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# **WPX ENERGY ROCKY MOUNTAIN LLC-EBUS**

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**SG 411-27  
GRAND VALLEY  
Garfield County , Colorado**

## **Cement Surface Casing** **18-Jan-2014**

**Post Job Report**

## The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3190180	Quote #:	Sales Order #: 901048813
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Customer Rep:		
Well Name: SG	Well #: 411-27	API/UWI #:	
Field: GARND VAILLEY	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Contractor: Aztec	Rig/Platform Name/Num: 1000		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	Job Type: Cement Surface Casing		
Sales Person: MAYO, MARK	Srv Supervisor: KEANE, JOHN	MBU ID Emp #: 486519	

## Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BANKS, BRENT A	7	371353	HYDE, DUSTIN C	7	453940	KEANE, JOHN Donovon	7	486519
LINN, PAUL Andrew	7	479143						

## Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10248057	60 mile	10565341	60 mile	10567589C	60 mile	10989685	60 mile
11259882	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
01/18/2013	7	1						

**TOTAL** Total is the sum of each column separately

## Job

Formation Name	Job	Job Times
Formation Depth (MD) Top Bottom 1580ft	Called Out	Date Time Time Zone
Form Type	On Location	18 - Jan - 2014 07:30 MST
Job depth MD 1567 ft	Job Started	18 - Jan - 2014 12:00 MST
Water Depth	Job Completed	18 - Jan - 2014 17:03 MST
Perforation Depth (MD) From To	Job Completed	18 - Jan - 2014 18:09 MST
	Departed Loc	11 - Jan - 2014 19:15 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
OPEN HOLE				13.5				.	1580.	.	1580.
9.625 IN SURFACE CASING	Mixed		9.625	9.001	32.3		H-40	.	1567.	.	1567.

## Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	9.625	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	9.625	1	HES
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 <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk	
1	Fresh Water Spacer		40.00	bbl	.	.0	.0	10		
2	VariCem GJ! Lead Cement	VARICEM (TM) CEMENT (452009)	250.0	sacks	12.3	2.38	13.75	8	13.75	
13.75 Gal		FRESH WATER								
3	VariCem GJ1 Tail Cement	VERSACEM (TM) SYSTEM (452010)	160.0	sacks	12.8	2.11	11.75	8	11.75	
11.75 Gal		FRESH WATER								
4	Fresh Water Displacement		119.00	bbl	.	.0	.0	10		
Calculated Values		Pressures		Volumes						
Displacement	119.8	Shut In: Instant		Lost Returns		Cement Slurry	166.1	Pad		
Top Of Cement	SURFACE	5 Min		Cement Returns	25	Actual Displacement	119.8	Treatment		
Frac Gradient		15 Min		Spacers	40	Load and Breakdown		Total Job	326	
Rates										
Circulating	10	Mixing	8	Displacement	10	Avg. Job	9			
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						

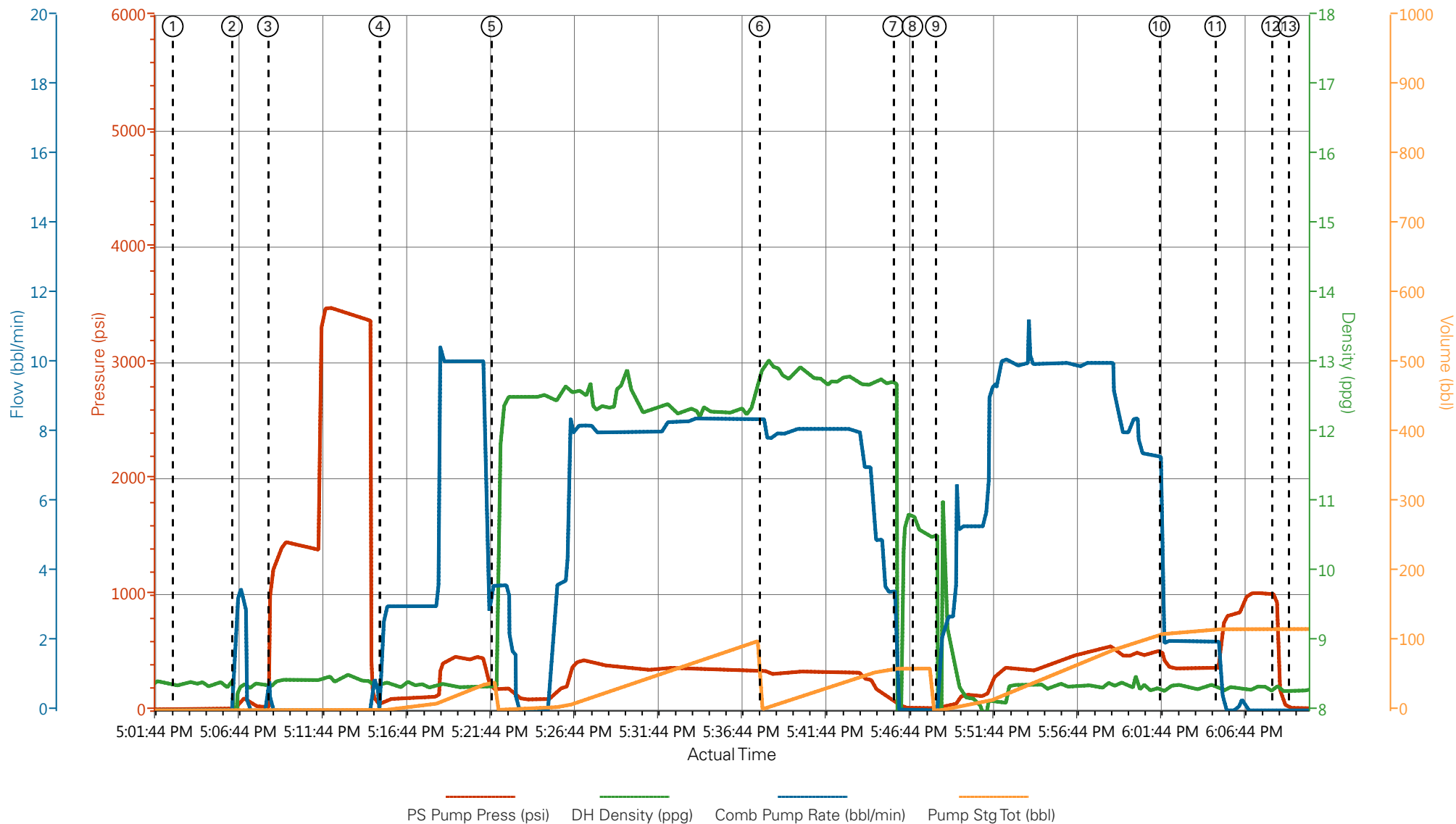
*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300721		<b>Ship To #:</b> 3190180		<b>Quote #:</b>		<b>Sales Order #:</b> 901048813	
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS				<b>Customer Rep:</b>			
<b>Well Name:</b> SG			<b>Well #:</b> 411-27			<b>API/UWI #:</b>	
<b>Field:</b> GARND VAILLEY		<b>City (SAP):</b> PARACHUTE		<b>County/Parish:</b> Garfield		<b>State:</b> Colorado	
<b>Legal Description:</b>							
<b>Lat:</b>				<b>Long:</b>			
<b>Contractor:</b> Aztec			<b>Rig/Platform Name/Num:</b> 1000				
<b>Job Purpose:</b> Cement Surface Casing						<b>Ticket Amount:</b>	
<b>Well Type:</b> Development Well			<b>Job Type:</b> Cement Surface Casing				
<b>Sales Person:</b> MAYO, MARK			<b>Srvc Supervisor:</b> KEANE, JOHN			<b>MBU ID Emp #:</b> 486519	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	01/18/2014 07:30							
Pre-Convoy Safety Meeting	01/18/2014 10:00							WITH HES
Arrive At Loc	01/18/2014 12:00							RIG RUNNING CASING UPON HES ARRIVAL
Assessment Of Location Safety Meeting	01/18/2014 12:15							WITH HES
Pre-Rig Up Safety Meeting	01/18/2014 12:30							WITH HES
Rig-Up Equipment	01/18/2014 12:35							
Pre-Job Safety Meeting	01/18/2014 16:45							WITH HES, WPX, AND AZTEC 1000
Start Job	01/18/2014 17:03							TP 1567 FT, TD 1580 FT, SHOE 46 FT, CSG 9.625 IN 32.3 LB/FT H-40, MWT 10.2 LBS, RIG CIRCULATING AT 10 BBL/MIN
Pump Water	01/18/2014 17:06		2	2			115.0	FILL LINES
Test Lines	01/18/2014 17:08							LOW TEST AT 1498 PSI, HIGH TEST AT 3470 PSI, PRESSURE HOLDING
Pump Spacer	01/18/2014 17:15		10	2			460.0	FRESH WATER, RETURNS AT 2 BBL AWAY
Pump Lead Cement	01/18/2014 17:22		8	106			340.0	MIXED AT 12.3 LB/GAL, 250 SKS, 2.38 FT3/SK, 13.75 GAL/SK, DENSITY VERIFIED USING PRESSURIZED MUD SCALES

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Tail Cement	01/18/2014 17:37		8	60			350.0	MIXED AT 12.8 LB/GAL, 160 SKS, 2.11 FT3/SK, 11.75 GAL/SK, DENSITY VERIFIED USING PRESSURIZED MUD SCALES
Shutdown	01/18/2014 17:45						87.0	
Drop Plug	01/18/2014 17:47							PLUG LAUNCHED
Pump Displacement	01/18/2014 17:48		10	110			630.0	FRESH WATER
Slow Rate	01/18/2014 18:01		2	10			353.0	SLOWED AT 110 BBL AWAY
Bump Plug	01/18/2014 18:05		2				377.0	PLUG BUMPED AT CALCULATED DISPLACEMENT
Check Floats	01/18/2014 18:08						1080	FLOATS HOLDING, 1 BBL RETURNED TO THE TRUCK
End Job	01/18/2014 18:09							GOOD CIRCULATION THROUGHOUT THE JOB, PIPE WAS STATIC, NO ADD HOURS CHARGED, NO DERRICK CHARGE, RIG USED 60 LBS OF SUGAR, 25 BBL CEMENT CIRCULATED TO SURFACE
Post-Job Safety Meeting (Pre Rig-Down)	01/18/2014 18:15							WITH HES
Rig-Down Equipment	01/18/2014 18:20							
Pre-Convoy Safety Meeting	01/18/2014 19:00							WITH HES
Crew Leave Location	01/18/2014 19:15							
Comment	01/18/2014 19:16							THANKS FOR USING HALLIBURTON, JOHN KEANE AND CREW

# WPX - SG-411-27- 9.625 IN SURFACE



- |  |                                     |                                  |
|--|-------------------------------------|----------------------------------|
| ① Start Job 10;8.36;0;0                  | ⑥ Pump Tail Cement 345;12.9;8.4;2.2 | ⑪ Bump Plug 364;8.36;2;116.6     |
| ② Fill Lines 14;6.65;1.7;0.2             | ⑦ Shutdown 87;12.72;3.5;60          | ⑫ Check Floats 1003;8.36;0;117.1 |
| ③ Test Lines 1105;8.36;0;2.2             | ⑧ Drop Top Plug 20;10.76;0;60.2     | ⑬ End Job 20;8.3;0;117.1         |
| ④ Pump Fresh Water Spacer 55;8.4;1.7;0.2 | ⑨ Pump Displacement 22;1.41;2.1;0.1 |                                  |
| ⑤ Pump Lead Cement 181;8.35;3.6;0        | ⑩ Slow Rate 470;8.28;2.3;110.1      |                                  |

▼ **HALLIBURTON** | iCem® Service

Created: 2014-01-18 14:30:01, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 1/18/2014 2:31:22 PM

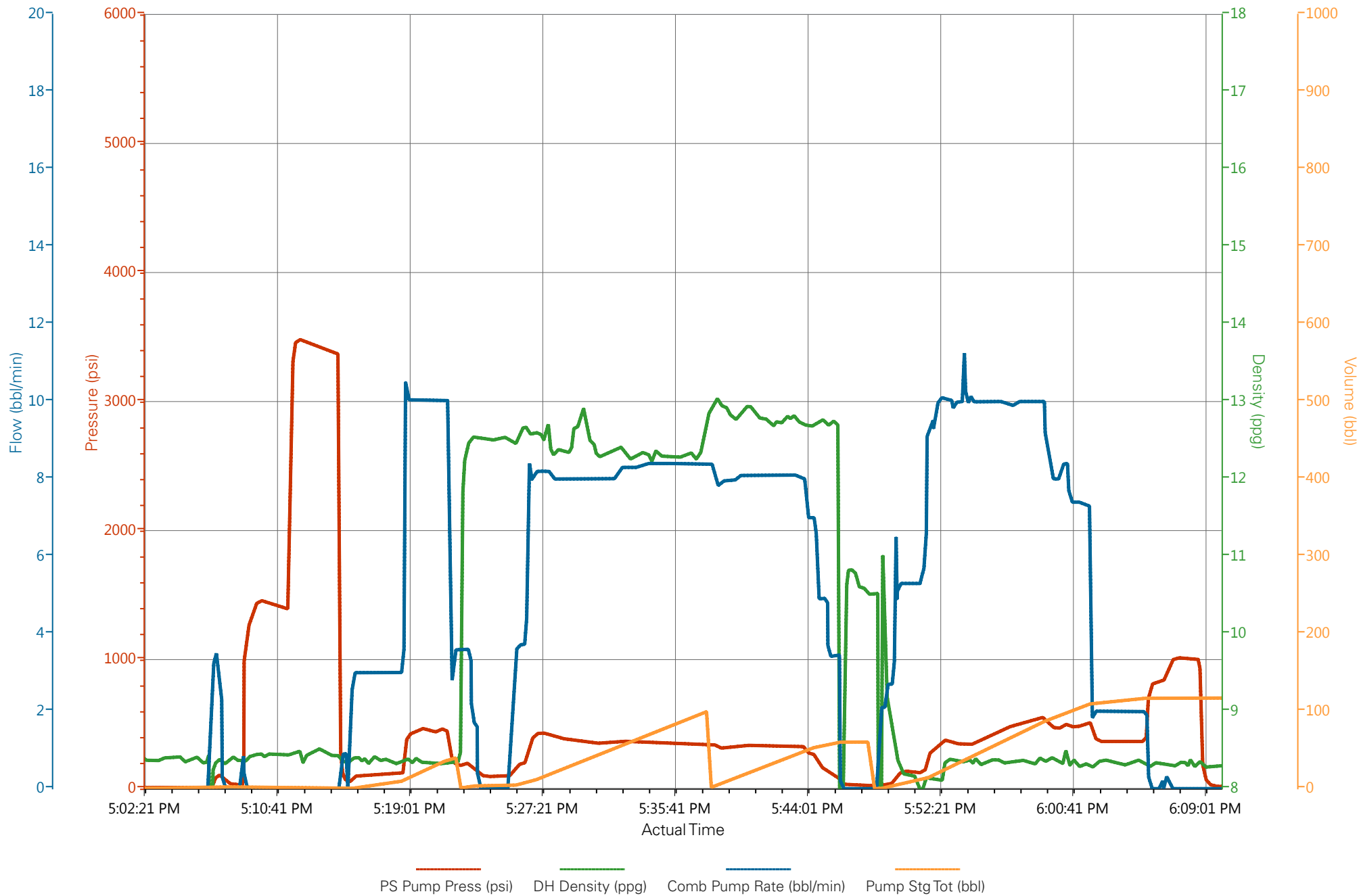
Well: SG-427-11

Representative: BRANDON HAIRE

Sales Order #: 901048813

ELITE 3: JOHN KEANE / BRENT BANKS

# WPX - SG-411-27- 9.625 IN SURFACE



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

# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: JOHN KEANE  
Attention: CHUCK ROSS  
Lease: SG  
Well #: 411-27

Date: 1/17/2014  
Date Rec.: 1/17/2014  
S.O.#: 901048813  
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>250</b> Mg / L
Calcium (Ca)	<i>500</i>	<b>250</b> Mg / L
Iron (FE2)	<i>300</i>	<b>0</b> Mg / L
Chlorides (Cl)	<i>3000</i>	<b>500</b> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>&lt;200</b> Mg / L
Chlorine (Cl <sub>2</sub> )		<b>0</b> Mg / L
Temp	<i>40-80</i>	<b>50</b> Deg
Total Dissolved Solids		<b>690</b> Mg / L

Respectfully: JOHN KEANE

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 use.



<b>Sales Order #:</b> 901048813	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 1/18/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b>		<b>API / UWI: (leave blank if unknown)</b> AFEYSUQJ5LKYWVE5AAA
<b>Well Name:</b> SG		<b>Well Number:</b> 411-27
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<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	1/19/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	JOHN KEANE (HB58526)
Customer Participation	Did the customer participate in this survey? (Y/N)	No
Customer Representative	Enter the Customer representative name	
HSE	Was our HSE performance satisfactory? Circle Y or N	
Equipment	Were you satisfied with our Equipment? Circle Y or N	
Personnel	Were you satisfied with our people? Circle Y or N	
Customer Comment	Customer's Comment	

CUSTOMER SIGNATURE

<b>Sales Order #:</b> 901048813	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 1/18/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b>		<b>API / UWI: (leave blank if unknown)</b> AFEYSUQJ5LKYWVE5AAA
<b>Well Name:</b> SG		<b>Well Number:</b> 411-27
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b> The date the survey was conducted	1/18/2014

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.	Deviated
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	4
<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>Operating Hours (Pumping Hours)</b> Total number of hours pumping fluid on this job. Enter in decimal format.	1
<b>Customer Non-Productive Rig Time (hrs)</b> 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.	0
<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>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	1
<b>Reason For Unplanned Shutdown</b>	LOST F-100 FLOWMETER

<b>Sales Order #:</b> 901048813	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 1/18/2014
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<b>Customer Representative:</b>		<b>API / UWI: (leave blank if unknown)</b> AFEYSUQJ5LKYWVE5AAA
<b>Well Name:</b> SG		<b>Well Number:</b> 411-27
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

Reason For Unplanned Shutdowns (after Starting To Pump)	
<b>Was this a Primary Cement Job (Yes / No)</b> Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
<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	90
<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