

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS  
DO NOT MAIL - ACH-43241  
TULSA, Oklahoma

RU 321-5

**NABORS/576**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 01/23/2014  
Version: 1

Service Supervisor: CARTER, ERIC

Submitted by: Grand Junction Cement Engineering

**HALLIBURTON**

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300721	<b>Ship To #:</b> 3123467	<b>Quote #:</b>	<b>Sales Order #:</b> 900835033
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Customer Rep:</b> Hartl, Al	
<b>Well Name:</b> RU		<b>Well #:</b> 321-5	<b>API/UWI #:</b> 05-045-21799
<b>Field:</b> RULISON	<b>City (SAP):</b> RIFLE	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Lat:</b> N 39.475 deg. OR N 39 deg. 28 min. 28.963 secs.		<b>Long:</b> W 107.799 deg. OR W -108 deg. 12 min. 4.367 secs.	
<b>Contractor:</b> NABORS		<b>Rig/Platform Name/Num:</b> 576	
<b>Job Purpose:</b> Cement Surface Casing			
<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Surface Casing	
<b>Sales Person:</b> MAYO, MARK		<b>Srvc Supervisor:</b> CARTER, ERIC	<b>MBU ID Emp #:</b> 345598

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CARTER, ERIC Earl	0.0	345598	LINN, PAUL Andrew	0.0	479143	WARDELL, STEVEN John	0.0	549567
WESTFALL, DUSTIN Adam	0.0	555858						

**Equipment**

HES Unit #	Distance-1 way						
	60 mile	10867531	60 mile	10989685	60 mile	11583933	60 mile
11808849	60 mile						

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
<b>TOTAL</b>			<i>Total is the sum of each column separately</i>					

**Job**

**Job Times**

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
<b>Formation Depth (MD)</b>			<b>On Location</b>	21 - Oct - 2013	03:00	MST
<b>Form Type</b>		BHST	<b>Job Started</b>	21 - Oct - 2013	20:00	MST
<b>Job depth MD</b>	1126.9 ft	<b>Job Depth TVD</b>	<b>Job Completed</b>	22 - Oct - 2013	01:06	MST
<b>Water Depth</b>		<b>Wk Ht Above Floor</b>	<b>Departed Loc</b>	22 - Oct - 2013	02:01	MST
<b>Perforation Depth (MD)</b>	<i>From</i>	<i>To</i>				

**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				.	1175.		
SURFACE CASING	Unknown		9.625	9.001	32.3		H-40	.	1126.9		

**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										
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		20.00	bbl	.	.0	.0	.0		
2	VariCem GJ! Lead Cement	VARICEM (TM) CEMENT (452009)	160.0	sacks	12.3	2.38	13.75		13.75	
13.75 Gal		FRESH WATER								
3	VariCem GJ1 Tail Cement	VARICEM (TM) CEMENT (452009)	160.0	sacks	12.8	2.11	11.75		11.75	
11.75 Gal		FRESH WATER								
4	Fresh Water Displacement			bbl	.	.0	.0	9.5		
Calculated Values			Pressures			Volumes				
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad		
Top Of Cement		5 Min		Cement Returns		Actual Displacement		Treatment		
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job		
Rates										
Circulating		Mixing		Displacement		Avg. Job				
Cement Left In Pipe		Amount	42.87 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> 3123467	<b>Quote #:</b>	<b>Sales Order #:</b> 900835033
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Customer Rep:</b> Hartl, Al	
<b>Well Name:</b> RU		<b>Well #:</b> 321-5	<b>API/UWI #:</b> 05-045-21799
<b>Field:</b> RULISON	<b>City (SAP):</b> RIFLE	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Legal Description:</b>			
<b>Lat:</b> N 39.475 deg. OR N 39 deg. 28 min. 28.963 secs.		<b>Long:</b> W 107.799 deg. OR W -108 deg. 12 min. 4.367 secs.	
<b>Contractor:</b> NABORS		<b>Rig/Platform Name/Num:</b> 576	
<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> CARTER, ERIC	<b>MBU ID Emp #:</b> 345598

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	10/21/2013 13:00							
Depart Yard Safety Meeting	10/21/2013 17:50							ATTENDED BY ALL HES CREW
Crew Leave Yard	10/21/2013 18:30							
Arrive At Loc	10/21/2013 20:00							RIG PULLING DRILL PIPE
Assessment Of Location Safety Meeting	10/21/2013 20:10							ATTENDED BY ALL HES CREW
Other	10/21/2013 20:20							SPOT EQUIPMENT
Pre-Rig Up Safety Meeting	10/21/2013 23:50							ATTENDED BY ALL HES CREW
Rig-Up Equipment	10/22/2013 00:00							
Pre-Job Safety Meeting	10/22/2013 00:30							ATTENDED BY ALL HES CREW, RIG CREW AND COMPANY REP
Start Job	10/22/2013 01:06							TP 1127.89', TD 1175' , SJ 42.87', LANDING JOINT 28', FC 1084.02', MW 10 PPG, CASING 9.625", 32.3#, H-40, RIG CIRCULATED FOR 1 HR PRIOR TO JOB
Other	10/22/2013 01:07		2	2			70.0	FILL LINES
Test Lines	10/22/2013 01:08							PRESSURED UP TO 3340 PSI, PRESSURE HELD
Pump Spacer	10/22/2013 01:12		4	20			170.0	FRESH WATER
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

Sold To # : 300721

Ship To # :3123467

Quote # :

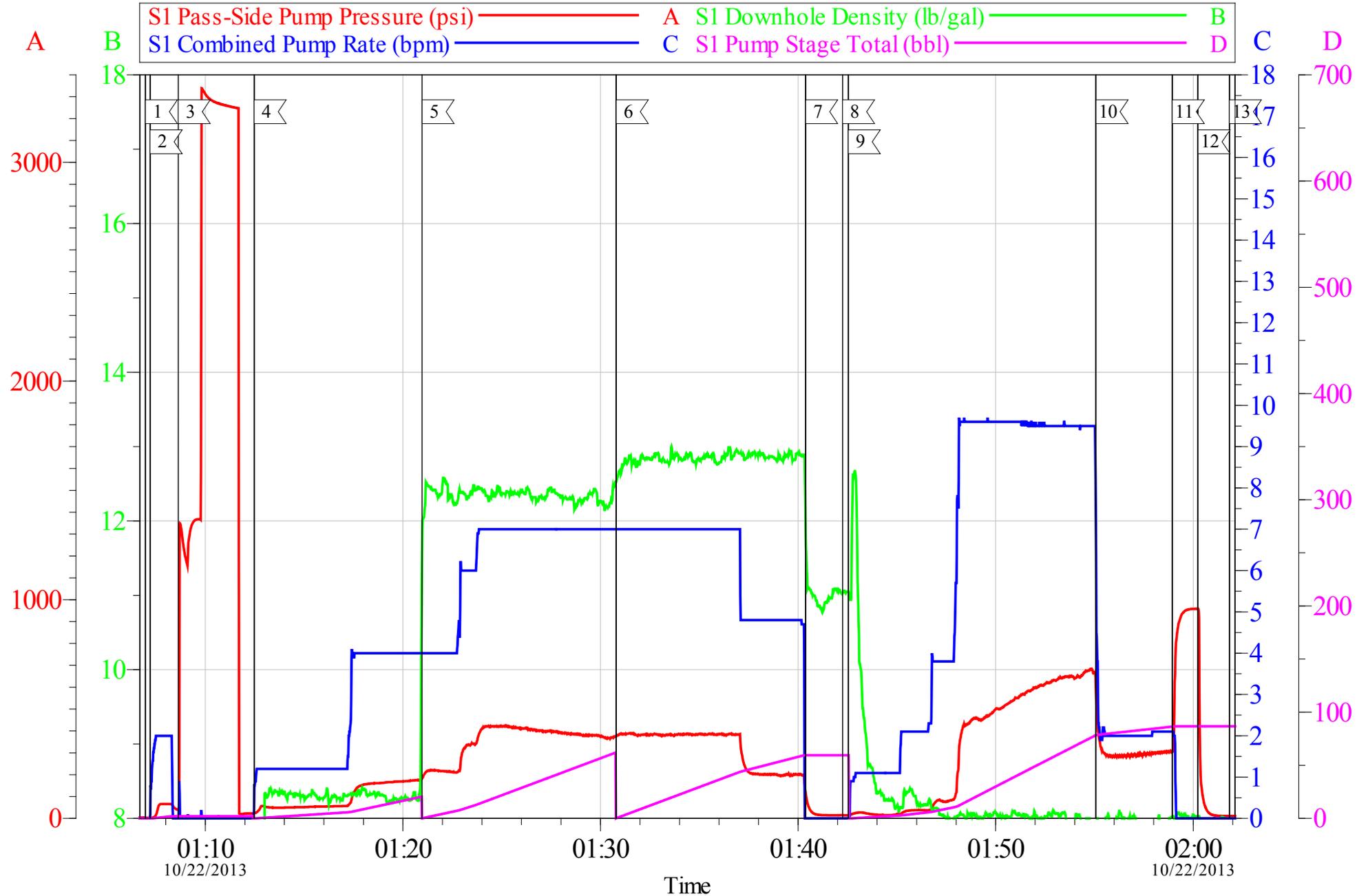
Sales Order # : 900835033

SUMMIT Version: 7.3.0106

Thursday, January 23, 2014 02:11:00

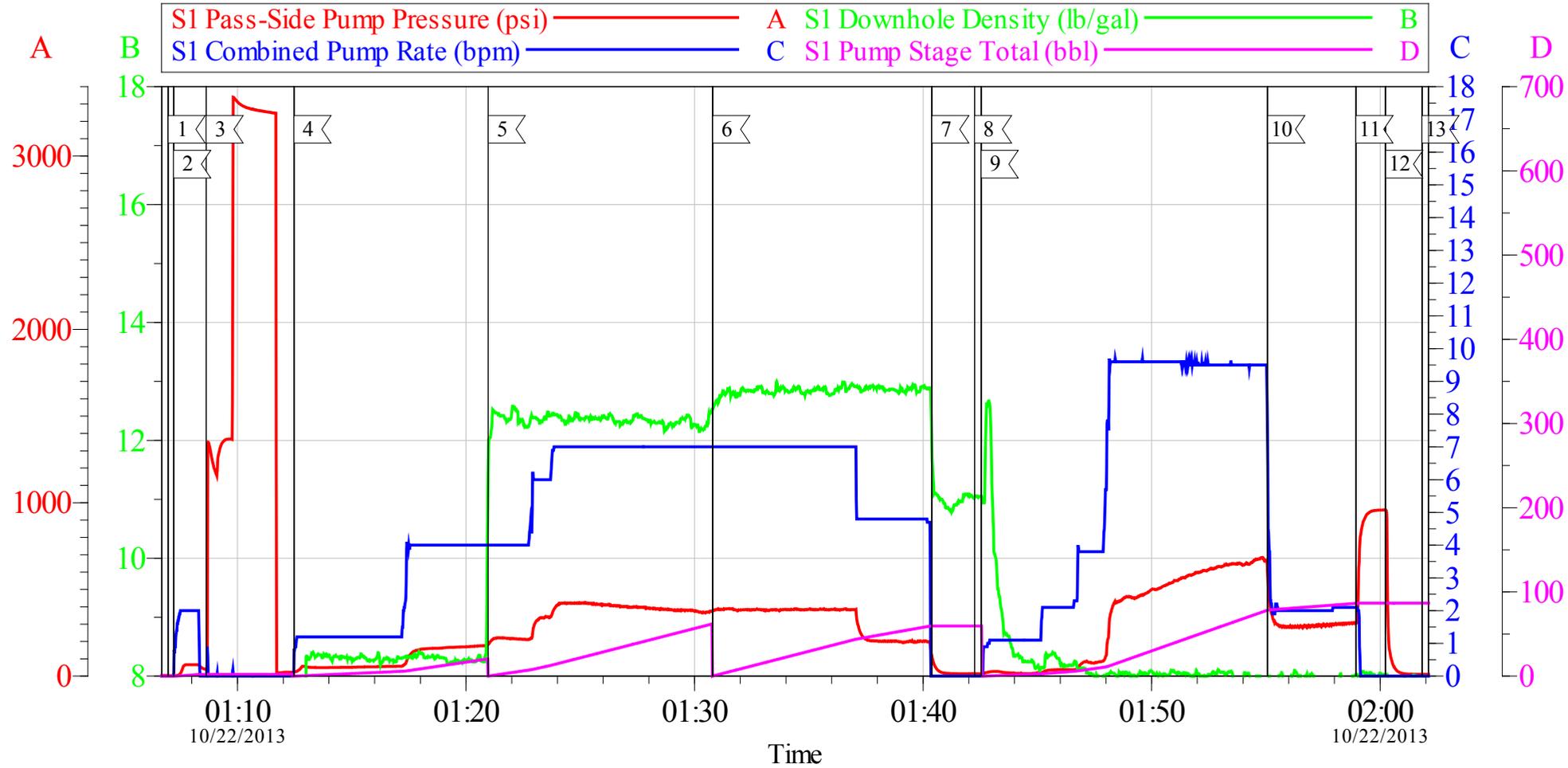
Pump Lead Cement	10/22/2013 01:20		7	67.8			420.0	160 SKS VARICEM MIXED AT 12.3 PPG, 2.38 YILED, 13.75 GL/SK
Pump Tail Cement	10/22/2013 01:30		7	60.1			375.0	160 SKS VARICEM MIXED AT 12.8 PPG, 2.11 YILED, 11.75 GL/SK
Shutdown	10/22/2013 01:40							
Drop Top Plug	10/22/2013 01:42							PLUG LUANCHED
Pump Displacement	10/22/2013 01:42		9.5	77.5			680.0	FRESH WATER
Slow Rate	10/22/2013 01:55		2	10			305.0	
Bump Plug	10/22/2013 01:58						960.0	PLUG LANDED
Check Floats	10/22/2013 02:00							FLOATS HELD
End Job	10/22/2013 02:01							GOOD CIRCULATION THROUGH OUT JOB, PIPE NOT MOVED DURING JOB, 20 BBLS CEMENT TO SURFACE
Post-Job Safety Meeting (Pre Rig-Down)	10/22/2013 02:05							ATTENDED BY ALL HES CREW
Rig-Down Equipment	10/22/2013 02:10							
Depart Location Safety Meeting	10/22/2013 02:50							ATTENDED BY ALL HES CREW
Crew Leave Location	10/22/2013 03:00							THANK YOU FOR USING HALLIBURTON CEMENT, ERIC CARTER AND CREW.

WPX - RU 321-5  
9.625" SURFACE



Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Job Date: 22-Oct-2013	Sales Order #: 900835033
Well Description: RU 321-5	Job Type: SURFACE	ADC Used: YES
Company Rep: RICK OAKS	Service Supervisor: ERIC CARTER	Elite#/Operator: 9/ANDREW LINN

WPX - RU 321-5  
9.625" SURFACE



### Local Event Log

1	START JOB	01:06:58	2	FILL LINES	01:07:12	3	TEST LINES	01:08:38
4	PUMP SPACER	01:12:28	5	PUMP LEAD CEMENT	01:20:58	6	PUMP TAIL CEMENT	01:30:48
7	SHUTDOWN	01:40:23	8	DROP TOP PLUG	01:42:15	9	PUMP DISPLACEMENT	01:42:32
10	SLOW RATE	01:55:05	11	BUMP PLUG	01:58:56	12	CHECK FLOATS	02:00:15
13	END JOB	02:01:50						

Customer:	WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Job Date:	22-Oct-2013	Sales Order #:	900835033
Well Description:	RU 321-5	Job Type:	SURFACE	ADC Used:	YES
Company Rep:	RICK OAKS	Service Supervisor:	ERIC CARTER	Elite#/Operator:	9/ANDREW LINN

# HALLIBURTON

---

## Water Analysis Report

Company: WPX  
Submitted by: ERIC CARTER  
Attention: J.Trout  
Lease: NABORS 576  
Well #: RU 321-5

Date: 1/23/2014  
Date Rec.: 1/23/2014  
S.O.#: 900835033  
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>0 Mg / L</b>
Hrdness	<i>500</i>	<b>250 Mg / L</b>
Iron (FE2)	<i>300</i>	<b>0 Mg / L</b>
Chlorides (Cl)	<i>3000</i>	<b>500 Mg / L</b>
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>&lt;200 Mg / L</b>
Temp	<i>40-80</i>	<b>54 Deg</b>
Total Dissolved Solids		<b>540 Mg / L</b>

Respectfully: ERIC CARTER

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 it

<b>Sales Order #:</b> 900835033	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 10/22/2013
<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> 05-045-21799
<b>Well Name:</b> RU		<b>Well Number:</b> 321-5
<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	10/22/2013
Survey Interviewer	The survey interviewer is the person who initiated the survey.	ERIC CARTER (HX15491)
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>
---------------------------

<b>Sales Order #:</b> 900835033	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 10/22/2013
<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> 05-045-21799
<b>Well Name:</b> RU		<b>Well Number:</b> 321-5
<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>	10/22/2013
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>	2.5
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
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

<b>Sales Order #:</b> 900835033	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 10/22/2013
<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> 05-045-21799
<b>Well Name:</b> RU		<b>Well Number:</b> 321-5
<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

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	98
<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	97
<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