

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

PA 433-27

**Nabors 576**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 10/28/2014

Job Date: 10/11/2014

Submitted by: Aaron Katz – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3353890	Quote #:	Sales Order #: 0901736897
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: RICK OAKS	
Well Name: FEDERAL	Well #: PA 433-27	API/UWI #: 05-045-22338-00	
Field: PARACHUTE	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: NE SE-27-6S-95W-1348FSL-851FEL			
Contractor:		Rig/Platform Name/Num: Nabors 576	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HX23209		Srcv Supervisor: Thomas Ponder	
<b>Job</b>			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	2864ft Job Depth TVD
Water Depth	Wk Ht Above Floor 4ft
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
Casing	3	9.625	9.001	32.3			0	30	0	0
Casing		9.625	8.921	36		J-55	0	2864		0
Open Hole Section			13.5				0	2864		0

### Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625	1		2834	Top Plug	9.625	1	HES
Float Shoe	9.625				Bottom Plug	9.625		HES
Float Collar	9.625	1		2819.3	SSR plug set	9.625		HES
Insert Float	9.625				Plug Container	9.625	1	HES
Stage Tool	9.625				Centralizers	9.625		HES

### 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 ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water	Fresh Water	20	bbl	8.34			4		
Stage/Plug #: 2										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	VariCem GJ1	VARICEM (TM) CEMENT	535	sack	12.3	2.38		8	13.77	

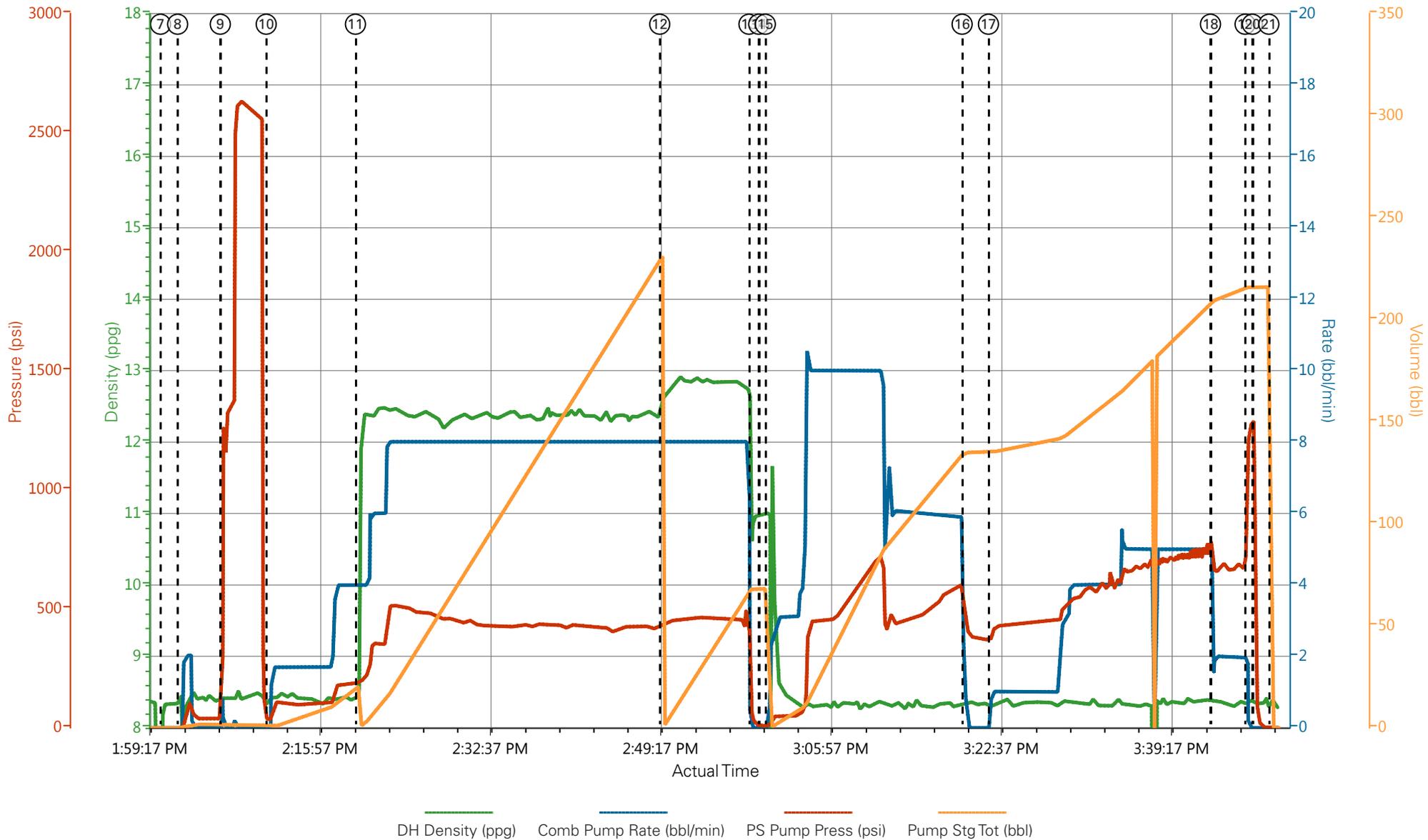
13.70 Gal		FRESH WATER							
0.25 lbm		POLY-E-FLAKE (101216940)							
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>	<b>Qty</b>	<b>Qty UoM</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft3/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/mi n</b>	<b>Total Mix Fluid Gal</b>
3	VariCem GJ1	VARICEM (TM) CEMENT	175	sack	12.8	2.11		8	11.77
0.25 lbm		POLY-E-FLAKE (101216940)							
11.71 Gal		FRESH WATER							
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>	<b>Qty</b>	<b>Qty UoM</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft3/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/mi n</b>	<b>Total Mix Fluid Gal</b>
4	Fresh Water Displacement	Fresh Water Displacement	217.9	bbl	8.34			10	
<b>Cement Left In Pipe</b>	<b>Amount</b>	45 ft		<b>Reason</b>	Shoe Joint				
<b>Comment</b>									

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)	Comment
Event	1	Call Out	10/11/2014	06:00:00	USER					CREW WAS OUT IN THE FIELD WHEN JOB CALLED OUT, ON LOCATION TIME @1100
Event	2	Arrive At Loc	10/11/2014	06:30:00	USER					RIG WAS STILL RUNNING CASING WHEN THE CREW ARRIVED ON LOCATION
Event	3	Assessment Of Location Safety Meeting	10/11/2014	12:30:00	USER					TD - 2880', TP- 2864', SJ - 44.7', MUD - 9.8 PPG, OPEN HOLE - 13 1/2", SURFACE CASING - 9 5/8" 36# J-55
Event	4	Pre-Rig Up Safety Meeting	10/11/2014	12:45:00	USER					JSA PERFORMED
Event	5	Rig-Up Equipment	10/11/2014	13:00:00	USER					1 - 550 PICK UP TRUCK, 1 - ELITE PUMPING UNIT, 1 - 660 CUFT BULK TRAILER, 1 - 1700 CUFT STORAGE SILO, 1 - 9 5/8" PLUG CONTAINER AND QUICK LATCH, 1 - 9 5/8" TOP PLUG
Event	6	Pre-Job Safety Meeting	10/11/2014	13:45:00	USER					ALL HES PRESENT, RIG CREW PRESENT, RIG STARTED CIRCULATING ON BOTTOM @ 1230
Event	7	Start Job	10/11/2014	14:00:37	COM6					RIG UP HES TO STAND PIPE AND PLUG CONTAINER
Event	8	Prime Pumps	10/11/2014	14:02:18	COM6	8.33	2	115	2	FILL LINES WITH FRESH WATER
Event	9	Test Lines	10/11/2014	14:06:28	USER		.1	2635	.1	GOOD PRESSURE TEST NO LEAKS IN THE LINES
Event	10	Pump Spacer 1	10/11/2014	14:10:58	COM6	8.33	4	191	20	FRESH WATER
Event	11	Pump Lead Cement	10/11/2014	14:19:42	COM6	12.3	8	513	226.8	535 SKS 12.3 PPG 2.38FT3/SK 13.77 GAL/SK
Event	12	Pump Tail Cement	10/11/2014	14:49:29	COM6	12.8	8	460	65.8	175 SKS 12.8 PPG 2.11FT3/SK 11.77 GAL/SK
Event	13	Shutdown	10/11/2014	14:58:13	USER					
Event	14	Drop Top Plug	10/11/2014	14:59:10	USER					PLUG DROP VERIFIED VIA TATTLE TELL BY CO REP
Event	15	Pump Displacement	10/11/2014	14:59:49	COM6	8.33	10	590	134	FRESH WATER, THE FIRST 10 BBL USED TO WASH UP MIXING TUB, 100 BBL IN TO DISPLACEMENT THE SOLIDS CONTENT OF THE RETURNS BECAME SO THICK THAT THE DREDGE PUMP COULD NOT REMOVE IT FAST ENOUGH HAD TO SLOW RATE TO ACCOMODATE, RIG

										THEN STARTED TO RECIPROCATATE THE CASING TO TRY AND FROCE THE SOLIDS OUT BETTER
Event	16	Shutdown	10/11/2014	15:19:04	USER					DREDGE PUMP STOPPED WORKING, USED VAC TRUCK BUT ENDED UP FILLING VAC TRUCK AND CELLAR RING BEFORE SHUTTING DOWN WITH 134 BBL OF DISPALCEMENT AWAY
Event	17	Pump Displacement	10/11/2014	15:21:39	USER	8.33	5	792	73.9	RIG WAS ABLE TO GET DREDGE WORKING AGAIN STARTED BACK INTO DISPLACEMENT
Event	18	Slow Rate	10/11/2014	15:43:23	USER	8.33	2	644	10	VERY THICK RETURNS THROUGH OUT THE JOB, CIRCULATED APPROX 80 BBL OF CEMENT TO SURFACE
Event	19	Bump Plug	10/11/2014	15:46:46	USER	8.33	2	707	217.9	PLUG BUMPED
Event	20	Check Floats	10/11/2014	15:47:29	USER			1289	217.9	FLOATS HELD, 1 BBL OF FLUID BACK TO THE DISPLACEMENT TANKS
Event	21	End Job	10/11/2014	15:49:06	COM6					THANK YOU FOR CHOOSING HALLIBURTON, THOMAS PONDER AND CREW

# WPX - FEDERAL PA 433-27 - 9.625 IN SURFACE



- ① Call Out
- ② Arrive At Loc
- ③ Assessment Of Location Safety Meeting
- ④ Pre-Rig Up Safety Meeting
- ⑤ Rig-Up Equipment
- ⑥ Pre-Job Safety Meeting
- ⑦ Start Job
- ⑧ Prime Pumps
- ⑨ Test Lines
- ⑩ Pump Spacer 1
- ⑪ Pump Lead Cement
- ⑫ Pump Tail Cement
- ⑬ Shutdown
- ⑭ Drop Top Plug
- ⑮ Pump Displacement
- ⑯ Shutdown
- ⑰ Pump Displacement
- ⑱ Slow Rate
- ⑲ Bump Plug
- 20 Check Floats
- 21 End Job

**HALLIBURTON** | iCem® Service

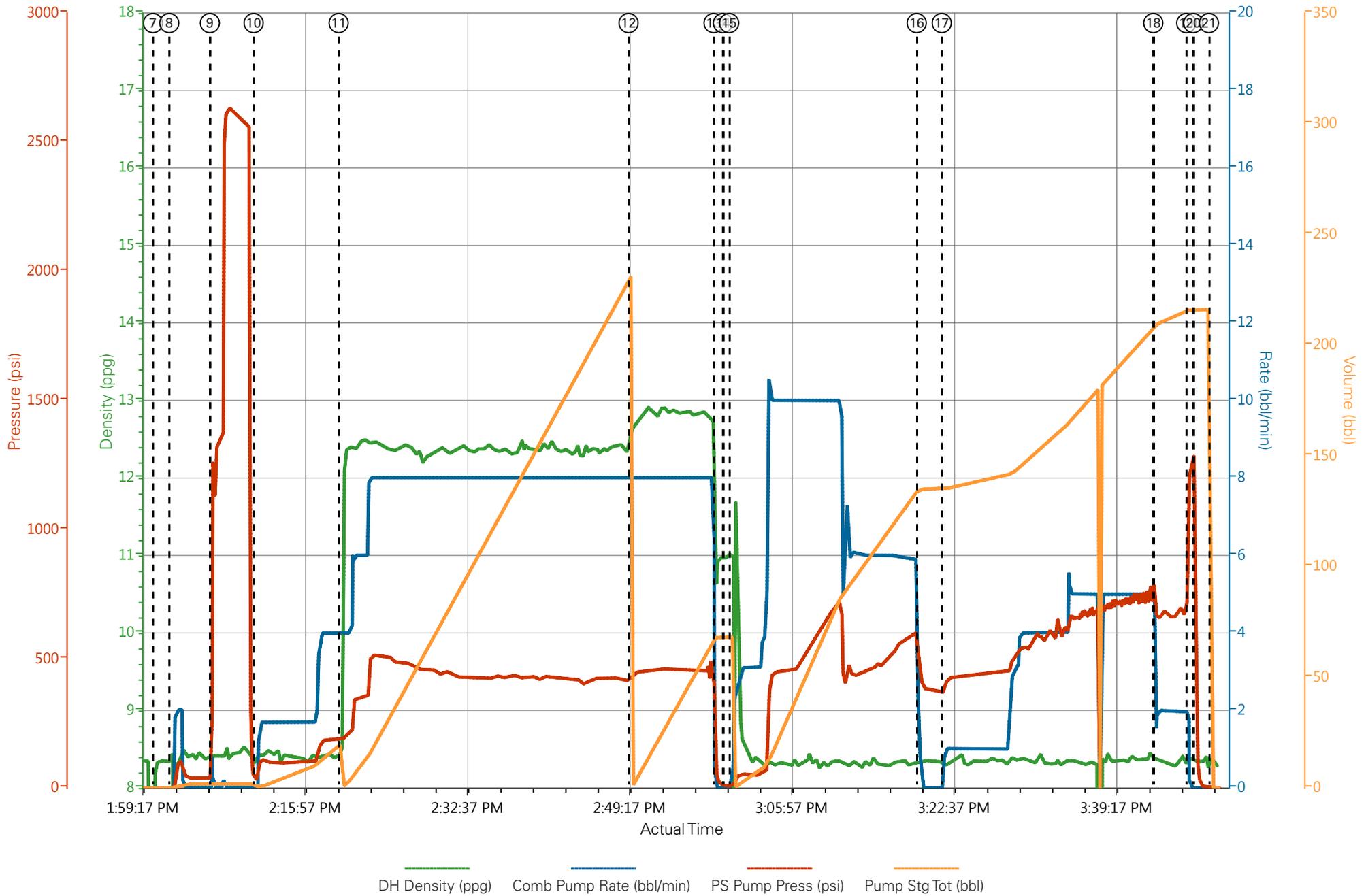
Created: 2014-10-11 13:13:27, Version: 3.0.121 Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS  
 Representative: RICK OAKS

Job Date: 10/11/2014 1:15:28 PM  
 Sales Order #: 901736897

Well: FEDERAL PA 433-27  
 ELITE #3: TRAVIS BROWN / ANDREW LINN  
 THOMAS PONDER

WPX - FEDERAL PA 433-27 - 9.625 IN SURFACE



# HALLIBURTON

Company: WPX Date: 10/11/2014  
Submitted by: THOMAS PONDER Date Rec.: 10/11/2014  
Attention: LARRY COOKSEY S.O.# 901736897  
Lease FEDERAL Job Type: SURFACE  
Well # PA 433-27

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>0 Mg / L</i>
Calcium (Ca)	<i>500</i>	<i>0 Mg / L</i>
Iron (FE2)	<i>300</i>	<i>0 Mg / L</i>
Chlorides (Cl)	<i>3000</i>	<i>0 Mg / L</i>
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<i>&lt;200 Mg / L</i>
Carbonates hardness		
Temp	<i>40-80</i>	<i>49 Deg</i>
Total Dissolved Solids		<i>290 Mg / L</i>

Respectfully: THOMAS PONDER

Title: CEMENTING SUPERVISOR

Location: GRAND JCT, CO

<b>Sales Order #:</b> 0901736897	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 10/11/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> RICK OAKS		<b>API / UWI: (leave blank if unknown)</b> 05-045-22338-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 0080455223
<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> GARFIELD

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	10/11/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX41187
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	RICK OAKS
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	GREAT JOB THANKS RICK

<b>CUSTOMER SIGNATURE</b>
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### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b>	10/11/2014
The date the survey was conducted	

Cementing KPI Survey	
<b>Type of Job</b>	0
Select the type of job. (Cementing or Non-Cementing)	
<b>Select the Maximum Deviation range for this Job</b>	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
<b>Total Operating Time (hours)</b>	4
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
<b>HSE Incident, Accident, Injury</b>	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
<b>Was the job purpose achieved?</b>	Yes
Was the job delivered correctly as per customer agreed design?	
<b>Operating Hours (Pumping Hours)</b>	2
Total number of hours pumping fluid on this job. Enter in decimal format.	
<b>Customer Non-Productive Rig Time (hrs)</b>	0
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>Type of Rig Classification Job Was Performed</b>	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
<b>Number Of JSAs Performed</b>	6
Number Of Jsas Performed	
<b>Number of Unplanned Shutdowns</b>	0
Unplanned shutdown is when injection stops for any period of time.	
<b>Was this a Primary Cement Job (Yes / No)</b>	Yes

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

Primary Cement Job= Casing job, Liner job, or Tie-back job.	
<b>Did We Run Wiper Plugs?</b> Did We Run Top And Bottom Casing Wiper Plugs?	Top
<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	99
<b>Was Automated Density Control Used?</b> Was Automated Density Control (ADC) Used ?	Yes
<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	99
<b>Nbr of Remedial Sqz Jobs Rqd - Competition</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By Competition	0
<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