

WPX Energy Rocky Mountain LLC - EBUS

PA 333-27

**Nabors 576**

## **Post Job Summary**

# **Cement Production Casing**

Date Prepared: 11/13/2014  
Job Date: 10/25/2014

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

### The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3353908	Quote #:	Sales Order #: 0901770958
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Customer Rep: AL HARTL		
Well Name: FEDERAL	Well #: PA 333-27	API/UWI #: 05-045-22336-00	
Field: PARACHUTE	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: NE SE-27-6S-95W-1356FSL-830FEL			
Contractor: NABORS DRLG	Rig/Platform Name/Num: NABORS 576		
Job BOM: 7523			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180	Srvc Supervisor: Eric Carter		
Job			

Formation Name			
Formation Depth (MD)	Top	2308 FT.	Bottom 8528.88 FT.
Form Type			BHST
Job depth MD		8529ft	Job Depth TVD
Water Depth			Wk Ht Above Floor 5 FT.
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	2803		0
Casing		4.5	4	11.6			0	8529		0
Open Hole Section			8.75				2803	8529	0	0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe						Top Plug	4.5	1	HES
Float Shoe						Bottom Plug			
Float Collar						SSR plug set			
Insert Float						Plug Container	4.5	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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water	Fresh Water	10	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	EconoCem GJ2	ECONOCHEM (TM) SYSTEM	355	sack	12.7	1.66	8.53	7		

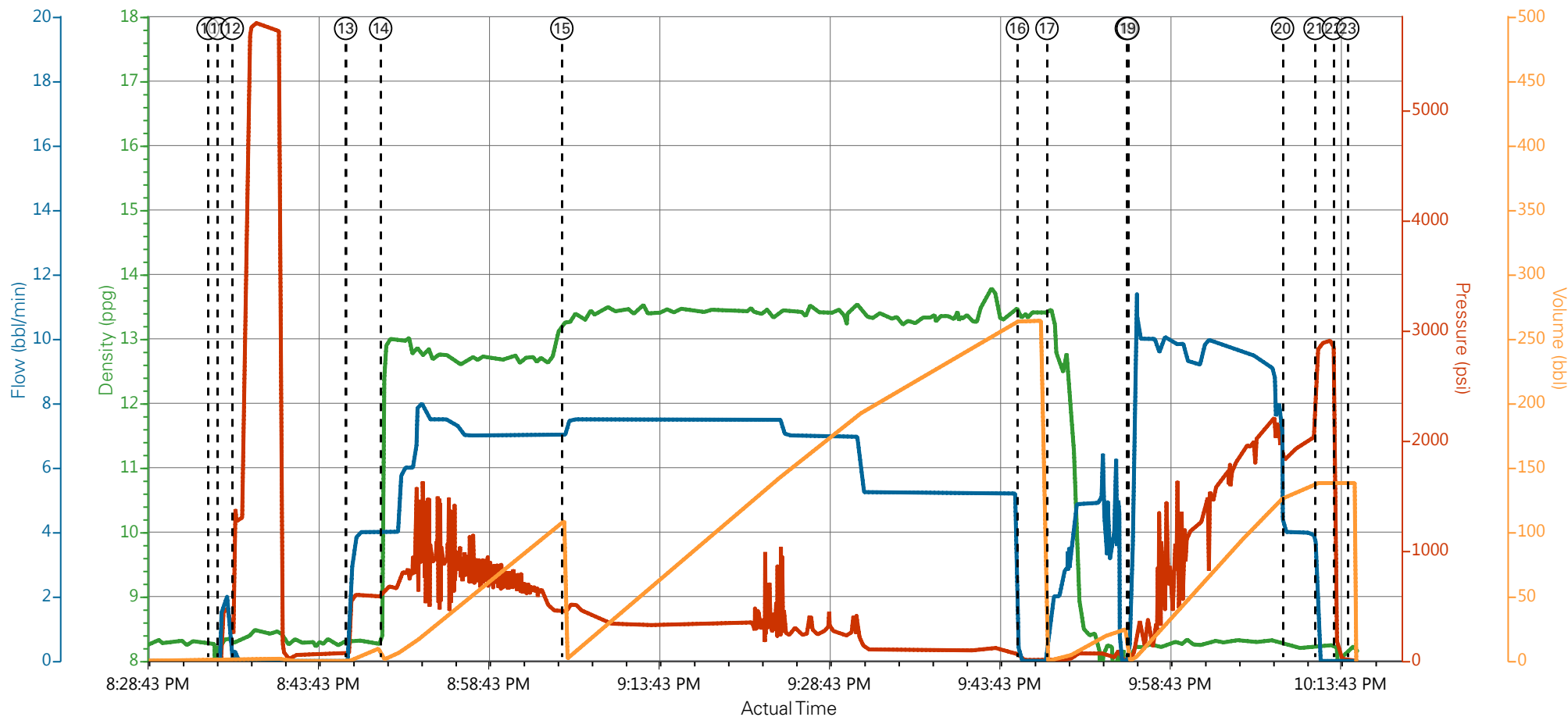
8.69 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	ThermaCem GJ2	THERMACEM (TM) SYSTEM	670	sack	13.5	1.74	7.63	7.5	
7.72 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Fresh Water Displacement	Fresh Water Displacement	131.8	bbl	8.34			10	
Cement Left In Pipe		Amount	28.75 ft		Reason		Shoe Joint		
Comment									

## 3.5 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	PS Pump Press (psi)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comment
Event	1	Call Out	10/25/2014	10:00:00	USER					
Event	2	Depart Yard Safety Meeting	10/25/2014	11:50:00	USER					ATTENDED BY ALL HES CREW
Event	3	Crew Leave Yard	10/25/2014	12:00:00	USER					
Event	4	Arrive At Loc	10/25/2014	13:00:00	USER					RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	10/25/2014	18:00:00	USER					ATTENDED BY ALL HES CREW
Event	6	Other	10/25/2014	18:10:00	USER					SPOT EQUIPMENT
Event	7	Pre-Rig Up Safety Meeting	10/25/2014	18:30:00	USER					ATTENDED BY ALL HES CREW
Event	8	Rig-Up Equipment	10/25/2014	18:40:00	USER					
Event	9	Pre-Job Safety Meeting	10/25/2014	20:00	USER					ATTENDED BY ALL HES CREW, RIG CREW AND COMPANY REP
Event	10	Other	10/25/2014	20:34:17	USER					TP 8528.88', TD 8528.88', MW 11.4 PPG, CASING 4.5", 11.6#, N-80, SJ 28.75', HOLE 8.75", SURFACE CASING 9.625", 32.3# SET AT 2308', RIG CIRCULATED FOR 2HR'S PRIOR TO JOB
Event	11	Other	10/25/2014	20:35:07	USER	8.34	490	2	2	FRESH WATER
Event	12	Test Lines	10/25/2014	20:36:25	USER					PRESSURED UP TO 5800 PSI, PRESSURE HELD
Event	13	Pump Spacer	10/25/2014	20:46:24	USER	8.34	590	4	10	FRESH WATER
Event	14	Pump Lead Cement	10/25/2014	20:49:29	USER	12.7	920	7	105	355 SKS ECONOCHEM MIXED AT 12.7 PPG, 1.66 YIELD, 8.53 GL/SK
Event	15	Pump Tail Cement	10/25/2014	21:05:26	USER	13.5	550	7.5	207.6	670 SKS THERMACHEM MIXED AT 13.5 PPG, 1.74 YIELD, 7.63 GL/SK
Event	16	Shutdown	10/25/2014	21:45:33	USER					
Event	17	Clean Lines	10/25/2014	21:48:09	USER					CLEANED LINES TO CATCH TANK

Event	18	Drop Top Plug	10/25/2014	21:55:08	USER					PLUG LAUNCHED
Event	19	Pump Displacement	10/25/2014	21:55:16	USER	8.4	2200	10	121.8	FRESH WATER WITH KCL, BE-6 AND MMCR
Event	20	Slow Rate	10/25/2014	22:08:53	USER	8.4	2050	4	10	
Event	21	Bump Plug	10/25/2014	22:11:45	USER		2920			PLUG LANDED
Event	22	Check Weight	10/25/2014	22:13:21	USER					FLOATS HELD
Event	23	Other	10/25/2014	22:14:38	USER					GOOD CIRCULATION THROUGHOUT JOB, PIPE NOT MOVED DURNIG JOB, 0 BBLs CEMENT TO SURFACE
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	10/25/2014	22:15	USER					ATTENDED BY ALL HES CREW
Event	25	Rig-Down Equipment	10/25/2014	22:20	USER					
Event	26	Depart Location Safety Meeting	10/25/2014	23:20	USER					ATTENDED BY ALL HES CREW
Event	27	Crew Leave Location	10/25/2014	23:30	USER					THANK YOU FOR USING HALLIBURTON CEMENT, ERIC CARTER AND CREW

# WPX - PA 333-27 - PRODUCTION



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

① Call Out n/a;n/a;n/a;n/a	⑧ Rig-Up Equipment n/a;n/a;n/a;n/a	⑮ Pump Tail Cement 13.21;429;7;0.9	22 Check Floats 8.21;154;0;138.1
② Depart Yard Safety Meeting n/a;n/a;n/a;n/a	⑨ Pre-Job Safety Meeting n/a;n/a;n/a;n/a	⑯ Shutdown 13.3;18;0;264	23 End Job 8.25;3;0;138.1
③ Crew Leave Yard n/a;n/a;n/a;n/a	⑩ Start Job 8.32;0;0;0	⑰ Clean Lines 13.43;9;2;0.1	24 Post-Job Safety Meeting (Pre Rig-Down) n/a;n/a;n/a;n/a
④ Arrive At Loc n/a;n/a;n/a;n/a	⑪ Fill Lines 8.33;15;1.4;0.1	⑱ Drop Top Plug 7.64;9;1.9;0.1	25 Rig-Down Equipment n/a;n/a;n/a;n/a
⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a	⑫ Test Lines 8.32;1303;0;1.7	⑲ Pump Displacement 8.24;29;2.3;0.3	26 Depart Location Safety Meeting n/a;n/a;n/a;n/a
⑥ Other n/a;n/a;n/a;n/a	⑬ Pump Spacer 8.28;83;1.1;0.1	20 Slow Rate 8.25;1835;4;127.7	27 Crew Leave Location n/a;n/a;n/a;n/a
⑦ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a	⑭ Pump Lead Cement 12.56;621;4;1.3	21 Bump Plug 8.23;2855;0;138.1	

▼ **HALLIBURTON** | iCem® Service

Created: 2014-10-25 11:30:35, Version: 4.0.248

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 10/25/2014 8:04:50 PM

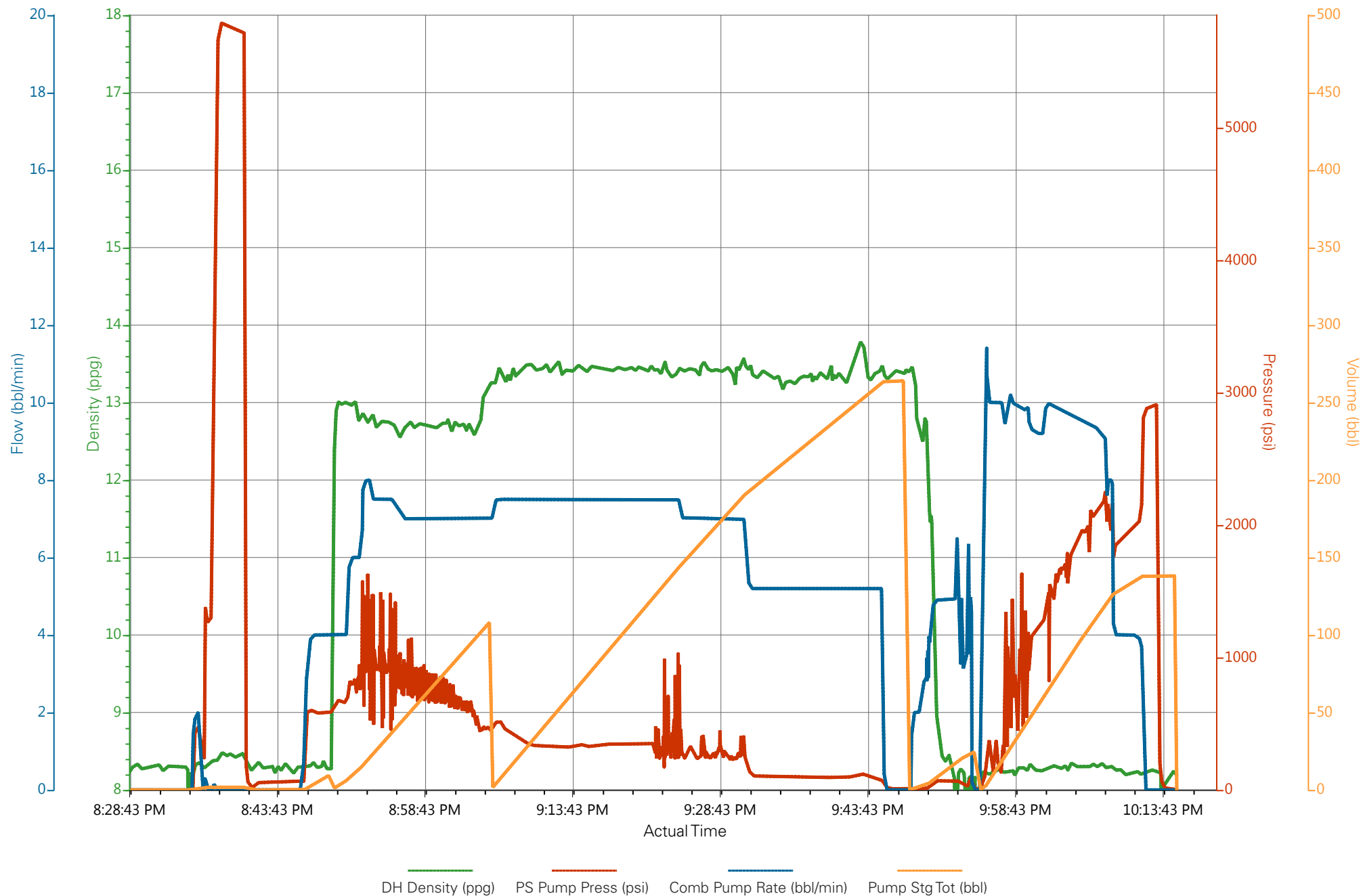
Well: PA 333-27

Representative: AL HARTL

Sales Order #: 0901770958

ERIC CARTER: CARL KUKUS/ELITE 9

# WPX - PA 333-27 - PRODUCTION



# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: ERIC CARTER  
Attention: J.Trout  
Lease: NABORS 576  
Well #: PA 333-27

Date: 11/13/2014  
Date Rec.: 11/13/2014  
S.O.#: 901770958  
Job Type: PRODUCTION

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>1000</i> Mg / L
Hardness	<i>500</i>	<i>250</i> Mg / L
Iron (FE2)	<i>300</i>	<i>10</i> Mg / L
Chlorides (Cl)	<i>3000</i>	<i>500</i> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<i>&lt;200</i> Mg / L
Temp	<i>40-80</i>	<i>60</i> Deg
Total Dissolved Solids		<i>OR</i> Mg / L

Respectfully: ERIC CARTER

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> 0901770958	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 10/25/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT PRODUCTION CASING BOM
<b>Customer Representative:</b> AL HARTL		<b>API / UWI: (leave blank if unknown)</b> 05-045-22336-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 0080455260
<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	10/25/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX15491
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	

CUSTOMER SIGNATURE

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*KEY PERFORMANCE INDICATORS*

General	
<b>Survey Conducted Date</b> The date the survey was conducted	10/25/2014

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.	Vertical
<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	5
<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>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, 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	98
<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>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)	Y
<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