

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

RWF 13-25

**Nabors 577**

# **Post Job Summary**

## **Cement Surface Casing**

Date Prepared: 04/06/2014

Submitted by: Grand Junction Cement Engineering

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3123565	Quote #:	Sales Order #: 0901185898
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: SCOTT GEARY	
Well Name: SAVAGE	Well #: RWF 13-25	API/UWI #: 05-045-21983-00	
Field: RULISON	City (SAP): RIF	County/Parish: GARFIELD	State: COLORADO
Legal Description: NE SW-25-6S-94W-1625FSL-2294FWL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS 577	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srcv Supervisor: Andrew Brennecke	

### Job

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1172ft 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	1172	0	0
Open Hole Section			13.5				0	1172	0	1172

### Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625	1		1162	Top Plug	9.625	1	HES
Float Shoe					Bottom Plug			
Float Collar	9.625	1		1118	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

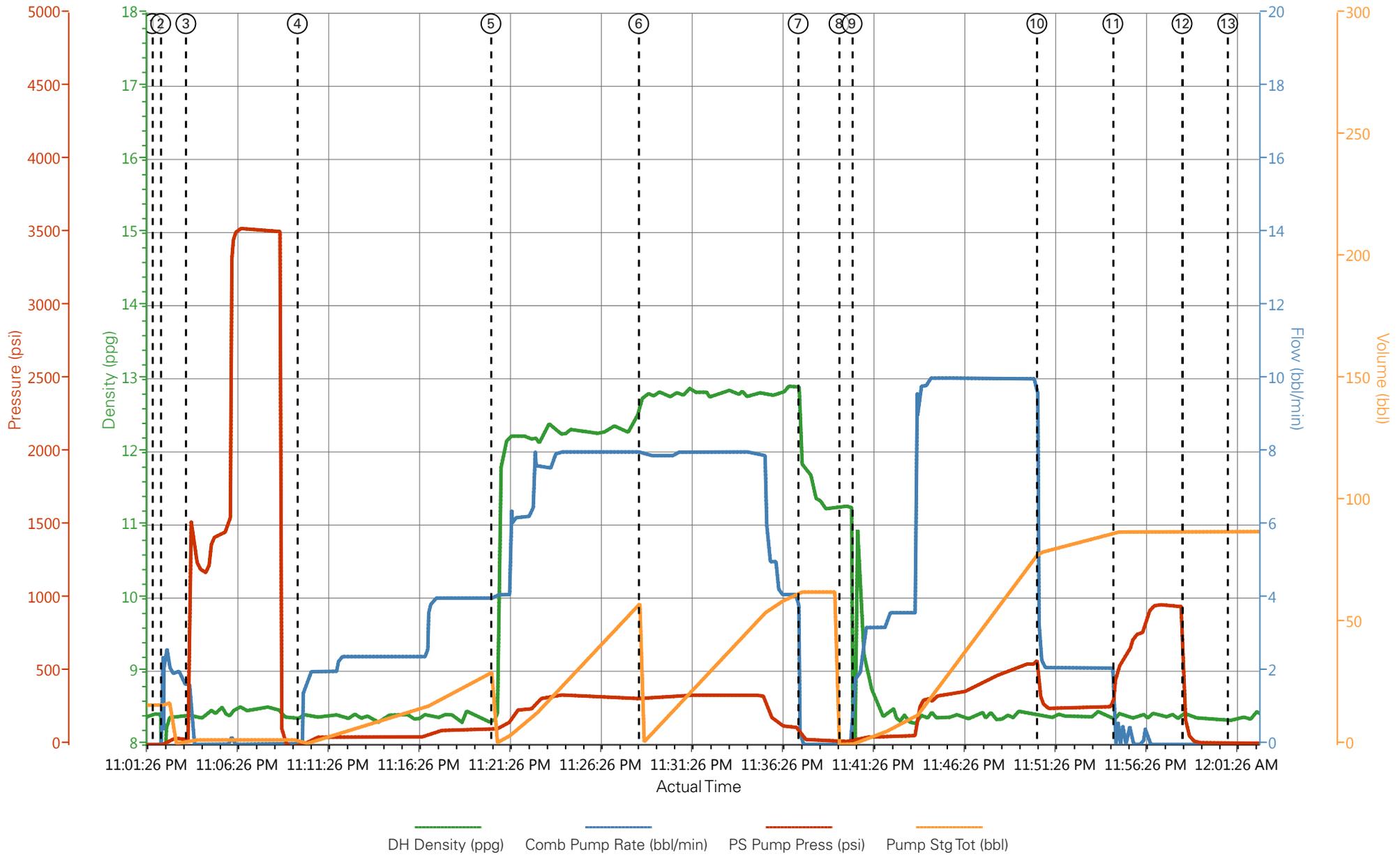
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water	Fresh Water	20	bbl	8.34			4		
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	Lead Cement	VARICEM (TM) CEMENT	140	Sack/Ton	12.3	2.38		8	13.77	

13.70 Gal		FRESH WATER							
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>	<b>Qty</b>	<b>Qty UoM</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft<sup>3</sup>/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/mi n</b>	<b>Total Mix Fluid Gal</b>
3	Tail Cement	VARICEM (TM) CEMENT	165	Sack/Ton	12.8	2.11		8	11.77
11.71 Gal		FRESH WATER							
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>	<b>Qty</b>	<b>Qty UoM</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft<sup>3</sup>/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/mi n</b>	<b>Total Mix Fluid Gal</b>
4	Displacement	Displacement	88	bbl	8.34			10/2	
<b>Cement Left In Pipe</b>		<b>Amount</b>	44 ft		<b>Reason</b>		Shoe Joint		
<b>Comment</b>									

1.1 Job Event Log

Type	Seq. No.	Graph Label/Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comment
Event	1	Call Out	3/12/2014	12:00:00	USER					
Event	2	Pre-Convoy Safety Meeting	3/12/2014	13:40:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	3/12/2014	13:45:00	USER					
Event	4	Arrive At Loc	3/12/2014	15:15:00	USER					RIG HAD NOT STARTED RUNNING CASING
Event	5	Pre-Job Safety Meeting	3/12/2014	22:45:00	USER					ALL HES AND RIG PERSONEL
Event	6	Start Job	3/12/2014	23:01:56	COM5					TD-1172', TP-1162', SJ-44', FLOAT COLLAR-1118', CSG-9.625"/H-40/32.3#, MUD-9.3#
Event	7	Prime Pumps	3/12/2014	23:02:23	COM5	8.33	2.10	56	2	FRESH WATER
Event	8	Test Lines	3/12/2014	23:03:46	COM5	8.41	.5	3530	2.2	PRESSURE HELD GOOD
Event	9	Pump Spacer 1	3/12/2014	23:09:54	COM5	8.36	4.0	100	20.0	FRESH WATER
Event	10	Pump Lead Cement	3/12/2014	23:20:33	COM5	12.3	8.00	330	59.3	140 SKS, 12.3PPG, 2.38FT3/SK, 13.77GAL/SK
Event	11	Pump Tail Cement	3/12/2014	23:28:41	COM5	12.8	8.00	337	62	165SKS, 12.8PPG, 2.11FT3/SK, 11.77GAL/SK
Event	12	Shutdown	3/12/2014	23:37:28	USER	11.81	0.00	61.00	62	
Event	13	Drop Plug	3/12/2014	23:39:42	USER	11.23	0.00	0.00	0.0	PLUG DROP VERIFIED BY TATTLE TAIL
Event	14	Pump Displacement	3/12/2014	23:40:26	COM5	8.35	10	520	78	FRESH WATER
Event	15	Slow Rate	3/12/2014	23:50:36	USER	8.42	2.0	247	10	
Event	16	Bump Plug	3/12/2014	23:54:46	USER	8.41	0.00	258.00	88.1	
Event	17	Check Floats	3/12/2014	23:58:35	USER	8.44	0.00	955.00	88.3	FLOATS HELD
Event	18	End Job	3/13/2014	00:01:06	COM5					GOOD RETURNS THROUGH OUT JOB. 18 BBL CEMENT BACK TO SURFACE
Event	19	Pre-Convoy Safety Meeting	3/13/2014	01:00:00	USER					ALL HES PRESENT
Event	20	Crew Leave Location	3/13/2014	01:15:00	USER					
Event	21	Other	3/13/2014	01:16:00	USER					THANK YOU FOR CHOOSING HALLIBURTON, ANDREW BRENNECKE AND CREW

WPX - RWF 13-25 - 9.625" SURFACE



① Start Job 8.44;0;-3;16   ② Prime Pumps 1.06;2.1;-2;16.2   ③ Test Lines 8.41;1.6;33;1.7   ④ Pump Spacer 1 8.36;0;-4;0   ⑤ Pump Lead Cement 8.33;4;105;0.1   ⑥ Pump Tail Cement 12.68;8;319;0.2   ⑦ Shut



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Created: 2014-03-12 17:01:02, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 3/12/2014 10:38:24 PM

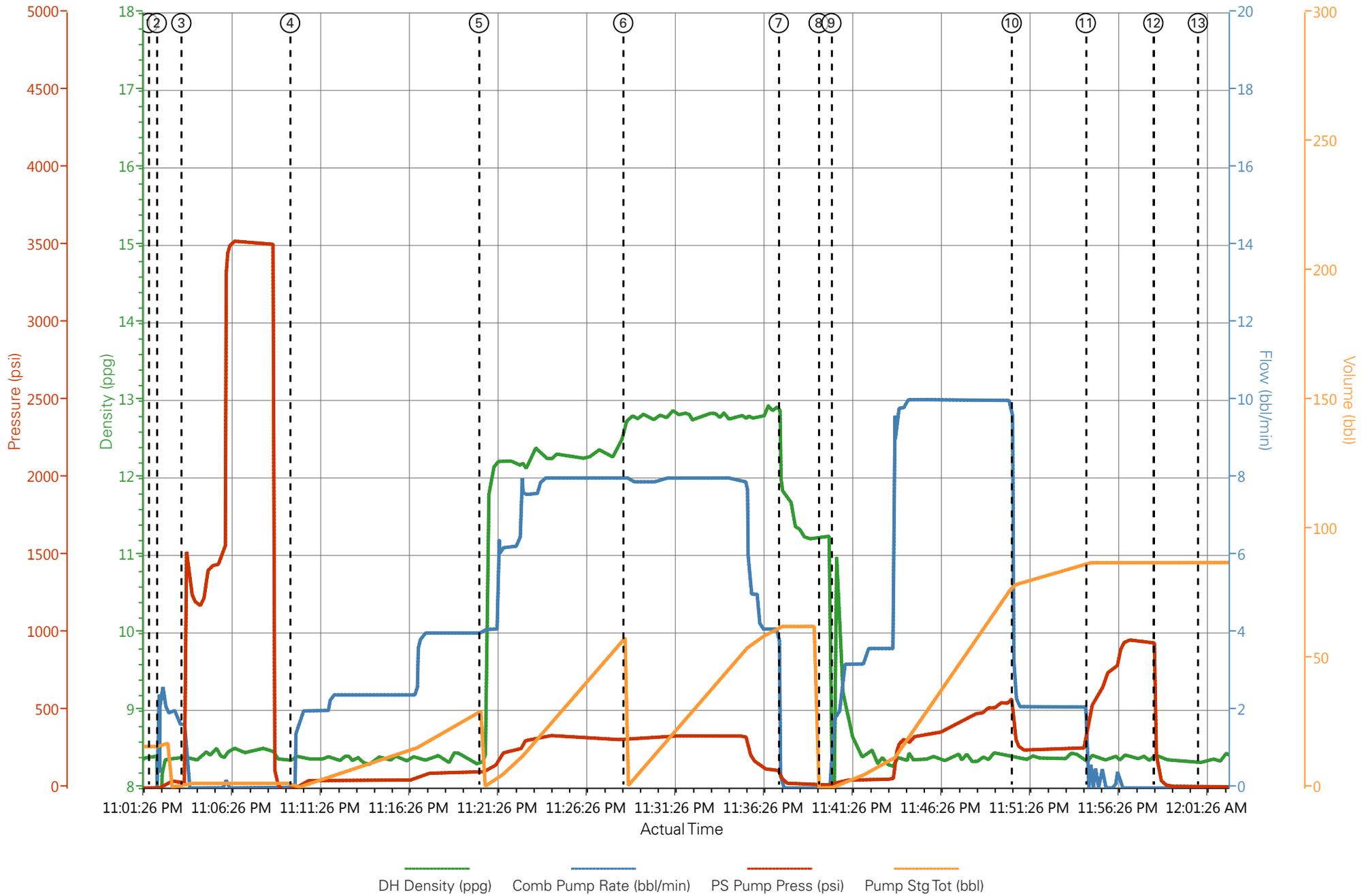
Well: RWF 13-25

Representative: SCOTT GEARY

Sales Order #: 901185898

ELITE #4: A.BRENNECKE/B.BANKS

# WPX - RWF 13-25 - 9.625" SURFACE



# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: A.BRENNECKE  
Attention: C.ROSS  
Lease: RWF  
Well #: 13-25

Date: 3/13/2014  
Date Rec.: 3/13/2014  
S.O.#: 901185898  
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7.5</b>
Potassium (K)	<i>5000</i>	<b>200 Mg / L</b>
Calcium (Ca)	<i>500</i>	<b>250 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>&lt;200 Mg / L</b>
Chlorine (Cl <sub>2</sub> )		<b>0 Mg / L</b>
Temp	<i>40-80</i>	<b>50 Deg</b>
Total Dissolved Solids		<b>200 Mg / L</b>

Respectfully: A.BRENNECKE

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> 0901185898	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 3/13/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> SCOTT GEARY		<b>API / UWI: (leave blank if unknown)</b> 05-045-21983-00
<b>Well Name:</b> SAVAGE		<b>Well Number:</b> 0080125640
<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 honest 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	3/13/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB58348
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	SCOTT GEARY
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	N/A

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

General	
<b>Survey Conducted Date</b>	3/13/2014
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>	3
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

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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	8
<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