

**HALLIBURTON**

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

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**Federal RG 313-14-298  
SULFUR CREEK  
Rio Blanco County , Colorado**

## **Cement Multiple Stages** **12-Dec-2013**

### **Post Job Report**

*The Road to Excellence Starts with Safety*

Sold To #: 300721		Ship To #: 3265169		Quote #:		Sales Order #: 900964862	
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS				Customer Rep: Ragsdale, Ted			
Well Name: Federal RG			Well #: 313-14-298			API/UWI #:	
Field: SULFUR CREEK		City (SAP): MEEKER		County/Parish: Rio Blanco		State: Colorado	
Contractor: CYCLONE 29			Rig/Platform Name/Num: Cyclone 29				
Job Purpose: Cement Multiple Stages							
Well Type: Development Well			Job Type: Cement Multiple Stages				
Sales Person: MAYO, MARK			Srv Supervisor: CARTER, ERIC			MBU ID Emp #: 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	HYDE, DUSTIN C	0.0	453940	KUKUS, CARLTON Dean	0.0	458577
LINN, PAUL Andrew	0.0	479143	MARTIN, DILLON Ray	0.0	478664	SOMOZA, RAMON Manuel	0.0	554555
WOLFE, JON P	0.0	485217						

**Equipment**

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10296152C	60 mile	10722398	60 mile	10867425	60 mile	10897891	60 mile
11139330	60 mile	11583933	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

TOTAL Total is the sum of each column separately

Job				Job Times			
Formation Name				Date	Time	Time Zone	
Formation Depth (MD)	Top	Bottom		Called Out	11 - Dec - 2013 13:30	MST	
Form Type		BHST		On Location	11 - Dec - 2013 20:00	MST	
Job depth MD	3389. ft	Job Depth TVD	3389. ft	Job Started	12 - Dec - 2013 05:51	MST	
Water Depth		Wk Ht Above Floor	5. ft	Job Completed	12 - Dec - 2013 20:26	MST	
Perforation Depth (MD)	From	To		Departed Loc	12 - Dec - 2013 22:00	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				1200.	3417.		
OPEN HOLE				14.75				.	1200.		
SURFACE CASING	Unknown		9.625	8.921	36.		J-55	.	3389.		

**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 ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk

**HALLIBURTON****Cementing Job Summary**

1	Fresh Water Spacer		40.00	bbl	8.33	.0	.0	.0	
2	1st Stage HLC Lead Cement	ECONOCEM (TM) SYSTEM (452992)	805.0	sacks	12.8	1.77	9.34		9.34
	0.25 lbm	POLY-E-FLAKE (101216940)							
	0.35 %	HR-5, 50 LB SK (100005050)							
	9.34 Gal	FRESH WATER							
3	1st Stage Varicem Tail Cement	VARICEM (TM) CEMENT (452009)	200.0	sacks	12.8	1.96	10.95		10.95
	0.3 lbm	POLY-E-FLAKE (101216940)							
	10.95 Gal	FRESH WATER							
4	Displacement		259.00	bbl	8.33	.0	.0	.0	
5	Fresh Water Spacer		20.00	bbl	8.33	.0	.0	.0	
6	2nd Stage VariCem Cement	VARICEM (TM) CEMENT (452009)	860.0	sacks	12.8	1.96	10.95		10.95
	0.3 lbm	POLY-E-FLAKE (101216940)							
	10.95 Gal	FRESH WATER							
7	Displacement		97.00	bbl	8.33	.0	.0	.0	
<b>Calculated Values</b>		<b>Pressures</b>		<b>Volumes</b>					
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	
<b>Rates</b>									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount	27.7 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*

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Well Name: Federal RG	Well #: 313-14-298	API/UWI #:	
Field: SULFUR CREEK	City (SAP): MEEKER	County/Parish: Rio Blanco	State: Colorado
Legal Description:			
Lat:		Long:	
Contractor: CYCLONE 29	Rig/Platform Name/Num: Cyclone 29		
Job Purpose: Cement Multiple Stages	Ticket Amount:		
Well Type: Development Well	Job Type: Cement Multiple Stages		
Sales Person: MAYO, MARK	Srv Supervisor: CARTER, ERIC	MBU ID Emp #: 345598	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	12/11/2013 00:46							
Depart Yard Safety Meeting	12/11/2013 17:20							ATTENDED BY ALL HES CREW
Crew Leave Yard	12/11/2013 17:30							
Arrive At Loc	12/11/2013 20:00							RIG RUNNING CASING
Assessment Of Location Safety Meeting	12/11/2013 20:20							ATTENDED BY ALL HES CREW
Other	12/11/2013 23:30							ALL EQUIPMENT AND MATERIALS ON LOCATION AND READY TO PERFORM SERVICES
Pre-Rig Up Safety Meeting	12/12/2013 03:50							ATTENDED BY ALL HES CREW
Rig-Up Equipment	12/12/2013 04:00							
Pre-Job Safety Meeting	12/12/2013 05:00							ATTENDED BY ALL HES CREW, RIG CREW AND COMPANY REP
Start Job	12/12/2013 05:51							TP 3389', TD 3417', SJ 27.65', FC 3361.35', CASING 9.625", 36#, J-55, HOLE 14.75"-1200", 13.5"-3417', MSC 1261'
Other	12/12/2013 05:51		2	2			230.0	FILL LINES
Test Lines	12/12/2013 05:53							PRESSURED UP TO 4075 PSI, PRESSURE HELD
Pump Spacer	12/12/2013 05:58		4	40			270.0	FRESH WATER
Activity Description	Date/Time	Cht	Rate bbl/min	Volume bbl		Pressure psig		Comments

Sold To #: 300721

Ship To #: 3265169

Quote #:

Sales Order #: 900964862

SUMMIT Version: 7.3.0109

Thursday, December 19, 2013 10:01:00

		#		Stage	Total	Tubing	Casing	
Pump 1st Stage Lead Slurry	12/12/2013 06:09		8	253.8			540.0	805 SKS ECONOCEM MIXED AT 12.8 PPG, 1.77 YIELD, 9.34 GL/SK
Pump 1st Stage Tail Slurry	12/12/2013 06:40		7.5	69.8			480.0	200 SKS VARICEM MIXED AT 12.8 PPG, 1.96 YIELD, 10.95 GL/SK
Shutdown	12/12/2013 06:50							
Drop Plug	12/12/2013 06:51							PLUG LAUNCHED
Pump Displacement	12/12/2013 06:53		9.5	85			500.0	FRESH WATER
Slow Rate	12/12/2013 07:02		4	20			180.0	SLOWED RATE TO ALLOW PLUG TO PASS THROUGH TOOL
Resume	12/12/2013 07:07		9.5	144.8			1090. 0	
Slow Rate	12/12/2013 07:22		3	10			700.0	
Bump Plug	12/12/2013 07:24						1380. 0	PLUG LANDED
Check Floats	12/12/2013 07:29							FLOATS HELD
Drop Opening Device For Multiple Stage Cementer	12/12/2013 07:32							PLUG LAUNCHED
Open Multiple Stage Cementer	12/12/2013 07:43						740.0	MSC OPENED
Circulate Well	12/12/2013 07:51		4	25			150.0	FRESH WATER, NO RETURNS, HES TURNED OVER TO RIG, RIG CIRCULATED 35 BBLS CEMENT TO SURFACE
End Job	12/12/2013 07:52							(END OF STAGE 1) GOOD RETURNS THROUGH OUT STAGE
Start Job	12/12/2013 09:40							BEGIN STAGE 2
Other	12/12/2013 09:40		2	2			120.0	FILL LINES
Test Lines	12/12/2013 09:42							PRESSURED UP TO 3770 PSI, PRESSURE HELD
Pump Spacer	12/12/2013 09:45		4	20			160.0	FRESH WATER
Pump 2nd Stage Tail Slurry	12/12/2013 09:53		8	300.2			530.0	860 SKS VARICEM MIXED AT 12.8 PPG, 1.96 YIELD, 10.95 GL/SK

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Quote #:

Sales Order #: 900964862

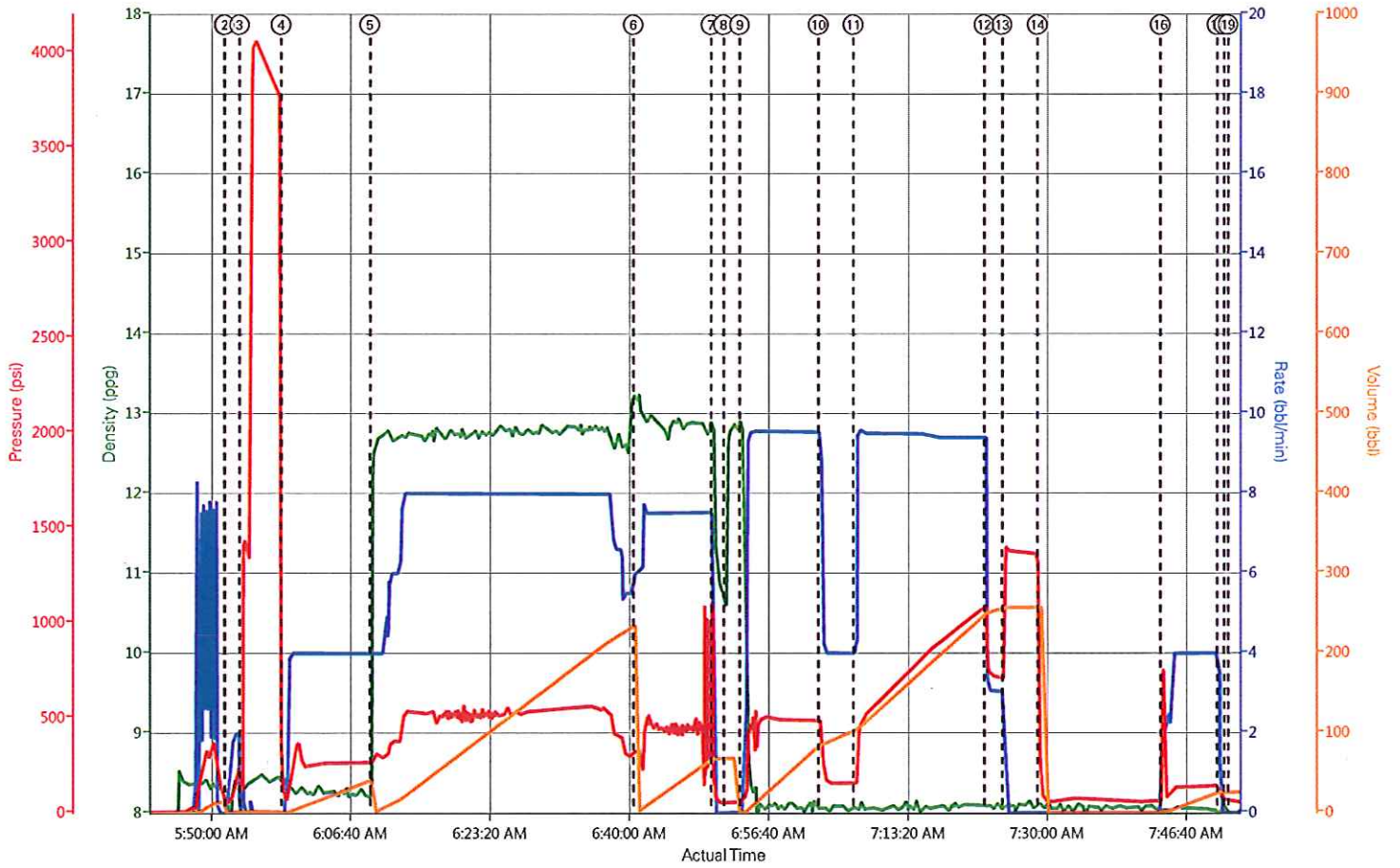
SUMMIT Version: 7.3.0109

Thursday, December 19, 2013 10:01:00

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Shutdown	12/12/2013 10:30							RETURNS SLOWED AT 140 BBLS CEMENT PUMPED
Drop Plug	12/12/2013 10:31							PLUG LAUNCHED
Pump Displacement	12/12/2013 10:34		9.5	87.5			620.0	FRESH WATER, GAINED RETURNS AT 50 BBLS DISPLACEMENT PUMPED
Slow Rate	12/12/2013 10:45		3	10			245.0	
Bump Plug	12/12/2013 10:48						1350.0	PLUG LANDED
Close Multiple Stage Cementer	12/12/2013 10:48							MSC CLOSED
End Job	12/12/2013 10:58							NO CEMENT TO SURFACE
Comment	12/12/2013 11:00							RIG WAITED 4 HR'S THEN PROCEEDED TO RUN 2" TUBING IN HOLE, TAGGED CEMENT AT 1030'
Start Job	12/12/2013 19:35							BEGIN TOP OUT
Other	12/12/2013 19:35		1	2		150.0		FILL LINES
Test Lines	12/12/2013 19:39							PRESSURED UP TO 2700 PSI, PRESSURE HELD
Pump Spacer	12/12/2013 19:42		2	8		175.0		
Pump Cement	12/12/2013 19:52		2	71.7		480.0		350 SKS TYPE G NEAT CEMENT MIXED AT 15.8 PPG, 1.15 YIELD, 5 GL/SK
Pump Displacement	12/12/2013 20:24		2	2		420.0		
Shutdown	12/12/2013 20:26							GAINED RETURNS AT 27 BBLS CEMENT PUMPED
End Job	12/12/2013 20:26							HES CREW RELEASED
Post-Job Safety Meeting (Pre Rig-Down)	12/12/2013 20:30							ATTENDED BY ALL HES CREW
Rig-Down Equipment	12/12/2013 20:40							

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Depart Location Safety Meeting	12/12/2013 21:50							ATTENDED BY ALL HES CREW
Crew Leave Location	12/12/2013 22:00							THANK YOU FOR USING HALLIBURTON CEMENT, ERIC CARTER AND CREW.

# WPX - RG 313-14-298 - SURFACE



DH Density (ppg) -0.3 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 44 Pump Stg Tot (bbl) 37.8

▼ **HALLIBURTON** | iCem® Service

Created: 2013-12-12 00:30:48, Version: 2.0.606

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-  
EBUS

Job Date: 12/12/2013 12:33:18 AM

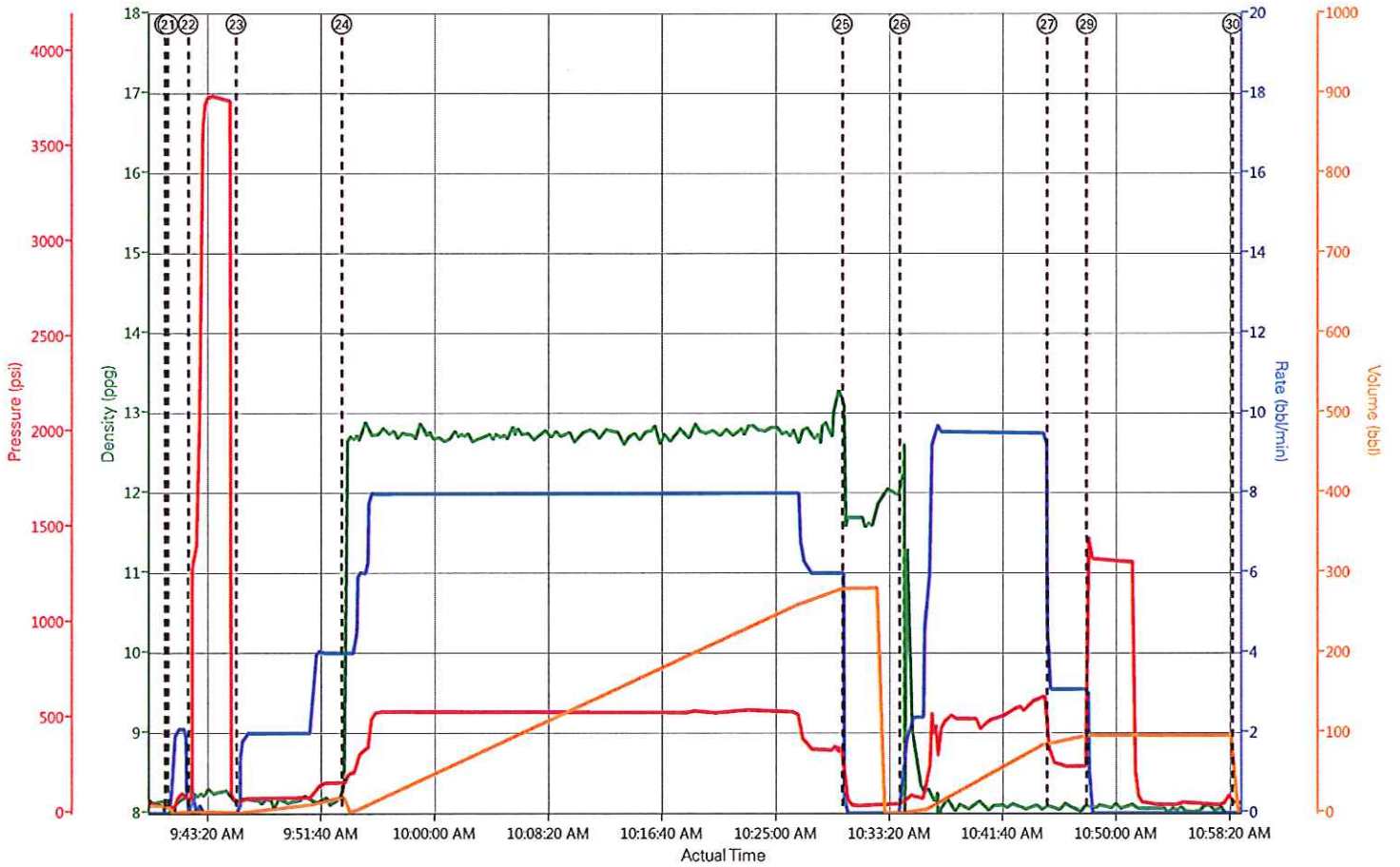
Well: FEDERAL RG 313-14-298

Representative: B. OAKS

Sales Order #: 900964862

ERIC CARTER: ANDREW LINN/ELITE 9

# WPX - RG 313-14-298 - SURFACE



DH Density (ppg) -0.3 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 44 Pump Stg Tot (bbl) 37.8

HALLIBURTON | iCem® Service

Created: 2013-12-12 00:30:48, Version: 2.0.606

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 12/12/2013 12:33:18 AM

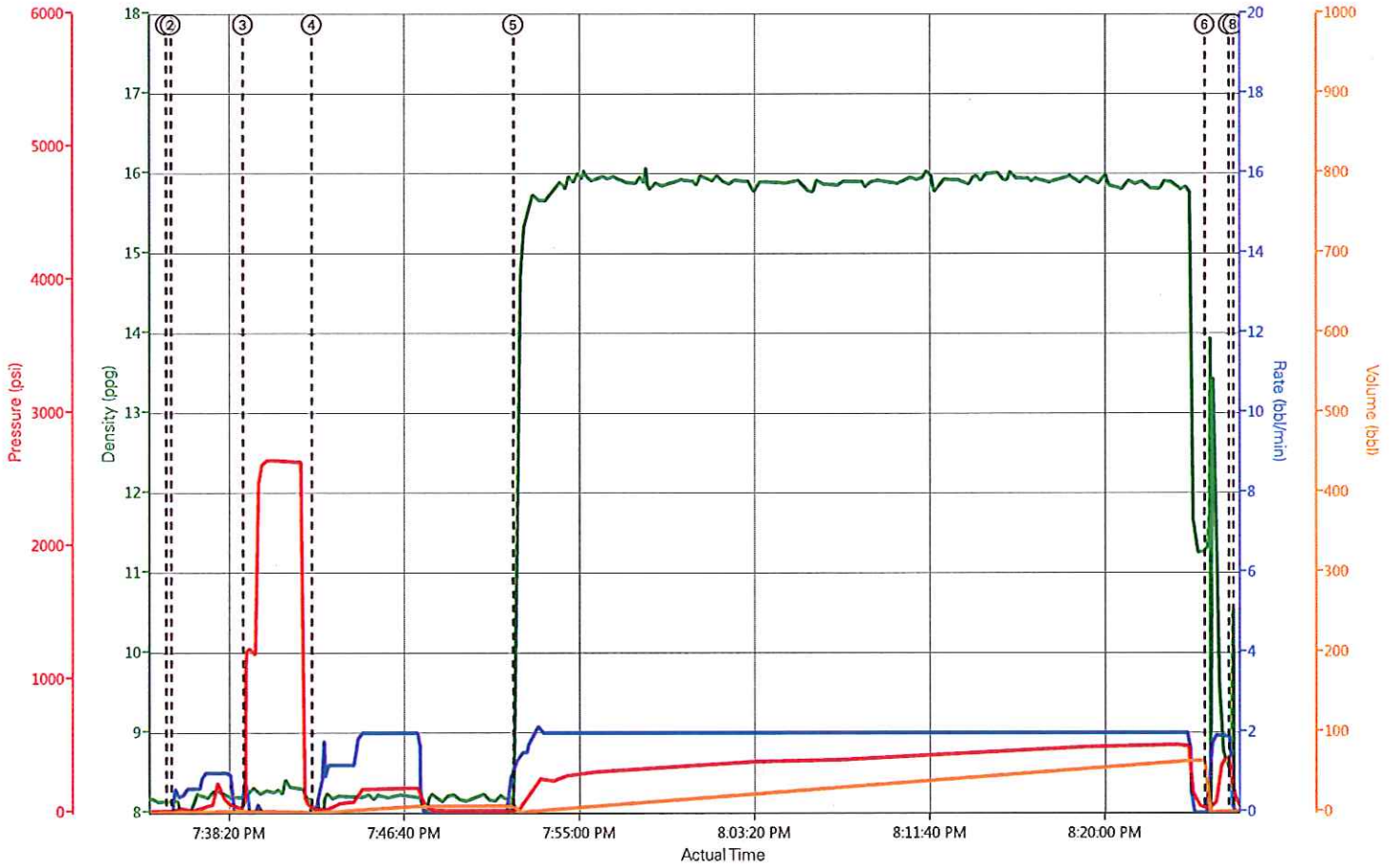
Well: FEDERAL RG 313-14-298

Representative: B. OAKS

Sales Order #: 900964862

ERIC CARTER : ANDREW LINN/ELITE 9

# WPX - RG 313-14-298 - TOP OUT



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

HALLIBURTON | iCem® Service

Created: 2013-12-12 16:55:55, Version: 2.0.606

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 12/12/2013 7:34:30 PM

Well: RG 313-14-298

Representative: B. OAKS

Sales Order #: 900964862

ERIC CARTER: ANDREW LINN/ELITE 9

# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: ERIC CARTER  
Attention: J.Trout  
Lease: CYCLONE 29  
Well #: RG 313-14-298

Date: 12/19/2013  
Date Rec.: 12/19/2013  
S.O.#: 900964862  
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7.9</i>
Potassium (K)	<i>5000</i>	<i>0 Mg / L</i>
Hardness	<i>500</i>	<i>425 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>
Temp	<i>40-80</i>	<i>90 Deg</i>
Total Dissolved Solids		<i>1200 Mg / L</i>

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 its use.

<b>Sales Order #:</b> 900964862	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 12/13/2013
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT MULTIPLE STAGES BOM
<b>Customer Representative:</b> BAUDE OAKS		<b>API / UWI: (leave blank if unknown)</b> AFEYSJH51JKHNVRAAAA
<b>Well Name:</b> Federal RG		<b>Well Number:</b> 313-14-298
<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> 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	12/13/2013
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	BAUDE 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	

CUSTOMER SIGNATURE
--------------------

<b>Sales Order #:</b> 900964862	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 12/13/2013
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT MULTIPLE STAGES BOM
<b>Customer Representative:</b> BAUDE OAKS		<b>API / UWI: (leave blank if unknown)</b> AFEYSJH51JKHNVRAAAA
<b>Well Name:</b> Federal RG		<b>Well Number:</b> 313-14-298
<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> Rio Blanco

### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b> The date the survey was conducted	12/13/2013

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.	10
<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.	6
<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	5
<b>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	0
<b>Was this a Primary Cement Job (Yes / No)</b>	Yes

<b>Sales Order #:</b> 900964862	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 12/13/2013
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<b>Customer Representative:</b> BAUDE OAKS		<b>API / UWI: (leave blank if unknown)</b> AFEYSJH51JKHNVRAAAA
<b>Well Name:</b> Federal RG		<b>Well Number:</b> 313-14-298
<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> Rio Blanco

Primary Cement Job= Casing job, Liner job, or Tie-back job.	
<b>Did We Run Wiper Plugs?</b>	None
Did We Run Top And Bottom Casing Wiper Plugs?	
<b>Mixing Density of Job Stayed in Designed Density Range (0-100%)</b>	98
Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	
<b>Was Automated Density Control Used?</b>	Yes
Was Automated Density Control (ADC) Used ?	
<b>Pump Rate (percent) of Job Stayed At Designed Pump Rate</b>	98
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	
<b>Nbr of Remedial Sqz Jobs Rqd - Competition</b>	0
Number Of Remedial Squeeze Jobs Required After Primary Job Performed By Competition	
<b>Nbr of Remedial Plug Jobs Rqd - HES</b>	0
Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	
<b>Nbr of Remedial Sqz Jobs Rqd - HES</b>	0
Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	