

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

PA 31-27

**Nabors 576**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 11/16/2014  
Job Date: 11/13/2014

Submitted by: Aaron Katz – Grand Junction Cement Engineer

## The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3207558	Quote #:	Sales Order #: 0901822463
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Rick Oaks	
Well Name: FEDERAL		Well #: PA 31-27	API/UWI #: 05-045-22242-00
Field: PARACHUTE	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: 27-6S-95W-2375FNL-648FEL			
Contractor:		Rig/Platform Name/Num: Nabors 576	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srvc Supervisor: Brandon Reeves	
Job			

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	2926ft		Job Depth TVD
Water Depth			Wk Ht Above Floor 4ft
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	3	9.625	9.001	32.3			0	30	0	0
Casing		9.625	9.001	32.3	8 RD	H-40	0	2896		0
Open Hole Section			13.5				0	2926		0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	9.625			2896		Top Plug	9.625	1	HES
Float Shoe	9.625					Bottom Plug	9.625		HES
Float Collar	9.625					SSR plug set	9.625		HES
Insert Float	9.625					Plug Container	9.625	1	HES
Stage Tool	9.625					Centralizers	9.625		HES

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 ft3/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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	VariCem GJ1	VARICEM (TM) CEMENT	400	sack	12.3	2.38		8	13.77	

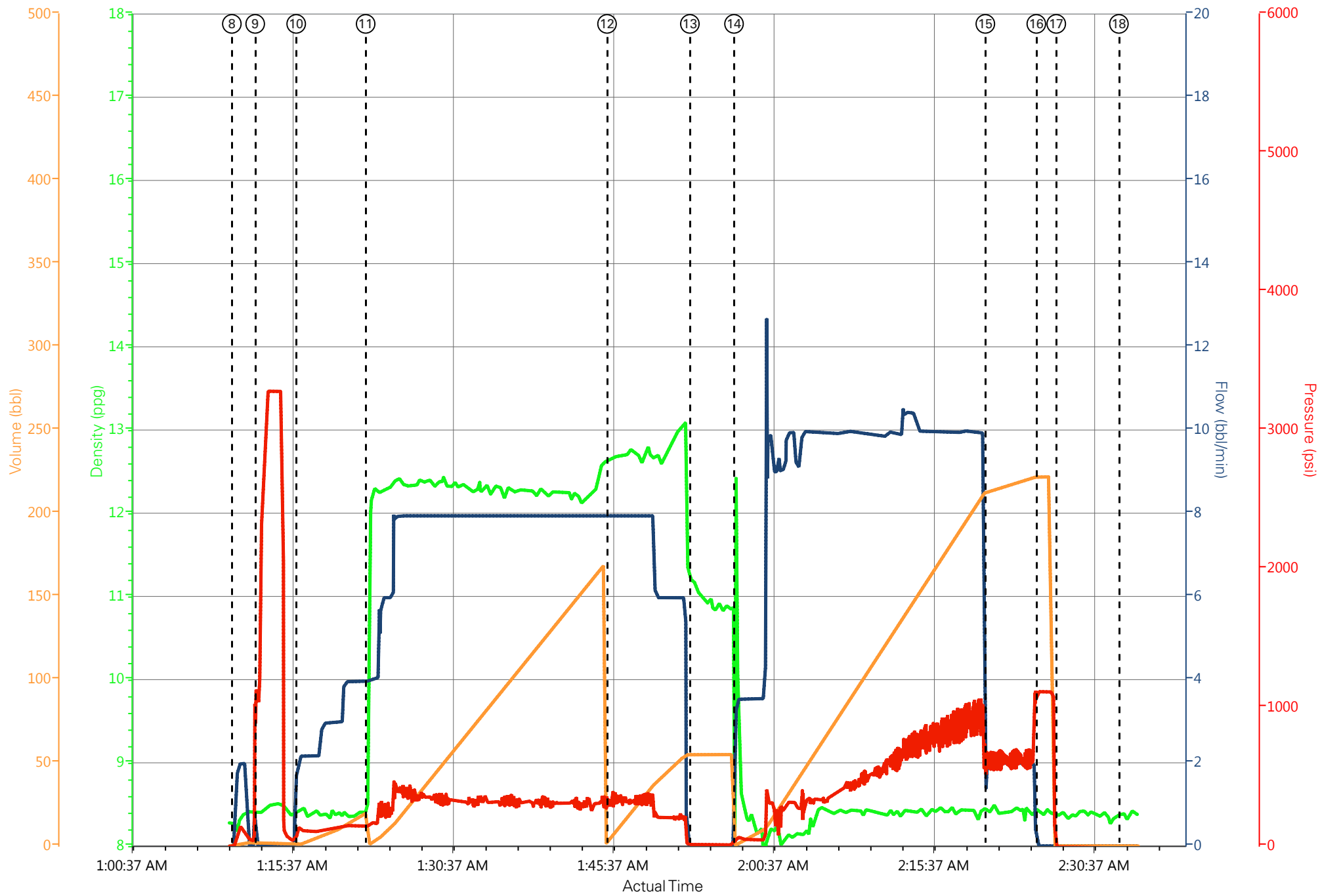
13.70 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	VariCem GJ1	VARICEM (TM) CEMENT	155	sack	12.8	2.11		8	11.77
11.71 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Fresh Water Displacement	Fresh Water Displacement	222	bbl	8.34			10	
Cement Left In Pipe		Amount	44.08 ft		Reason		Shoe Joint		
Comment									

## 1.1 Job Event Log

Type	Seq No.	Graph Label	Date	Time	Source	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pump Stage Total (bbl)	Driv-Side Pump Pressure (psi)	Comment
Event	1	Call Out	11/12/2014	11:00:01	USER					
Event	2	Depart from Service Center or Other Site	11/12/2014	12:30:32	USER					
Event	3	Arrive at Location from Service Center	11/12/2014	14:30:12	USER					
Event	4	Assessment Of Location Safety Meeting	11/12/2014	23:00:00	USER					
Event	5	Pre-Rig Up Safety Meeting	11/12/2014	23:45:12	USER					
Event	6	Rig-Up Equipment	11/13/2014	00:00:05	USER					
Event	7	Pre-Job Safety Meeting	11/13/2014	00:45:12	USER					
Event	8	Start Job	11/13/2014	01:10:12	USER	8.29	0.86	0.0	0.00	TP-2926' SJ-44.08' MW-10.4 PPG. HOLE 13 1/2" CASING-9 5/8" H-40
Event	9	Test Lines	11/13/2014	01:12:23	USER	8.41	0.00	2.0	3290.00	TESTED LINES TO 3290 PSI.
Event	10	Pump Water Spacer	11/13/2014	01:16:13	USER	8.42	4.00	20.0	120.00	20 BBLS.FRESH WATER SPACER
Event	11	Pump Lead Cement	11/13/2014	01:22:43	USER	12.32	8.0	169.6	375.00	400 SKS. @ 12.3 PPG. 2.38 YIELD 13.77 GAL/SK.
Event	12	Pump Tail Cement	11/13/2014	01:45:18	USER	12.84	8.0	58.2	315.00	155 SKS.@ 12.8 PPG. 2.11 YIELD 11.77 GAL/SK.
Event	13	Drop Top Plug	11/13/2014	01:53:03	USER	8.35	0.00	0.0	0.00	HES PROVIDED THE TOP PLUG.
Event	14	Pump Displacement	11/13/2014	01:57:11	USER	8.34	10.00	0.0	940.00	FRESH WATER DISPLACEMENT.
Event	15	Slow Rate	11/13/2014	02:20:42	USER	8.43	2.00	210.0	610.00	SLOW RATE TO LAND THE PLUG.
Event	16	Bump Plug	11/13/2014	02:25:28	USER	8.44	2.00	222.0	630.00	PLUG LANDED AT 630 PSI. PRESSURED UP TO 1100 PSI.

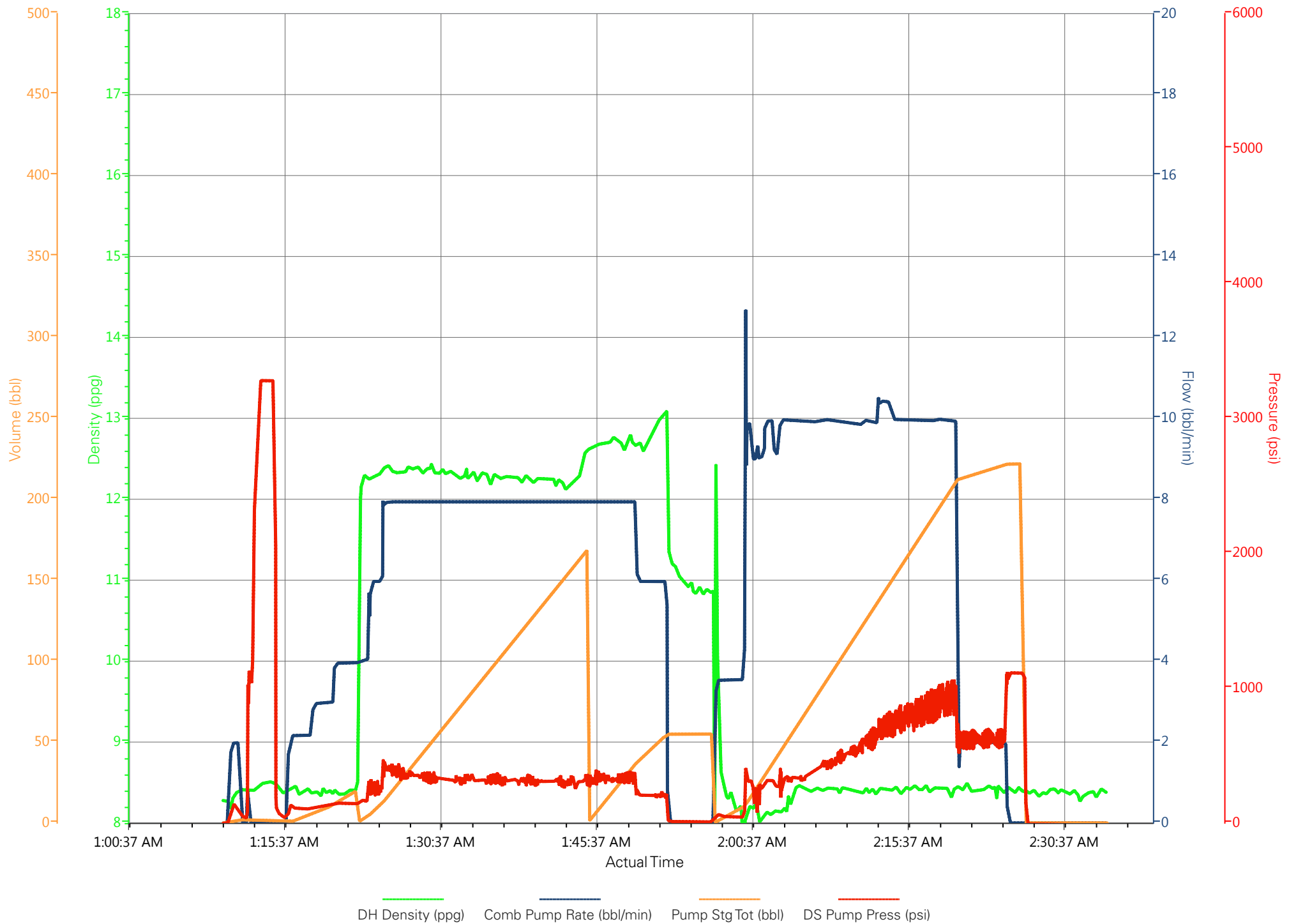
Event	17	Check Floats	11/13/2014	02:27:20	USER	8.39	0.00	0.0	0.00	FLOATS HELD. 1 BBL.OFFLOW BACK.
Event	18	End Job	11/13/2014	02:33:12	USER	8.37	0.00	0.0	0.00	THE WELLWAS CIRCULATED BEFORE STARTING THE JOB. GOOD CIRCULATION THROUGHOUT THE JOB. THE PIPE WAS NOT RECIPROCATED. CIRCULATED 65 BBL.S.OF CEMENTTO SURFACE.

# WPX ENERGY - FEDERAL PA 31-27 - 9 5/8" SURFACE



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

# WPX ENERGY - FEDERAL PA 31-27 - 9 5/8" SURFACE



# HALLIBURTON

## Water Analysis Report

Company: WPX ENERGY

Submitted by: BRANDON REEVES

Attention: J. TROUT

Lease FEDERAL

Well # PA 31-27

Date: 11/13/2014

Date Rec.: 11/13/2014

S.O.# 901822463

Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7.1</b>
Potassium (K)	<i>5000</i>	<b>0</b> Mg / L
Calcium (Ca)	<i>500</i>	<b>100</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>UNDER 200</b> Mg / L
Chlorine (Cl <sub>2</sub> )		<b>0</b> Mg / L
Temp	<i>40-80</i>	<b>42</b> Deg
Total Dissolved Solids		<b>280</b> Mg / L

Respectfully: BRANDON REEVES

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> 0901822463	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 11/13/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> RICK OAKS		<b>API / UWI: (leave blank if unknown)</b> 05-045-22242-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 0080244816
<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	11/13/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HBT9414
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	RICK 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	THANKS GREAT JOB

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

General	
<b>Survey Conducted Date</b> The date the survey was conducted	11/13/2014

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.	Deviated
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	4
<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>Pumping Hours</b> Total number of hours pumping fluid on this job. Enter in decimal format.	2
<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	6
<b>Was this a Primary Cement Job (Yes / No)</b> Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
<b>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	0
<b>Customer Non-Productive Rig Time (hrs)</b>	0

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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>Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?</b> Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?	No
<b>Did We Run Wiper Plugs?</b> Did We Run Top And Bottom Casing Wiper Plugs?	Top
<b>If a top plug was run, was the plug bumped? (Yes/No/N/A)</b> If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
<b>If applicable, was Halliburton float equipment used? (Yes/No/N/A)</b> If applicable, was Halliburton float equipment used? (Yes/No/N/A)	N/A
<b>If applicable, did the floats hold? (Yes/No/N/A)</b> If applicable, did the floats hold? (Yes/No/N/A)	Yes
<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>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>If applicable, were there returns throughout the job? (Yes/No/N/A)</b> If applicable, were there returns throughout the job? (Yes/No/N/A)	YES
<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