

WPX Energy Rocky Mountain LLC- EBUS

NER 523-32

**Nabors 576**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 08/31/2014  
Job Date: 08/29/2014

Submitted by: Evan Russell – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3123447	Quote #:	Sales Order #: 0901626450
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: AL HARTL	
Well Name: FEDERAL	Well #: NER 523-32	API/UWI #: 05-045-21776-00	
Field: RULISON	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: 5-7S-93W-113FNL-2571FWL			
Contractor:		Rig/Platform Name/Num: Nabors 576	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HX23209		Srvc Supervisor: Francisco Javier Castillo	

### Job

Formation Name			
Formation Depth (MD)	Top	Surface	Bottom
			1177ft
Form Type	BHST		
Job depth MD	1177ft		
Water Depth	Job Depth TVD		
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	Used	9.625	9.001	32.3	8rd	H-40	0	30	0	0
Casing	New	9.625	9.001	32.3	8rd	H-40	0	1177		0
Open Hole Section			13.5				0	1177		0

### Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625	1	WTF	1177	Top Plug	9.625	1	HES
Float Shoe					Bottom Plug			
Float Collar	9.625	1	WTF	1133	SSR plug set			
Insert Float					Plug Container	9.625	1	HES
Stage Tool					Centralizers	9.625	9	WTF

### 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	VariCem GJ1	VARICEM (TM) CEMENT	140	sack	12.3	2.38		8	13.77
13.70 Gal		FRESH WATER							
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 ft<sup>3</sup>/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/mi n</b>	<b>Total Mix Fluid Gal</b>
3	VariCem GJ1	VARICEM (TM) CEMENT	160	sack	12.8	2.11		8	11.77
0.25 lbm		POLY-E-FLAKE (101216940)							
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	Fresh Water Displacement	Fresh Water Displacement	89	bbl	8.34			10	
<b>Cement Left In Pipe</b>		<b>Amount</b>	44 ft		<b>Reason</b>			Shoe Joint	
<b>Comment</b>									

1.1 Job Event Log

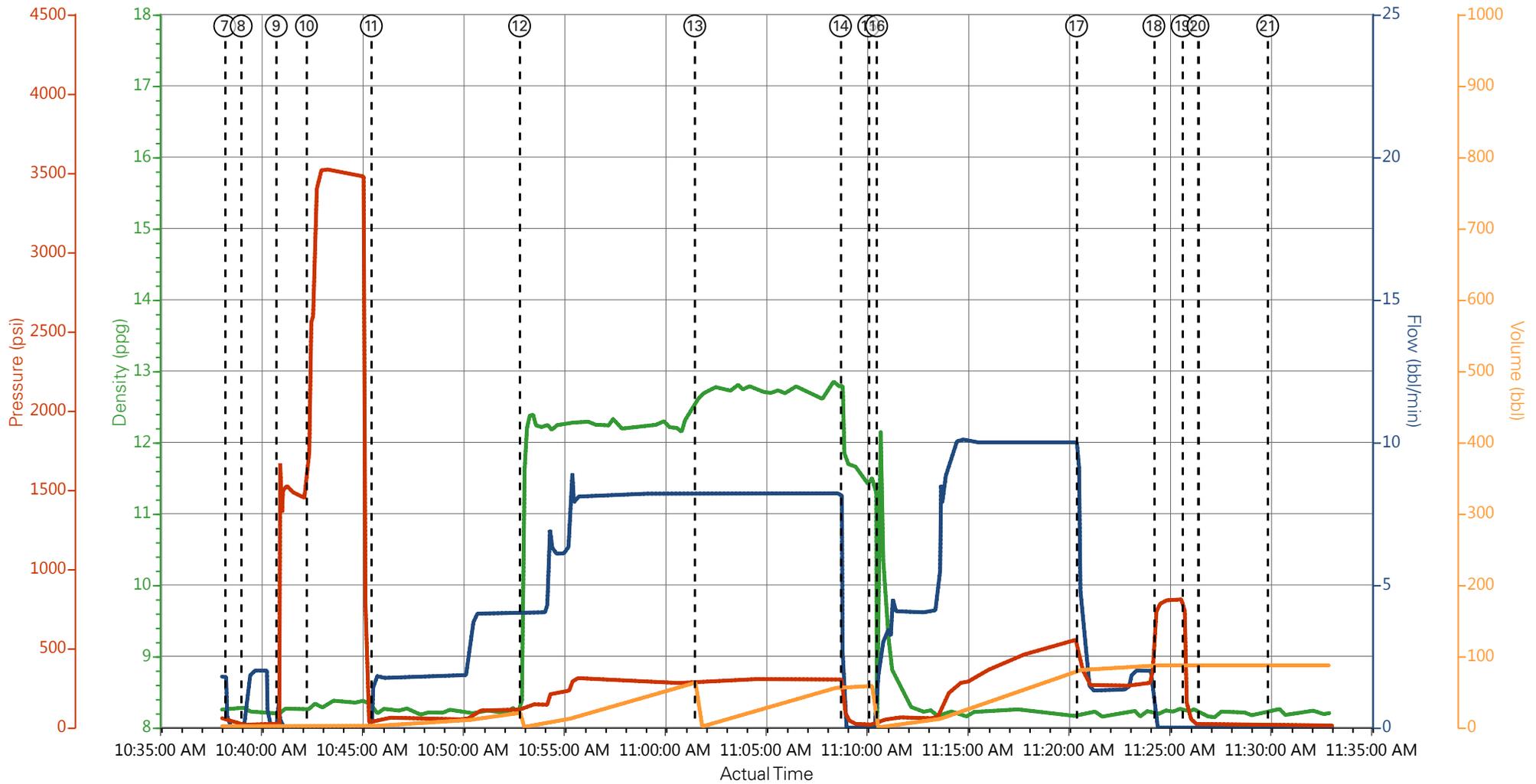
Graph Label	Date	Time	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comment
CALL OUT	8/29/2014	03:00:00					ON LOCATION AT 09:00 HRS
DEPART YARD SAFETY MEETING	8/29/2014	05:55:00					
CREW LEAVE THE YARD	8/29/2014	06:00:00					
ARRIVE ON LOCATION	8/29/2014	08:00:00					RIG WAS STILL RUNNING CASING
RIG UP MEETING / RIG UP	8/29/2014	09:00:00					1-ELITE, 1-660 BULK TRUCK, 2" PUMPING IRON, 9.625- PLUG CONTAINER AND QUICK CONNECT, 2" BALE BASKET
PRE-JOB SAFETY MEETING	8/29/2014	10:15:00					
START JOB	8/29/2014	10:38:20					SET DEPTH-1177', OH-13.5", SJ-44.12", CSG-9.625", 32.3#, H-40, MUD-10.2 PPG, FV-75
PRIME LINES	8/29/2014	10:39:09	8.33 PPG	2 BPM	45 PSI	2 BBLS	FRESH WATER
STALL OUT	8/29/2014	10:40:53					HELD PRESSURE AT 1500 PSI
TEST LINES	8/29/2014	10:42:22					HELD PRESSURE AT 3530 PSI
WATER SPACER	8/29/2014	10:45:35	8.33 PPG	4 BPM	52 PSI	20 BBLS	FRESH WATER
LEAD SLURRY	8/29/2014	10:52:56	12.3 PPG	8 BPM	282 PSI	59 BBLS	140 SKS, 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK
TAIL SLURRY	8/29/2014	11:01:37	12.8 PPG	8 BPM	400 PSI	60 BBLS	160 SKS, 12.8 PPG, 2.11 FT3/SK, 11.77 GAL/SK
SHUTDOWN	8/29/2014	11:08:50					
DROP PLUG	8/29/2014	11:10:14					VERIFIED BY DRILLER
DISPLACEMENT	8/29/2014	11:10:37	8.33 PPG	10 BPM	436 PSI	79 BBLS	FRESH WATER
SLOW RATE	8/29/2014	11:20:31	8.33 PPG	2 BPM	277 PSI	10 BBLS	
BUMP PLUG	8/29/2014	11:24:21			809 PSI	TOTAL DISP 89 BBL	CIRCULATED 30 BBLS / 71 SKS TO SURFACE

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CHECK FLOATS	8/29/2014	11:25:45	FLOATS HELD / FLOW BACK 0.5 BBLs
END JOB	8/29/2014	11:26:32	USED 20 LBS OF SUGAR
RIG DOWN SAFETY MEETING / RIG DOWN	8/29/2014	11:30:00	
RIG DOWN COMPLETE	8/29/2014	12:30:00	
DEPART LOCATION SAFETY MEETING	8/29/2014	12:45:00	NO INJURIES TO REPORT
CREW LEAVE LOCATION	8/29/2014	13:00:00	
THANK YOU	8/29/2014	13:01:00	THANK YOU FOR YOUR BUSINESS FROM JAVIER CASTILLO AND CREW

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# NER 523-32 9 5/8" Surface



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

① CALL OUT n/a;n/a;n/a;n/a	⑤ RIG UP MEETING / RIG UP n/a;n/a;n/a;n/a	⑨ STALL OUT 8.21;0.3;1679;2.1	⑬ TAIL SLURRY 12.61;8.2;291;0.1	⑰ SLOW RATE 8.21;4.8;436;80.7
② DEPARTYARD SAFETY MEETING n/a;n/a;n/a;n/a	⑥ PRE-JOB SAFETY MEETING n/a;n/a;n/a;n/a	⑩ TEST LINES 8.26;0;2545;2.1	⑭ SHUTDOWN 11.88;0;125;58.3	⑱ BUMP PLUG 8.17;0;759;87.2
③ CREW LEAVE THE YARD n/a;n/a;n/a;n/a	⑦ START JOB 8.23;0;47;2.3	⑪ WATER SPACER 8.18;1.8;37;2.3	⑮ DROP PLUG 11.48;0;19;58.3	⑲ CHECK FLOATS 8.27;0;259;87.2
④ ARRIVE ON LOCATION n/a;n/a;n/a;n/a	⑧ PRIME LINES 8.27;0.2;16;0	⑫ LEAD SLURRY 9.79;4;117;0.6	⑯ DISPLACEMENT 12.16;2;35;0.4	20 END JOB 8.25;0;16;87.2



**HALLIBURTON** | iCem® Service

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Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 8/29/2014 10:37:49 AM

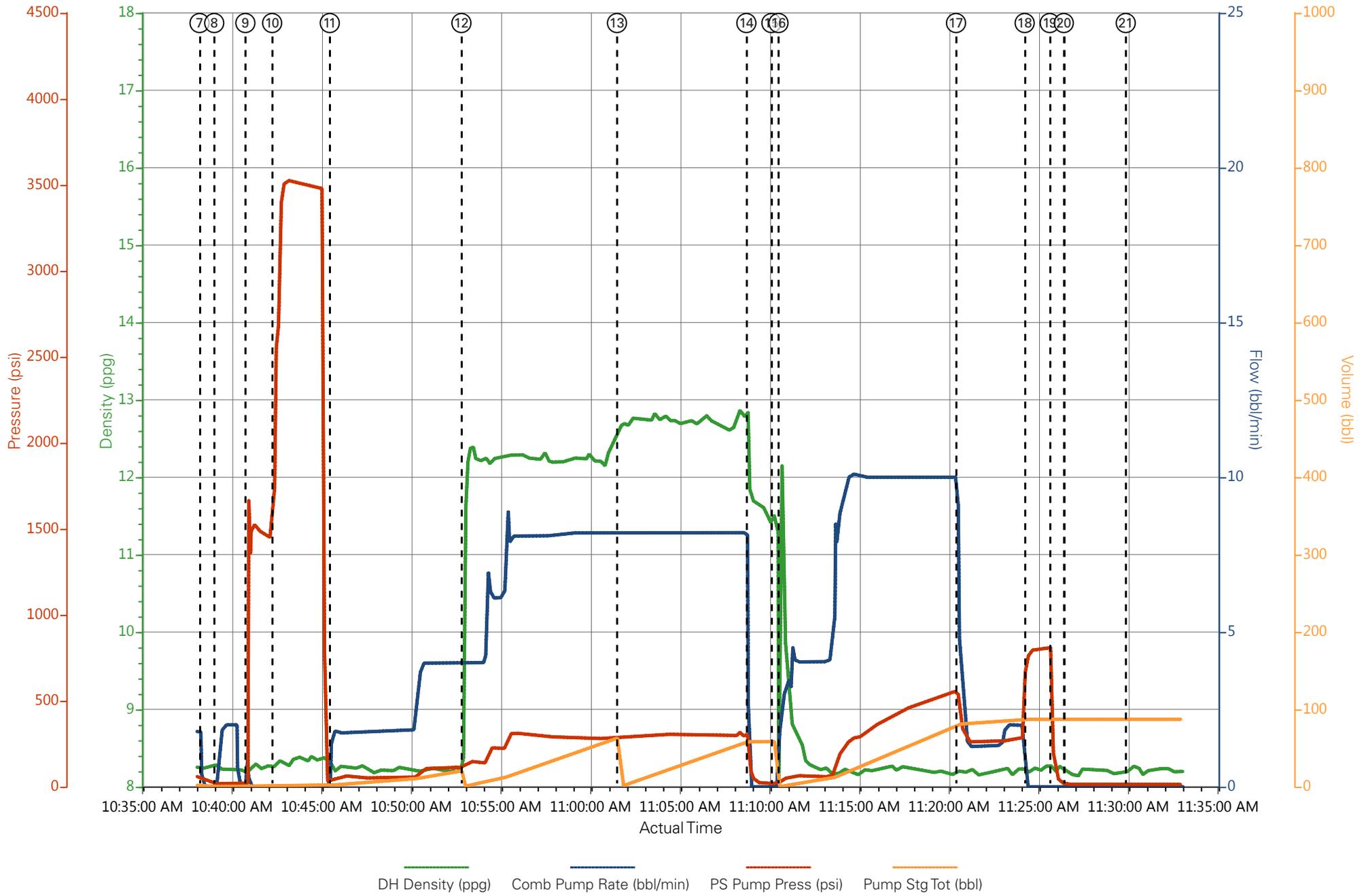
Well: NER 523-32

Representative: AL HARTL

Sales Order #: 901626450

ELITE #3: J. CASTILLO / KEVIN BENNETT

# NER 523-32 9 5/8" Surface



# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: JAVIER CASTILLO  
Attention: Chuck Ross  
Lease: FED NER  
Well #: 523-32

Date: 8/29/2014  
Date Rec.: 8/29/2014  
S.O.#: 901626450  
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>200</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>200</b> Mg / L
Chlorine (Cl <sub>2</sub> )		<b>0</b> Mg / L
Temp	<i>40-80</i>	<b>65</b> Deg
Total Dissolved Solids		<b>410</b> Mg / L

Respectfully: JAVIER CASTILLO

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> 0901626450	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 8/29/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> AL HARTL		<b>API / UWI: (leave blank if unknown)</b> 05-045-21776-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 0080125494
<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	8/29/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB85312
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	AL HARTL
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>
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### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b>	8/29/2014
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>	1.5
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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<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	95
<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	95
<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