

WPX Energy Rocky Mountain LLC - EBUS

PA 331-27

**Nabors 576**

# **Post Job Summary**

## **Cement Surface Casing**

Date Prepared: 12/28/2014

Job Date: 12/06/2014

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

*The Road to Excellence Starts with Safety*

Sold To #: 300721	Ship To #: 3207602	Quote #:	Sales Order #: 0901903924
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: RICK OAKS	
Well Name: FEDERAL	Well #: PA 331-27	API/UWI #: 05-045-22243-00	
Field: PARACHUTE	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: 27-6S-95W-2360FNL-648FEL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS 576	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srcv Supervisor: JAVIER CASTILLO	
<b>Job</b>			

Formation Name			
Formation Depth (MD)	Top	SURFACE	Bottom 2930ft
Form Type	BHST		
Job depth MD	2930ft		Job Depth TVD
Water Depth			Wk Ht Above Floor
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	NEW	9.625	9.001	32.3		H-40	0	2930		0
Open Hole Section			13.5				0	2930		0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make	
Guide Shoe	9.625	1	WTF	2930	Top Plug	9.625	1	HES	
Float Shoe					Bottom Plug				
Float Collar	9.625	1	WTF	2886.59	SSR plug set				
Insert Float					Plug Container	9.625	1	HES	
Stage Tool					Centralizers	9.625		WTF	

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	20	bbl	8.34			4		
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	VariCem GJ1	VARICEM (TM) CEMENT	400	sack	12.3	2.38		8	13.77	

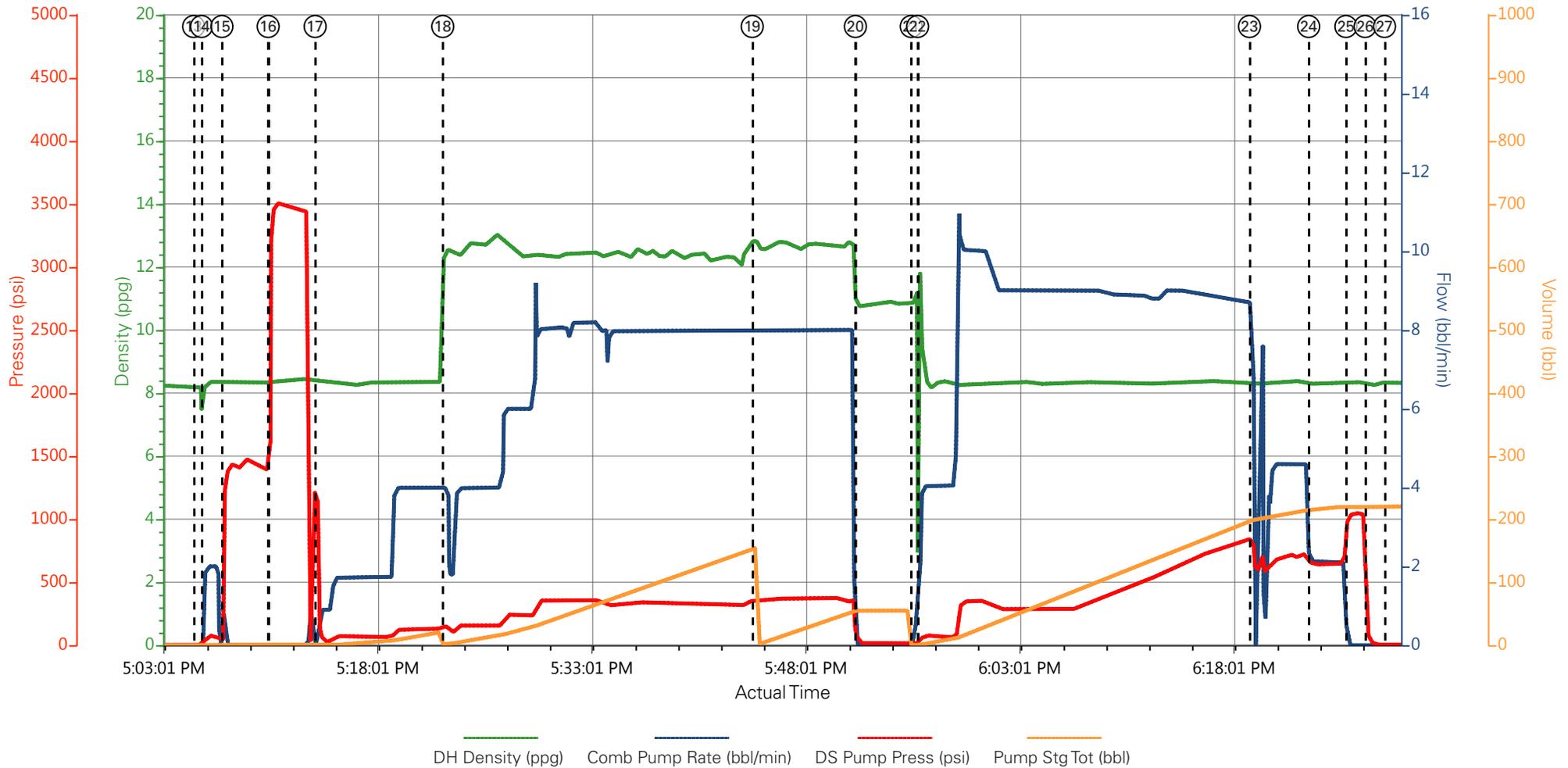
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
3	VariCem GJ1	VARICEM (TM) CEMENT	155	sack	12.8	2.11		8	11.77	
4	Fresh Water Displacement	Fresh Water Displacement	227	bbl	8.34			9		
<b>Cement Left In Pipe</b>		<b>Amount</b>	44.11 ft		<b>Reason</b>			Shoe Joint		
<b>Comment</b>										

1.1 Job Event Log

Graph Label	Date	Time	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Pressure	Pump Stg Total	Comment
CALL OUT	12/6/2014	02:00:00					ON LOCATION AT 08:00 HRS
DEPART YARD SAFETY MEETING	12/6/2014	03:50:00					
CREW LEAVE THE YARD	12/6/2014	04:00:00					
ARRIVE ON LOCATION	12/6/2014	05:00:00					RIG WAS PULLING OUT DRILL PIPE, WELL WAS TIGHT PULLING OUT THE DRILL PIPE
RIG START RUNNING CASING	12/6/2014	09:00:00					WELL WAS TIGHT GOING IN WITH CASING
RIG LANDED CASING	12/6/2014	13:30:00					RIG BEGAN TO CIRCULATE WELL
WELL HEAD LEAK	12/6/2014	14:00:10					RIG HEAD TO CHANGE THE WELL HEAD BECAUSE IT WAS LEAKING
SPOT TRUCKS	12/6/2014	15:35:01					SPOT TRUCKS AFTER CASING CREW CLEARED LOCATION
RIG UP MEETING	12/6/2014	15:45:01					
RIG UP	12/6/2014	15:50:01					1-ELITE, 1-660, 1-SILO, 2" IRON, PLUG CONTAINER AND QUICK CONNECT
RIG UP COMPLETE	12/6/2014	16:35:01					
PRE-JOB SAFETY MEETING	12/6/2014	16:50:01					ALL HES PERSONEL AND RIG CREW
START JOB	12/6/2014	17:05:20					JOB DEPTH 2930.7', OH-13.5", SJ-44.11, FC-2886.56', CSG-9.625", 32.3#, H-40
PRIME LINES	12/6/2014	17:05:53	8.33 PPG	2 BPM	90 psi	2 bbls	FRESH WATER
STALL OUT	12/6/2014	17:07:19					TESTED TO 1441 PSI
TEST LINES	12/6/2014	17:10:33					TESTED TO 3500 PSI

WATER SPACER	12/6/2014	17:13:51	8.33 ppg	4 bpm	110 psi	20 bbls	FRESH WATER
LEAD CEMENT	12/6/2014	17:22:47	12.3 ppg	8 bpm	319 psi	169 bbls	400 SKS, 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK
TAIL CEMENT	12/6/2014	17:44:29	12.8 ppg	8 bpm	370 psi	58 bbls	155 SKS, 12.8 PPG, 2.11 FT3/SK, 11.77 GAL/SK
SHUTDOWN	12/6/2014	17:51:42					GOOD CIRCULATION THROUGH OUT CEMENT MIXING
DROP TOP PLUG	12/6/2014	17:55:37					PLUG DROP VERIFIED BY CUSTOMER AND DRILLER
DISPLACEMENT	12/6/2014	17:56:04	8.33 ppg	9 bpm	850 psi	200 bbls	FRESH WATER
SLOW RATE	12/6/2014	18:19:19	8.33 ppg	4 bpm	735 psi	17 bbls	
SLOW RATE	12/6/2014	18:23:28	8.33 ppg	2 bpm	653 psi	10 bbls	
BUMP PLUG	12/6/2014	18:26:05			1050 psi	Total Disp 227 bbls	CIRCULATED 20 BBLS / 48 SKS OF CEMENT TO SURFACE
CHECK FLOATS	12/6/2014	18:27:25					FLOAT HELD WITH 0.5 BBLS FLOW BACK
END JOB	12/6/2014	18:28:47					USED 120 LBS OF SUGAR AND 1-GAL MMCR/GOOD CIRCULATION THROUGH THE ENTIRE JOB
RIG DOWN SAFETY MEETING	12/6/2014	18:45:00					
RIG DOWN	12/6/2014	18:50:00					BLOW DOWN PUMP
RIG DOWN COMPLETE	12/6/2014	20:30:00					
DEPART LOCATION SAFETY MEETING	12/6/2014	20:50:00					NO INJURIES WERE REPORTED AFTER THE JOB
CREW LEAVE LOCATION	12/6/2014	21:00:01					
THANK YOU	12/6/2014	21:01:00					THANK YOU FOR YOUR BUSINESS FROM JAVIER CASTILLO AND CREW

# WPX PA 331-27 SURFACE



- |   |                                     |                                  |   |
|---|-------------------------------------|----------------------------------|---|
| ① CALL OUT n/a;n/a;n/a;n/a                  | ⑩ RIG UP n/a;n/a;n/a;n/a            | ⑲ TAIL CEMENT 12.87;8;353;0.1    | 28 RIG DOWN SAFETY MEETING n/a;n/a;n/a;n/a        |
| ② DEPARTYARD SAFETY MEETING n/a;n/a;n/a;n/a | ⑪ RIG UP COMPLETE 8.33;9.7;469;10.1 | 20 SHUTDOWN 10.75;0;29;54.8      | 29 RIG DOWN n/a;n/a;n/a;n/a                       |
| ③ CREW LEAVE THE YARD n/a;n/a;n/a;n/a       | ⑫ PRE-JOB SAFETY MEETING 8.23;0;4;0 | 21 DROPTOP PLUG 10.88;0;7;0      | 30 RIG DOWN COMPLETE n/a;n/a;n/a;n/a              |
| ④ ARRIVE ON LOCATION n/a;n/a;n/a;n/a        | ⑬ START JOB 8.23;0;0;0              | 22 DISPLACEMENT 10.74;3.7;51;0.8 | 31 DEPART LOCATION SAFETY MEETING n/a;n/a;n/a;n/a |
| ⑤ RIG START RUNNING CASING n/a;n/a;n/a;n/a  | ⑭ PRIME LINES 8.16;1.9;34;0.2       | 23 SLOW RATE 8.34;8.7;846;199.1  | 32 CREW LEAVE LOCATION n/a;n/a;n/a;n/a            |
| ⑥ RIG LANDED CASING n/a;n/a;n/a;n/a         | ⑮ STALL OUT 8.37;0;1238;2.1         | 24 SLOW RATE 8.28;2.1;648;215.3  | 33 THANKYOU n/a;n/a;n/a;n/a                       |
| ⑦ WELL HEAD LEAK n/a;n/a;n/a;n/a            | ⑯ TEST LINES 8.43;0;3354;2.1        | 25 BUMP PLUG 8.34;0;1028;220.2   |   |
| ⑧ SPOTTRUCKS n/a;n/a;n/a;n/a                | ⑰ WATER SPACER 8.36;0.9;245;2.4     | 26 CHECK FLOATS 8.33;0;61;220.2  |   |
| ⑨ RIG UP MEETING n/a;n/a;n/a;n/a            | ⑱ LEAD CEMENT 12.64;4;161;2         | 27 END JOB 8.28;0;3;220.2        |   |

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Created: 2014-12-06 16:01:30, Version: 4.0.248

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 12/6/2014 4:28:52 PM

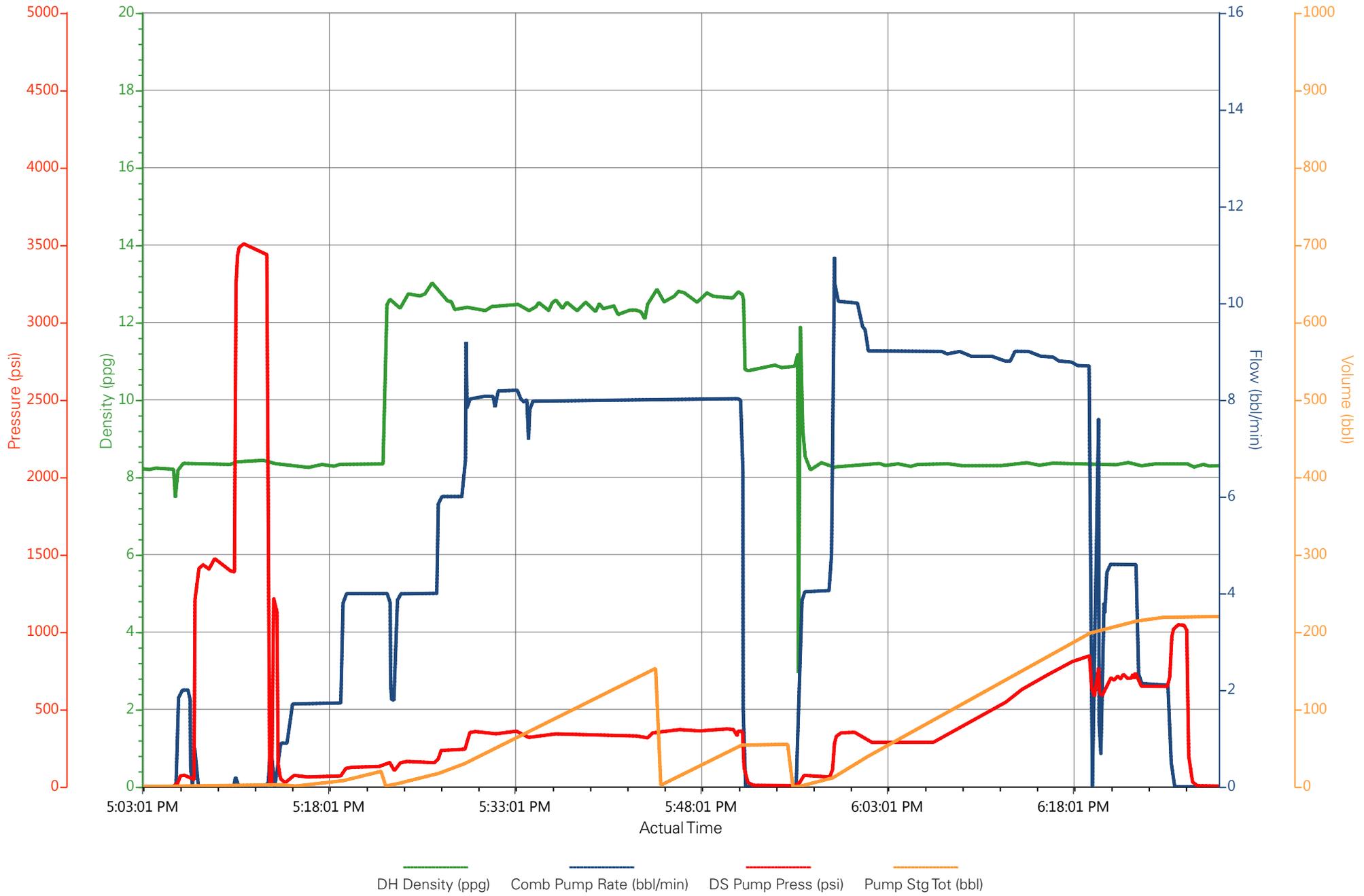
Well: PA 331-27

Representative: RICK OAKS

Sales Order #: 901903924

ELITE #9: J. CASTILLO / PAUL SALAZAR

# WPX PA 331-27 SURFACE



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

# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: JAVIER CASTILLO  
Attention: Chuck Ross  
Lease: PA  
Well #: 331-27

Date: 12/6/2014  
Date Rec.: 12/6/2014  
S.O.#: 901903924  
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>200 Mg / L</b>
Calcium (Ca)	<i>500</i>	<b>120 Mg / L</b>
Iron (FE2)	<i>300</i>	<b>0 Mg / L</b>
Chlorides (Cl)	<i>3000</i>	<b>0 Mg / L</b>
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>200 Mg / L</b>
Chlorine (Cl <sub>2</sub> )		<b>0 Mg / L</b>
Temp	<i>40-80</i>	<b>45 Deg</b>
Total Dissolved Solids		<b>410 Mg / L</b>

Respectfully: JAVIER CASTILLO

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 u

<b>Sales Order #:</b> 0901903924	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 12/6/2014
<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> 05-045-22243-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 0080244863
<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	12/6/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB85312
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	

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

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### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b>	12/6/2014
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>	16
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>	1.5
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>	5
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>Customer Representative:</b> RICK OAKS		<b>API / UWI: (leave blank if unknown)</b> 05-045-22243-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 0080244863
<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

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	90
<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	95
<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