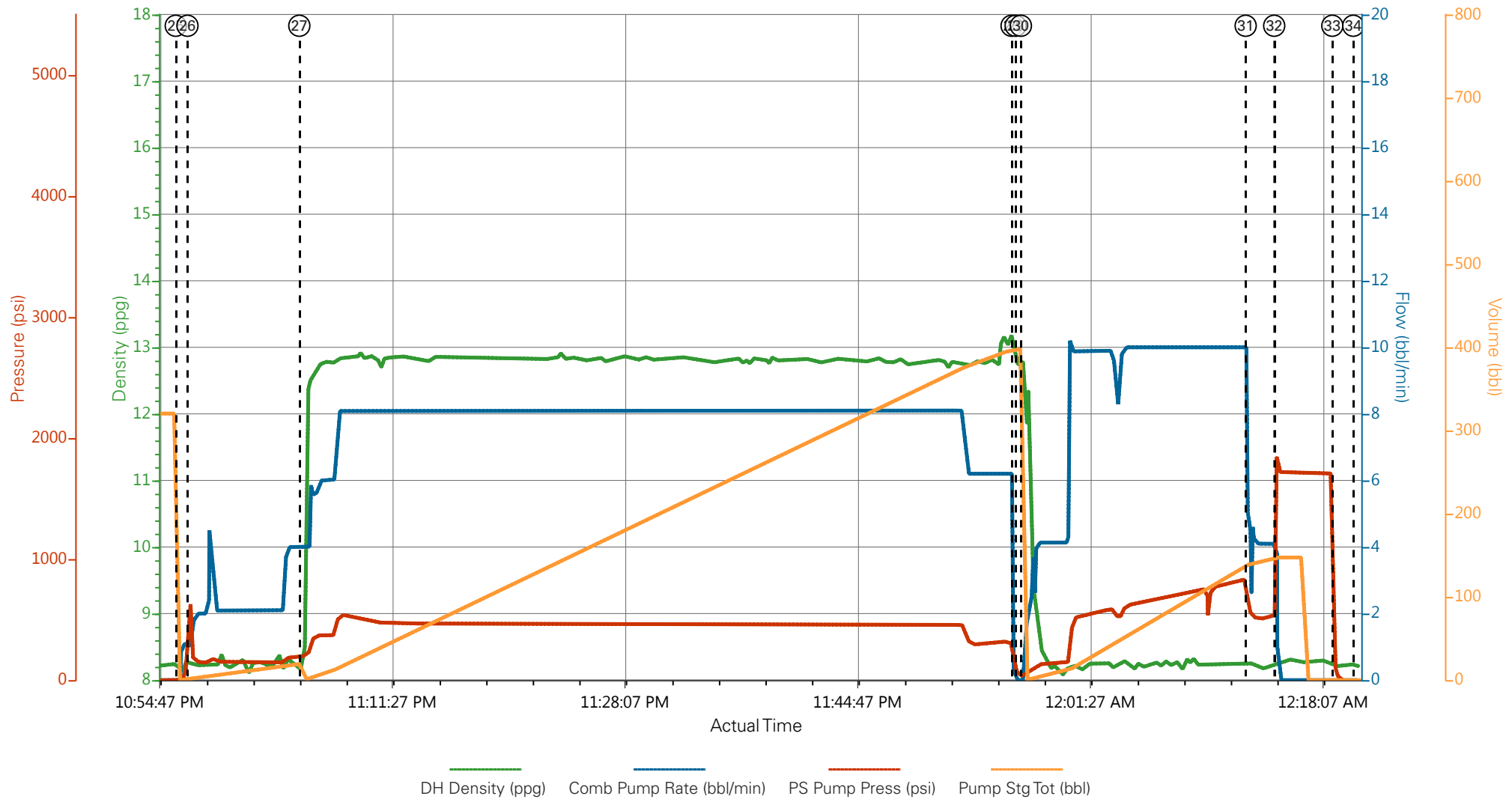
Sales Order #: 0901906655

ELITE # 8: DUSTIN SMITH / BEN ROSE

# WPX - FEDERAL RGU 333-26-198 - 1ST STAGE



# WPX - FEDERAL RGU 333-26-198 - 2ND STAGE



- |   |                           |                      |                                 |                           |
|---|---------------------------|----------------------|---------------------------------|---------------------------|
| ① Call Out                              | ⑧ Start Job               | ⑮ Drop Top Plug      | 22 Bump Plug                    | 29 Drop Top Plug          |
| ② Pre-Convoy Safety Meeting             | ⑨ Prime Lines             | ⑯ Pump Displacement  | 23 Check Floats                 | 30 Pump Displacement      |
| ③ Arrive At Loc                         | ⑩ Test Lines              | ⑰ Slow Rate          | 24 Drop Opening Device          | 31 Slow Rate              |
| ④ Assessment Of Location Safety Meeting | ⑪ Pump Fresh Water Spacer | ⑱ Increase Rate      | 25 Open Multiple Stage Cementer | 32 Bump Plug / Close Tool |
| ⑤ Pre-Rig Up Safety Meeting             | ⑫ Pump Lead Cement        | ⑲ Slow Rate          | 26 Pump Fresh Water Spacer      | 33 Check Floats           |
| ⑥ Rig-Up Equipment                      | ⑬ Pump Tail Cement        | 20 Shutdown          | 27 Pump Lead Cement             | 34 End Job                |
| ⑦ Pre-Job Safety Meeting                | ⑭ Shutdown                | 21 Pump Displacement | 28 Shutdown                     |                           |

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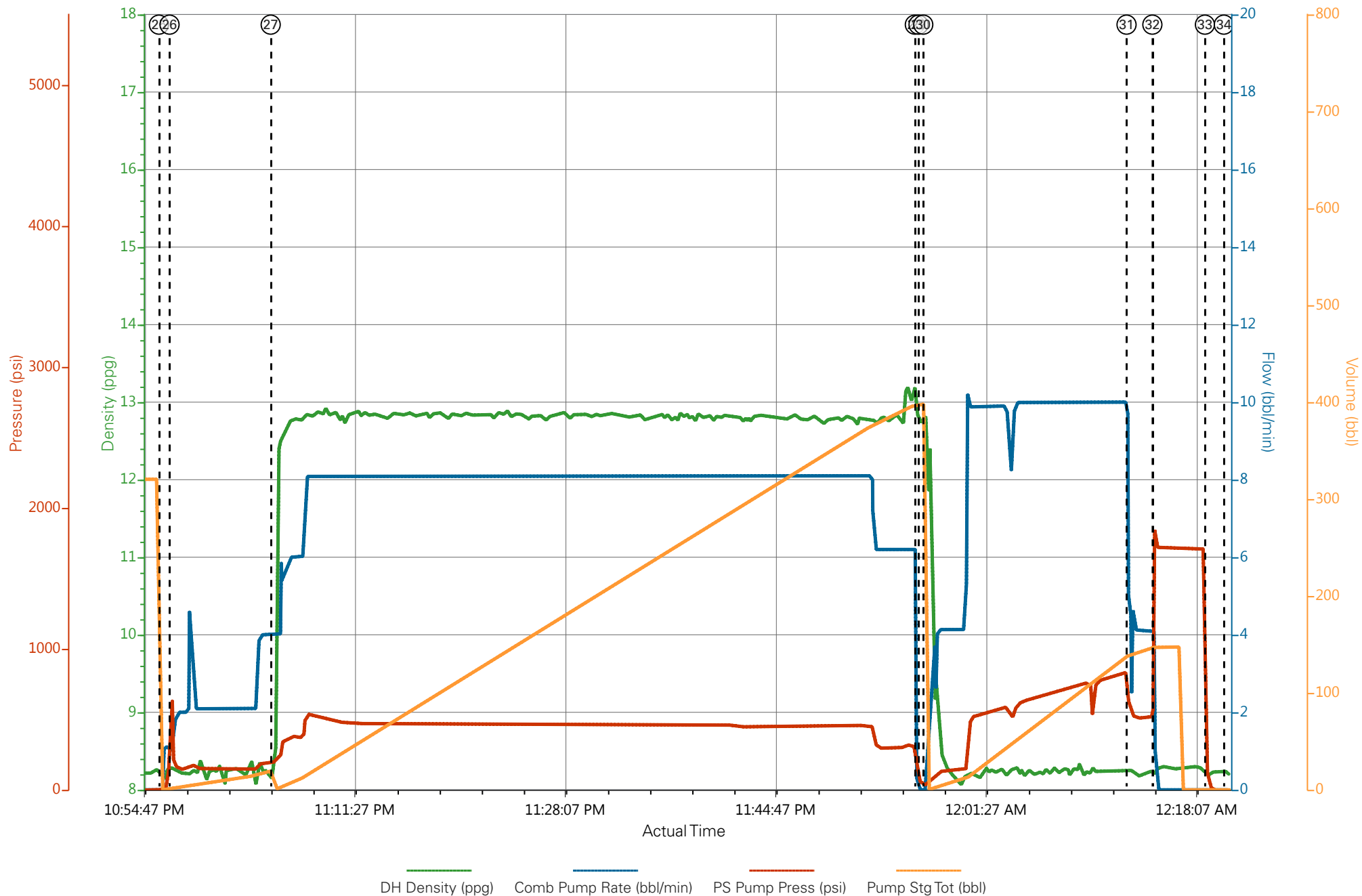
Well: FEDERAL RGU 333-26-198

Representative: TOM BOWEN / RICK MORTIMER

Sales Order #: 0901906655

ELITE # 8: DUSTIN SMITH / BEN ROSE

# WPX - FEDERAL RGU 333-26-198 - 2ND STAGE



# HALLIBURTON

## Water Analysis Report

Company: WPX

Submitted by: DUSTIN SMITH

Attention:

Lease FEDERAL RGU

Well # 333-26-198

Date: 12/7/2014

Date Rec.:

S.O.# 901906655

Job Type: 2 STAGE SURFACE

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>200</b> Mg / L
Calcium (Ca)	<i>500</i>	<b>120</b> Mg / L
Iron (FE2)	<i>300</i>	<b>0</b> Mg / L
Chlorides (Cl)	<i>3000</i>	<b>0</b> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>UNDER 200</b> Mg / L
Chlorine (Cl <sub>2</sub> )		<b>0</b> Mg / L
Temp	<i>40-90</i>	<b>65</b> Deg
Total Dissolved Solids		<b>870</b> Mg / L

Respectfully: DUSTIN SMITH

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

NOTICE:

This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its

<b>Sales Order #:</b> 0901906655	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 12/8/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT MULTIPLE STAGES BOM
<b>Customer Representative:</b> TOM BOWEN		<b>API / UWI: (leave blank if unknown)</b> 05-103-11988-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 0080129296
<b>Well Type:</b> DIRECTIONAL GAS	<b>Well Country:</b> USA	
<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> RIO BLANCO

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and service of a standard unmatched in the service sector of the energy industry.

Please take the time to let us know if our performance met with your satisfaction. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

### CUSTOMER SATISFACTION SURVEY

CATEGORY	CUSTOMER SATISFACTION RESPONSE	
Survey Conducted Date	The date the survey was conducted	12/8/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX37079
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	TOM BOWEN
HSE	Was our HSE performance satisfactory? Circle Y or N	Yes
Equipment	Were you satisfied with our Equipment? Circle Y or N	Yes
Personnel	Were you satisfied with our people? Circle Y or N	Yes
Customer Comment	Customer's Comment	DUSTIN AND CREW DID A VERY GOOD JOB THX TOM

<b>CUSTOMER SIGNATURE</b>
---------------------------

<b>Sales Order #:</b> 0901906655	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 12/8/2014
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*KEY PERFORMANCE INDICATORS*

General	
<b>Survey Conducted Date</b> The date the survey was conducted	12/8/2014

Cementing KPI Survey	
<b>Type of Job</b> Select the type of job. (Cementing or Non-Cementing)	0
<b>Select the Maximum Deviation range for this Job</b> What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	6
<b>HSE Incident, Accident, Injury</b> HSE Incident, Accident, Injury. This should be recordable incidents only.	No
<b>Was the job purpose achieved?</b> Was the job delivered correctly as per customer agreed design?	Yes
<b>Pumping Hours</b> Total number of hours pumping fluid on this job. Enter in decimal format.	4
<b>Type of Rig Classification Job Was Performed</b> Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
<b>Number Of JSAs Performed</b> Number Of Jsas Performed	6
<b>Was this a Primary Cement Job (Yes / No)</b> Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
<b>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	0
<b>Customer Non-Productive Rig Time (hrs)</b>	0

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<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> RIO BLANCO

Lost time due to Halliburton in the start, execution, or completion of an ordered service or product, or delays in a follow-on service. Enter in decimal format. 0 if none.	
<b>Did We Run Wiper Plugs?</b> Did We Run Top And Bottom Casing Wiper Plugs?	Top
<b>If a top plug was run, was the plug bumped? (Yes/No/N/A)</b> If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
<b>If applicable, did the floats hold? (Yes/No/N/A)</b> If applicable, did the floats hold? (Yes/No/N/A)	Yes
<b>Mixing Density of Job Stayed in Designed Density Range (0-100%)</b> Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	90
<b>Pump Rate (percent) of Job Stayed At Designed Pump Rate</b> Pump Rate range defined as +/- 1bbl/min. Calculation: Total BBLs of fluid pumped at the designed rate divided by Total BBLs of fluid pumped, multiplied by 100	90
<b>If applicable, were there returns throughout the job? (Yes/No/N/A)</b> If applicable, were there returns throughout the job? (Yes/No/N/A)	YES
<b>Nbr of Remedial Plug Jobs Rqd - HES</b> Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
<b>Nbr of Remedial Sqz Jobs Rqd - HES</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0