

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

RWF 313-25

**Nabors 577**

# **Post Job Summary**

## **Cement Surface Casing**

Date Prepared: 03/23/2014

Submitted by: Grand Junction Cement Engineering

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3123568	Quote #:	Sales Order #: 0901202092
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Luke Hubbard	
Well Name: SAVAGE	Well #: RWF 313-25	API/UWI #: 05-045-21987-00	
Field: RULISON	City (SAP): RIF	County/Parish: GARFIELD	State: COLORADO
Legal Description: NE SW-25-6S-94W-1655FSL-2294FWL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS 577	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srcv Supervisor: Edward Deussen	
<b>Job</b>			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1157ft 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		9.625	9.001	32.3	8 RD	H-40	0	1152	0	0
Open Hole Section			13.5				0	1157	0	0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe				1152		Top Plug	9.625	1	HES
Float Shoe						Bottom Plug			
Float Collar						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
					Size					

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			4.0		
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	Lead Cement	VARICEM (TM) CEMENT	140	Sack/Ton	12.3	2.38		7.0	13.77	
			13.70 Gal	FRESH WATER						

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
3	Tail Cement	VARICEM (TM) CEMENT	165	Sack/Ton	12.8	2.11		7.0	11.77	
11.71 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
4	Displacement	Displacement	87.3	bbl	8.34			10.0		
<b>Cement Left In Pipe</b>		<b>Amount</b>	43 ft		<b>Reason</b>			Shoe Joint		
<b>Comment</b>										

# Summary Report



Sales Order #: 0901202092  
WO #: 0901202092  
PO/AFE #: NA

Crew: \_\_\_\_\_

Job Start Date: 3/23/2014

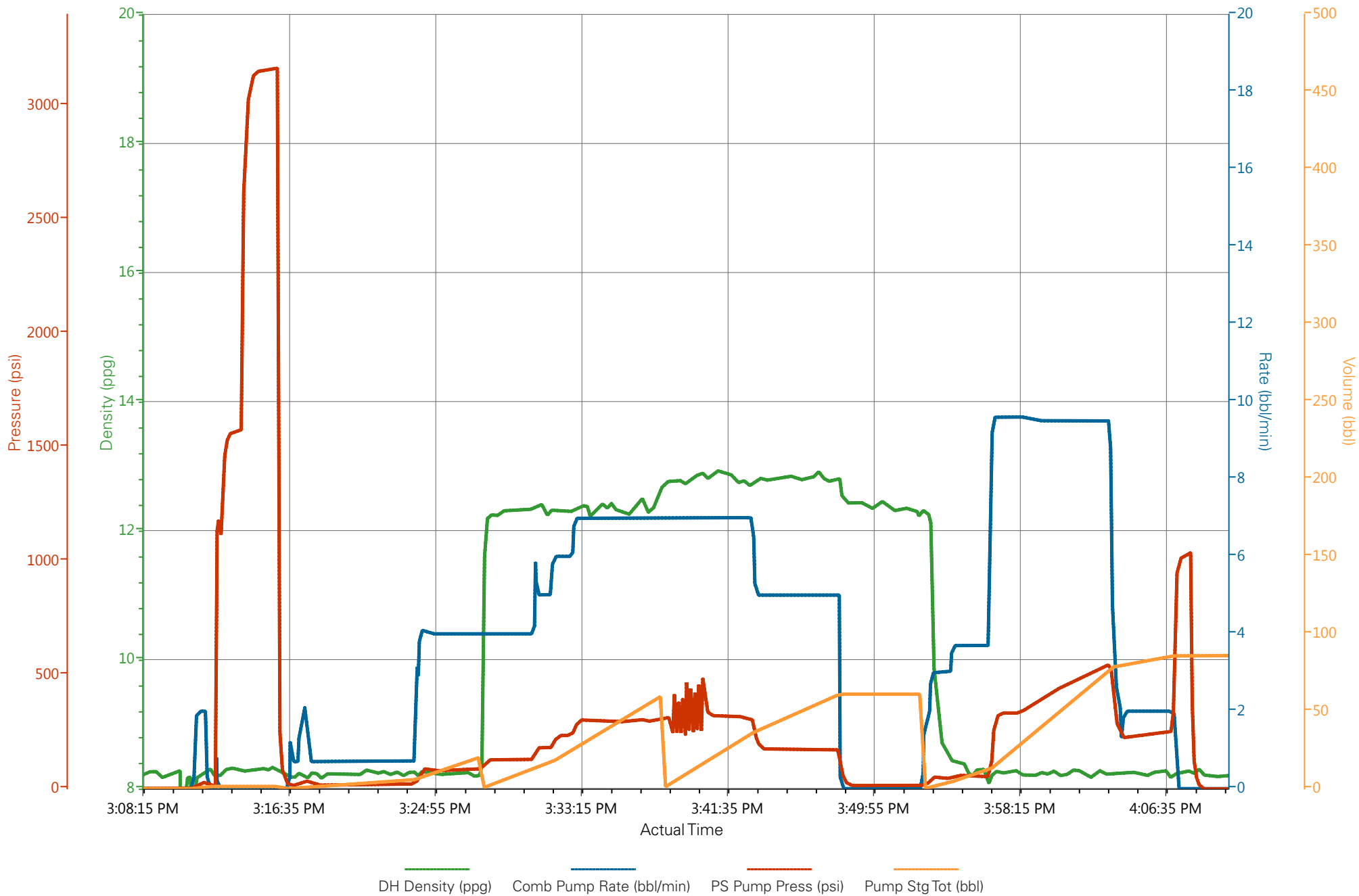
<b>Customer:</b>	WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	<b>Field:</b>	RULISON	<b>Job Type:</b>	CMT SURFACE CASING BOM
<b>UWI / API Number:</b>	05-045-21987-00	<b>County/Parish:</b>	GARFIELD	<b>Service Supervisor:</b>	Edward Deussen
<b>Well Name:</b>	SAVAGE	<b>State:</b>	COLORADO		
<b>Well No:</b>	RWF 313-25	<b>Latitude:</b>	39.494010	<b>Cust Rep Name:</b>	Luke Hubbard
		<b>Longitude:</b>	-107.837886	<b>Cust Rep Phone #:</b>	
		<b>Sect / Twn / Rng:</b>	25/6/94		

Remarks:		
<i>The Information Stated Herein Is Correct</i>	Customer Representative Signature	Date
	Customer Representative Printed Name	

### 3.1 Job Event Log

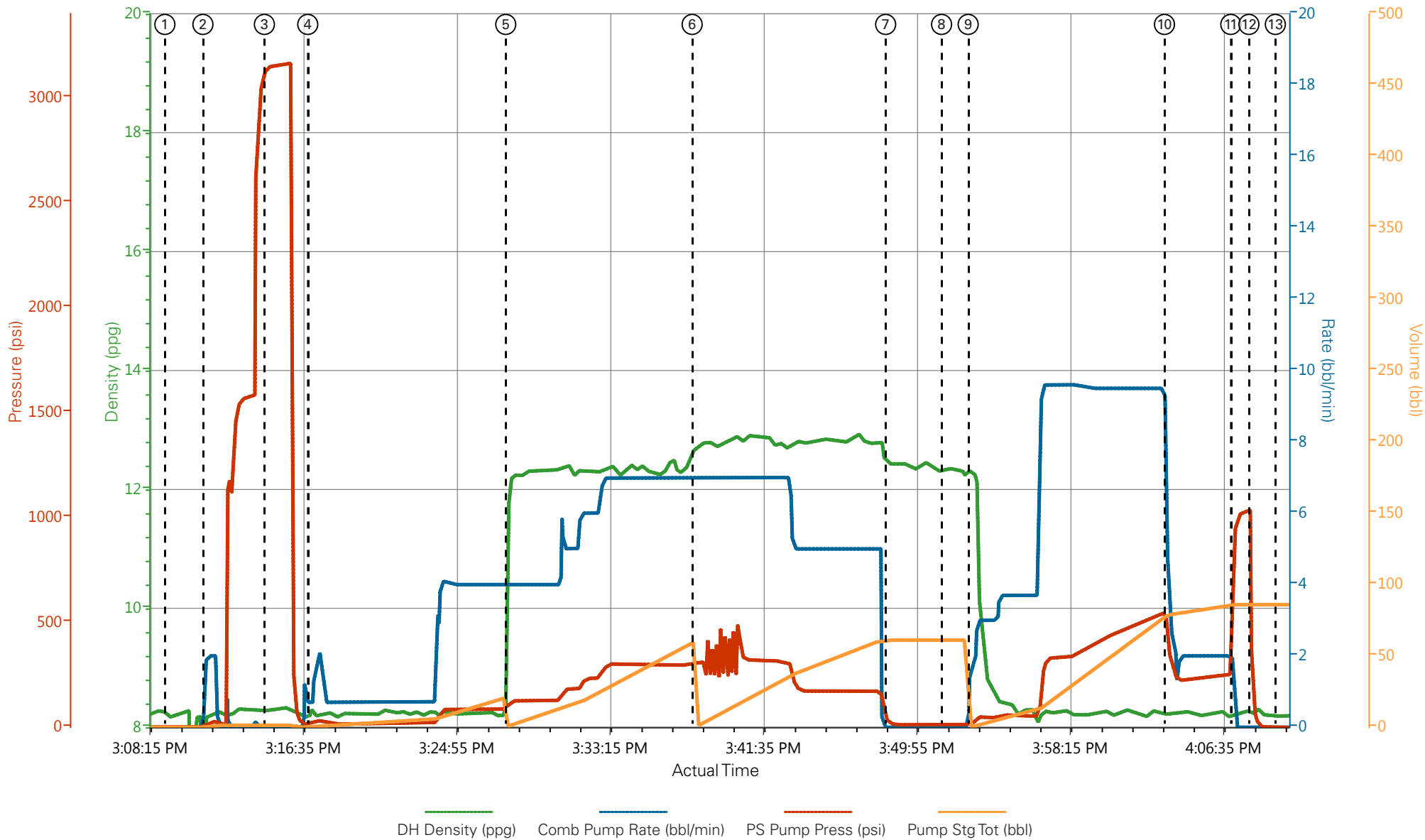
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comment
Event	1	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/23/2014	14:45:00	USER					All personnel on site
Event	2	Start Job	Start Job	3/23/2014	15:09:14	USER					TD 1157', TP 1152', SJ 43', Mud 9.8 ppg, 13 1/2" OH
Event	3	Prime Pumps	Prime Lines	3/23/2014	15:11:17	USER	8.40	2	29	2.0	
Event	4	Test Lines	Test Lines	3/23/2014	15:14:38	COM5			3151		Pressure Held Well
Event	5	Pump Spacer 1	Pump H2O Spacer	3/23/2014	15:16:59	COM5	8.31	4.0	79	20.0	Fresh Water
Event	6	Pump Lead Cement	Pump Lead Cement	3/23/2014	15:27:45	COM5	12.3	7.0	305	59.3	140 sks, 12.3 ppg, 2.38 yield, 13.77 gal/sk
Event	7	Pump Tail Cement	Pump Tail Cement	3/23/2014	15:37:52	COM5	12.8	7.0	318	62.0	165 sks, 12.8 ppg, 2.11 yield, 11.77 gal/sk
Event	8	Shutdown	Shutdown/Wash Up	3/23/2014	15:48:23	USER					Wash up on top of plug
Event	9	Drop Top Plug	Drop Top Plug	3/23/2014	15:51:30	USER					
Event	10	Pump Displacement	Pump Displacement	3/23/2014	15:52:46	COM5	8.30	10.0	547	87.3	Fresh Water
Event	11	Other	Slow Rate	3/23/2014	16:03:37	COM5	8.23	2.0	220	10	
Event	12	Bump Plug	Bump Plug	3/23/2014	16:07:08	COM5			257		15 bbls cement to surface
Event	13	Other	Check Floats	3/23/2014	16:08:07	COM5			788		Floats held - 1/2 bbl back
Event	14	End Job	End Job	3/23/2014	16:09:34	COM5					40 lbs sugar used
Event	15	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	3/23/2014	16:30:00	USER					
Event	16	Rig-Down Equipment	Rig-Down Equipment	3/23/2014	16:45:00	USER					
Event	17	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/23/2014	17:30:00	USER					
Event	18	Crew Leave Location	Crew Leave Location	3/23/2014	17:45:00	USER					Thank you for using Halliburton

# WPX - RWF 313-25 - 9 5/8" SURFACE



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

# WPX - RWF 313-25 - 9 5/8" SURFACE



- |                               |                                    |                                  |                                   |
|-------------------------------|------------------------------------|----------------------------------|-----------------------------------|
| ① Start Job 8.14;0;1;0        | ④ Pump H2O Spacer 8.31;0.7;15;0.3  | ⑦ Shutdown/Wash Up 12.41;0;22;61 | ⑩ Drop Top Plug 8.21;4.6;402;78.5 |
| ② Prime Lines 8.17;1.9;16;0.2 | ⑤ Pump Lead Cement 11.91;4;101;1   | ⑧ Pump Displacement 12.3;0;13;61 | ⑪ Bump Plug 8.25;0;898;85.9       |
| ③ Test Lines 8.25;0;3143;1.4  | ⑥ Pump Tail Cement 12.67;7;309;0.1 | ⑨ Slow Rate 12.29;1.8;22;0.2     | ⑫ Check Floats 8.22;0;207;85.9    |
|                               |                                    |                                  | ⑬ End Job 8.21;0;-3;85.9          |

**HALLIBURTON** | iCem® Service

Created: 2014-03-23 12:44:45, Version: 3.0.121

Edit

Customer : WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date : 3/23/2014 2:31:14 PM

Well : RWF 313-25

Representative : Luke Hubbard

Sales Order # : 901202092

Elite #9 : Ed Deussen / Rob Eickhoff

# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: ED DEUSSEN  
Attention: J.TROUT  
Lease: RWF  
Well #: 313-25

Date: 3/23/2014  
Date Rec.: 3/23/2014  
S.O.#: 901202092  
Job Type: 9 5/8" Surface

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>400</b> Mg / L
Calcium (Ca)	<i>500</i>	<b>120</b> Mg / L
Iron (FE2)	<i>300</i>	<b>0</b> Mg / L
Chlorides (Cl)	<i>3000</i>	<b>0</b> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>&lt;200</b> Mg / L
Temp	<i>40-80</i>	<b>52</b> Deg
Total Dissolved Solids		<b>420</b> Mg / L

Respectfully: ED DEUSSEN

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

<b>Sales Order #:</b> 0901176038	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 3/14/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT PRODUCTION CASING BOM
<b>Customer Representative:</b> AL DUNIHO		<b>API / UWI: (leave blank if unknown)</b> 05-045-21962-00
<b>Well Name:</b> SAVAGE		<b>Well Number:</b> 0080125620
<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	3/14/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB57194
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	AL DUNIHO
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	GOOD JOB MEN

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

General	
<b>Survey Conducted Date</b>	3/14/2014
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>	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>	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>	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> 0901176038	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 3/14/2014
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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	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	98
<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