

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

PA 524-16

**Nabors 573**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 05/02/2014

Job Date: 04/30/14

Submitted by: Evan Russell - Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3123607	Quote #:	Sales Order #: 0901311508
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Beaudé Oaks	
Well Name: FEDERAL	Well #: PA 524-16	API/UWI #: 05-045-22042-00	
Field: PARACHUTE	City (SAP): PAR	County/Parish: GARFIELD	State: COLORADO
Legal Description: SE NW-21-6S-95W-2600FNL-1396FWL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS 573	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srvc Supervisor: Edward Deussen	
<b>Job</b>			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1204.62ft 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			0	1204.62		0
Open Hole Section			13.5				0	1224		0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make	
Guide Shoe				1204.62	Top Plug	9.625	1	HES	
Float Shoe					Bottom Plug			HES	
Float Collar					SSR plug set			HES	
Insert Float					Plug Container	9.625	1	HES	
Stage Tool					Centralizers			HES	

Miscellaneous Materials									
Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc			
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Conc			

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 Spacer	Fresh Water Spacer	20	bbl	8.34			4.0	
Stage/Plug #: 2									
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	12.3	2.38		7.0	13.77

13.72 Gal		FRESH WATER							
0.25 %		D-AIR 5000, 50 LB SACK (102068797)							
<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 ft3/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	175	sack	12.8	2.11		7.0	11.77
0.25 %		D-AIR 5000, 50 LB SACK (102068797)							
0.25 lbm		POLY-E-FLAKE (101216940)							
<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 ft3/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/mi n</b>	<b>Total Mix Fluid Gal</b>
4	Fresh Water Displacement	Fresh Water Displacement	91.1	bbl	8.34			10.0	
<b>Cement Left In Pipe</b>	<b>Amount</b>	46.53 ft			<b>Reason</b>	Shoe Joint			
<b>Comment</b>									

# Summary Report



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

Sales Order #: 0901311508  
WO #: 0901311508  
PO/AFE #: NA

Job Start Date: 4/30/2014

Customer:	WPX ENERGY ROCKY MOUNTAIN Field:	PARACHUTE	Job Type:	CMT SURFACE CASING BOM
	LLC-EBUS		Service Supervisor:	Edward Deussen
UWI / API Number:	05-045-22042-00	County/Parish:	GARFIELD	
Well Name:	FEDERAL	State:	COLORADO	
Well No:	PA 524-16	Latitude:	39.510514	
		Longitude:	-108.008151	
		Sect / Twn / Rng:	21/6/95	
		Cust Rep Name:	Beaude Oaks	
		Cust Rep Phone #:		

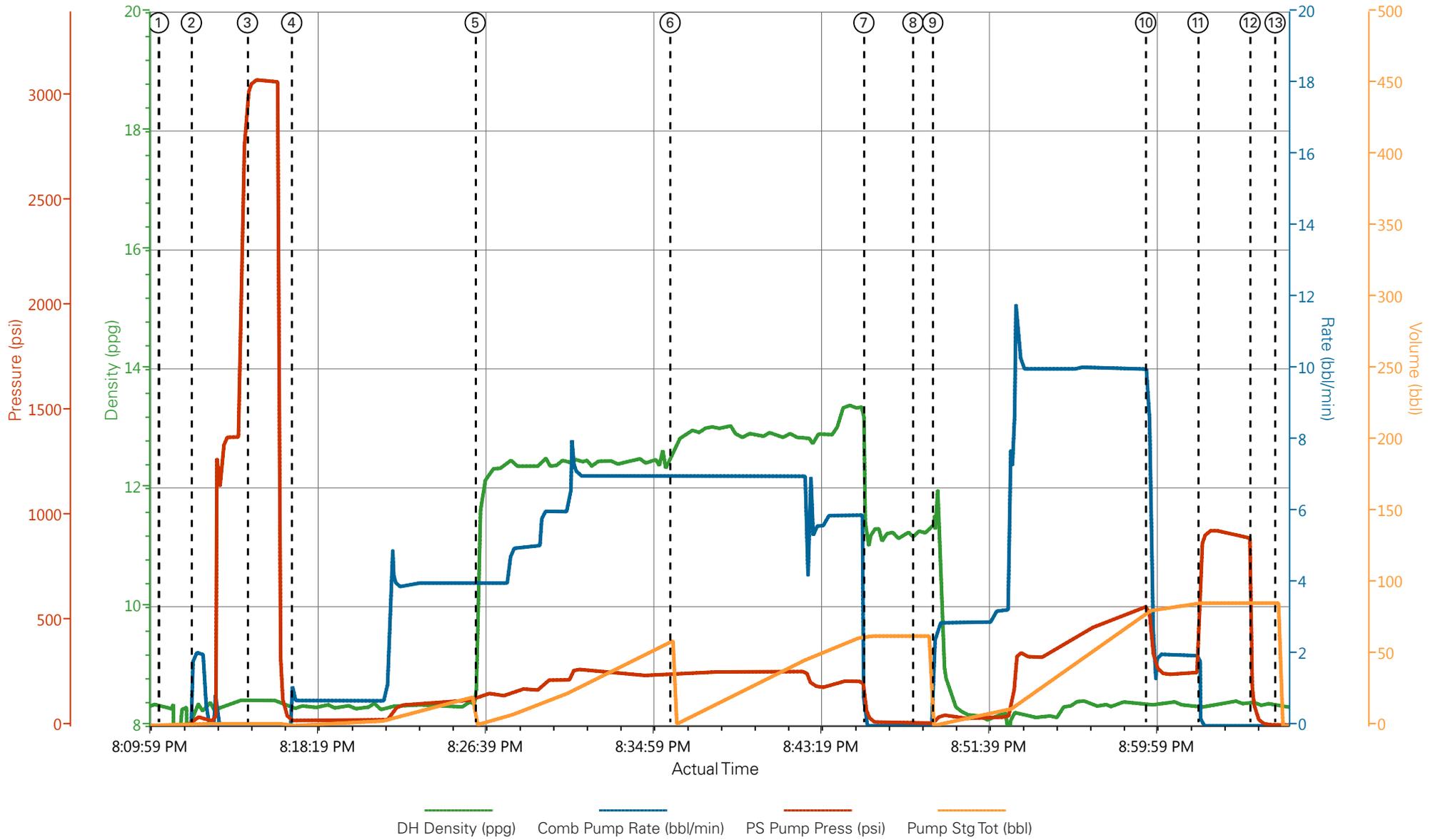
Remarks:

The Information Stated Herein Is Correct	Customer Representative Signature	Date 4-30-2014
	Customer Representative Printed Name Beaude Oaks	

3.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comment
Event	1	Start Job	4/30/2014	20:10:34	COM5					O/L 1200 - TP 1204.62, SJ 46.53, 13 1/2" OH, 32.3 9 5/8" csg, Mud @ 10.4 ppg
Event	2	Prime Pumps	4/30/2014	20:12:12	COM5	8.25	2.0	43	2.0	
Event	3	Test Lines	4/30/2014	20:14:59	COM5			3079		Pressure held well
Event	4	Pump Spacer 1	4/30/2014	20:17:11	COM5	8.30	4.0	170	20.0	Fresh Water
Event	5	Pump Lead Cement	4/30/2014	20:26:17	COM5	12.3	7.0	257	59.3	140 sks, 12.3 ppg, 2.38 yield, 13.77 gal/sk
Event	6	Pump Tail Cement	4/30/2014	20:35:58	COM5	12.8	7.0	260	65.8	175 sks, 12.8 ppg, 2.11 yield, 11.77 gal/sk
Event	7	Shutdown	4/30/2014	20:45:36	USER					Wash up on top of plug
Event	8	Drop Top Plug	4/30/2014	20:48:02	COM5					
Event	9	Pump Displacement	4/30/2014	20:49:01	COM5	8.37	10.0	565	91.1	Fresh Water
Event	10	Other	4/30/2014	20:59:35	COM5	8.37	2.0	240	10.0	
Event	11	Bump Plug	4/30/2014	21:02:11	COM5			273		15 bbls cement to surface
Event	12	Other	4/30/2014	21:04:46	COM5			901		Floats held - 1/2 bbl flowback
Event	13	End Job	4/30/2014	21:06:01	COM5					40 lbs sugar used - 2 add hours

# WPX - PA 524-16 - 9 5/8" SURFACE



- ① Start Job 8.35;0;2;0
- ② Prime Pumps 8.25;2.1;29;0.3
- ③ Test Lines 8.4;0;3057;1.4
- ④ Pump H2O Spacer 8.29;0.7;22;0.1
- ⑤ Pump Lead Cement 10.94;4;132;0.9
- ⑥ Pump Tail Cement 12.68;7;246;0.1
- ⑦ Shutdown/Wash Up 11.18;0;59;62.8
- ⑧ Drop Top Plug 11.25;0;11;62.8
- ⑨ Pump Displacement 11.75;2.6;27;0.3
- ⑩ Other 8.37;9.9;571;80.2
- ⑪ Bump Plug 8.33;0;852;85.9
- ⑫ Other 8.45;0;115;85.9
- ⑬ End Job 8.33;0;4;85.9

**HALLIBURTON** | iCem® Service

Created: 2014-04-30 18:16:56, Version: 3.0.121

[Edit](#)

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 4/30/2014 7:04:11 PM

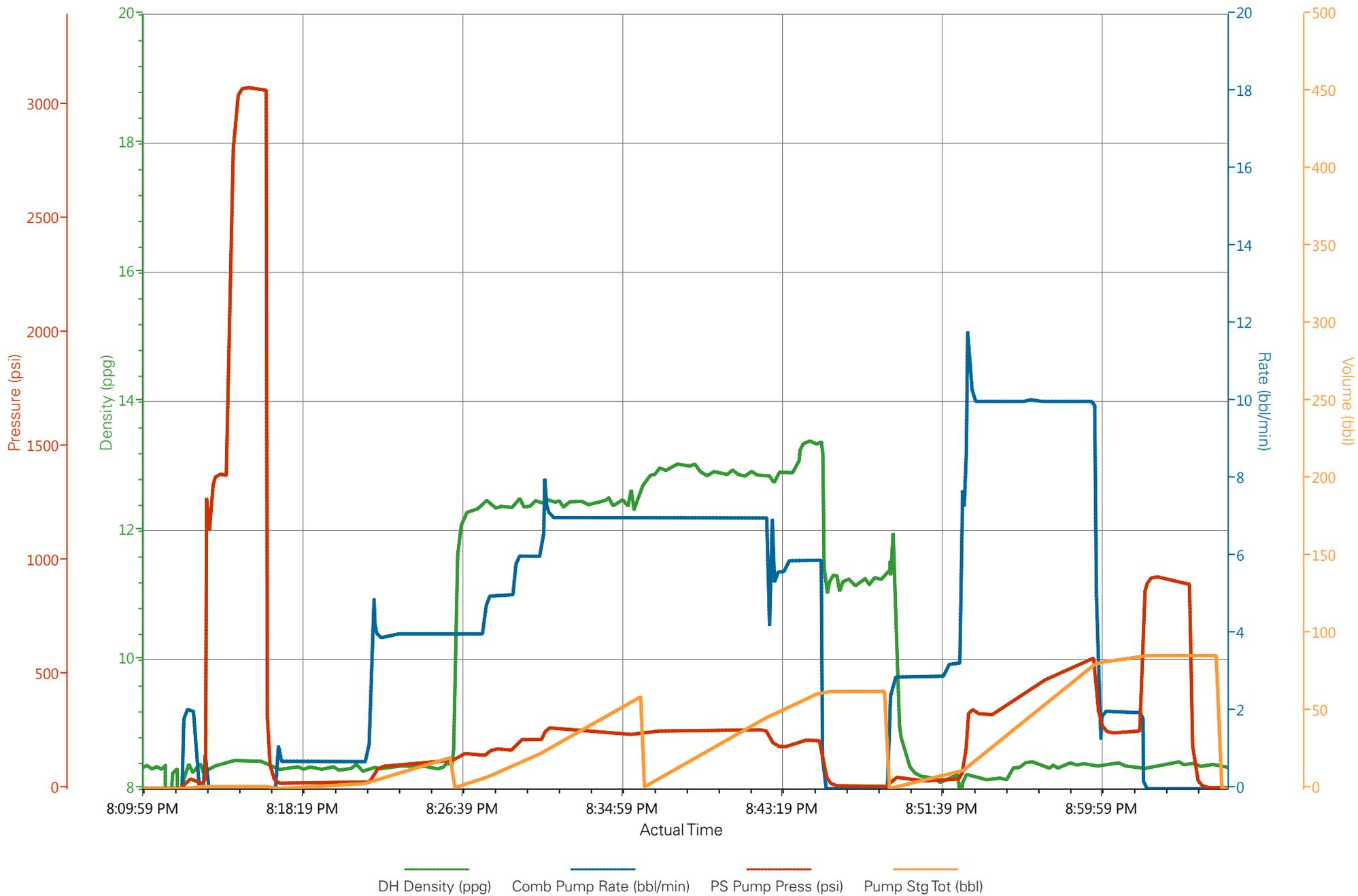
Well: PA 524-16

Representative: Beaude Oaks

Sales Order #: 901311508

Elite #9: Ed Deussen / Rob Eickhoff

WPX - PA 524-16 - 9 5/8" SURFACE



# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: ED DEUSSEN  
Attention: J.TROUT  
Lease: PA  
Well #: 524-16

Date: 4/30/2014  
Date Rec.: 4/30/2014  
S.O.#: 901311508  
Job Type: 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>51</b> Deg
Total Dissolved Solids		<b>370</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 its

<b>Sales Order #:</b> 0901311508	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 4/30/2014
<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> 05-045-22042-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 0080125686
<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	5/1/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB57194
Customer Participation	Did the customer participate in this survey? (Y/N)	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	

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

General	
<b>Survey Conducted Date</b>	4/30/2014
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	99
<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	99
<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