

WPX Energy Rocky Mountain LLC-EBUS

RGU 433-26-198

**Cyclone 29**

## **Post Job Summary**

### **Cement Production Casing**

Date Prepared: 02/05/2015  
Job Date: 01/23/2015

Submitted by: Jenna Cook – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3124438	Quote #:	Sales Order #: 0902040448
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: TOM BOWEN	
Well Name: FEDERAL	Well #: RGU 433-26-198	API/UWI #: 05-103-11963-00	
Field: SULPHUR CREEK	City (SAP): MEEKER	County/Parish: RIO BLANCO	State: COLORADO
Legal Description: 26-1S-98W-2467FNL-922FEL			
Contractor: CYCLONE		Rig/Platform Name/Num: CYCLONE 29	
Job BOM: 7523			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srcv Supervisor: Christopher Kukus	

### Job

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	12738ft Job Depth TVD
Water Depth	Wk Ht Above Floor 5FT
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	8.921	36			0	4113		0
Casing	0	4.5	4	11.6	8 RD (LT&C)	I-80	0	12738		0
Open Hole Section			8.75				4113	12738	0	0

### Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	4.5	1		12738	Top Plug	4.5		HES
Float Shoe	4.5				Bottom Plug	4.5		HES
Float Collar	4.5	1		12709	SSR plug set	4.5		HES
Insert Float	4.5				Plug Container	4.5	1	HES
Stage Tool	4.5				Centralizers	4.5		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 ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water	Fresh Water	100	bbl	8.3			6		
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	ExtendaCem GJ1	EXTENDACEM (TM) SYSTEM	625	sack	11	2.75		8	16.08	
16.22 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 ft3/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>	
3	EconoCem GJ1	ECONOCEM (TM) SYSTEM	375	sack	12.7	1.91		8	10.07	
10.25 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 ft3/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>	
4	ThermaCem GJ1	THERMACEM (TM) SYSTEM	970	sack	13.5	1.75		8	8.23	
8.32 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 ft3/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>	
5	Displacement	Displacement	197	bbl	8.34			10		
<b>Cement Left In Pipe</b>		<b>Amount</b>	27 ft		<b>Reason</b>			Shoe Joint		
<b>Comment</b>										

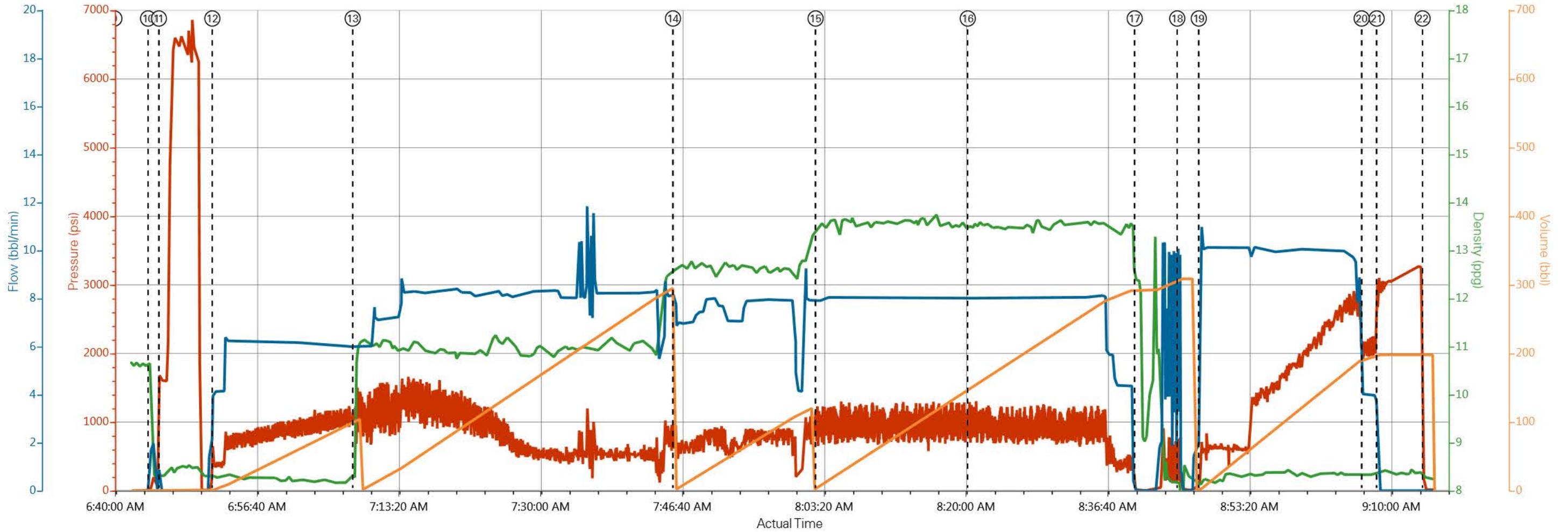
## 1.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comment
Event	1	Call Out	1/23/2015	19:30:00	USER					HES CREW CALLED OUT AT 19:30 WITH ON LOCATION TIME OF 03:00
Event	2	Pre-Convoy Safety Meeting	1/23/2015	21:50:01	USER					ALL HES CREW MEMBERS
Event	3	Crew Leave Yard	1/23/2015	22:00:02	USER					HES CREW AND EQUIPMENT READY AND LEFT YARD AT 22:00
Event	4	Arrive at Location from Service Center	1/24/2015	01:00:03	USER					HES CREW ARRIVED ON LOCATION AT 01:00 2 HOURS EARLY RIG WAS RUNNING CASING HES CREW SPOTTED EQUIPMENT AND RIGGED UP
Event	5	Assessment Of Location Safety Meeting	1/24/2015	01:15:04	USER					ALL HES CREW MEMBERS
Event	6	Pre-Rig Up Safety Meeting	1/24/2015	01:20:05	USER					ALL HES CREW MEMBERS
Event	7	Rig-Up Equipment	1/24/2015	01:30:06	USER					RIG UP IRON TO GROUND MANIFOLD LINE TO STAND PIPE AND ON TO THE PIT, FRESH WATER LINES TO FRAC TANK AND UP RIGHT, BULK LINES TO BULK EQUIPMENT
Event	8	Pre-Job Safety Meeting	1/24/2015	06:20:07	USER					ALL HES CREW MEMBERS AND RIG CREW
Event	9	Start Job	1/24/2015	06:40:08	USER					TD:12738 TP: 12738 SJ: 27.05 FC: 12709 CSG: 4 1/2 11.6# 180 OH: 8 1/2 TO 7963, 7 7/8 TO 12738 SF CSG: 9 5/8 36# J55 MUD: 10.1 VISC: 46 RIG

										CIRCULATED FOR 3 HOURS WITH FULL RETURNS
Event	10	Prime Pumps	1/24/2015	06:44:05	USER	150.0	8.36	2.0	2.0	PRIME LINES WITH 2 BBLS OF FRESH WATER
Event	11	Pressure Test	1/24/2015	06:45:22	USER	6660.0	8.31	0.00	2.0	PRESSURE TEST OK AT 6660 PSI KICK OUTS WORKING AND STALL OUT AT 1615 PSI
Event	12	Pump Spacer	1/24/2015	06:51:39	USER	353.81	8.35	6.0	100.0	PUMP 100 BBLS OF FRESH WATER SPACER
Event	13	Pump Cement	1/24/2015	07:08:08	USER	1050.38	11.0	8.0	306.1	EXTENDACEM 625 SKS 11 PPG 2.75 YIELD 16.08 GAL/SK SCAVENGER CEMENT WEIGHT VERIFIED BY MUD SCALE WET AND DRY SAMPLE WERE TAKEN A TOTAL OF 306.1 BBLS OF SCAVENGER AWAY
Event	14	Pump Lead Cement	1/24/2015	07:45:47	USER	952.88	12.77	8.0	127.6	ECONOCEM 375 SKS 12.7 PPG 1.91 YIELD 10.07 GAL/SK LEAD CEMENT WEIGHT VERIFIED BY MUD SCALE WET AND DRY SAMPLES WERE TAKEN AND A TOTAL OF 127.6 BBLS OF LEAD CEMENT AWAY
Event	15	Pump Tail Cement	1/24/2015	08:02:33	USER	891.94	13.53	8.0	302.3	THERMACEM 970SKS 13.5 PPG 1.75 YIELD 8.23 GAL/SK TAIL CEMENT WEIGHT VERIFIED BY MUD SCALE WET AND DRY SAMPLES WERE TAKEN AND A TOTAL OF 302.3 BBLS OF TAIL CEMENT AWAY
Event	16	Comment	1/24/2015	08:20:27	USER	700.69	13.47	8.02	80.0	WELL LOST RETURNS 80 BBLS INTO TAIL CEMENT
Event	17	Shutdown	1/24/2015	08:40:04	USER	14.43	13.56	0.00	302.3	SHUTDOWN TO READY TANKS AND CLEAN PUMPS

										AND LINES WITH 10 BBLS OF FRESH WATER
Event	18	Drop Top Plug	1/24/2015	08:45:04	USER	761.63	8.18	9.79	302.3	CO REP REQUESTED TO USE THERE LATCH DOWN PLUG, PLUG AWAY WITH NO ISSUES
Event	19	Pump Displacement	1/24/2015	08:47:36	USER	569.44	8.45	10.0	197.0	PUMP 197 BBLS OF KCL DISPLACEMENT 20 BAGS OF KCL, 3 BAGS BE-6, 1 GAL MMCR WERE ADDED
Event	20	Slow Rate	1/24/2015	09:06:45	USER	2012.27	8.38	4.00	187.0	HES SLOW RATE TO 4 BBLS A MIN TO BUMP PLUG
Event	21	Bump Plug	1/24/2015	09:08:31	USER	2140.0	8.38	0.00	197.0	PLUG BUMP AT CAULATED DISPLACEMENT AT 2140 PSI AND WAS TOOK UP TO 3257
Event	22	Check Floats	1/24/2015	09:13:54	USER	3257.0	8.29	0.00	197.0	FLOATS HELD WITH 2.5 BBLS BACK TO THE DISPLACEMENT TANKS
Event	23	End Job	1/24/2015	09:25:21	USER					JOB WENT GOOD WITH NO ISSUES. THE WELL LOST RETURNS 80 BBLS INTO CEMENT AND NEVER GOT THEM BACK, PLUG DID BUMP AND FLOATS HELD
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	1/24/2015	09:30:22	USER					ALL HES CREW MEMBERS
Event	25	Pre-Rig Down Safety Meeting	1/24/2015	09:40:23	USER					ALL HES CREW MEMBERS
Event	26	Rig-Down Equipment	1/24/2015	09:50:24	USER					RIG DOWN FLOOR, IRON, FRESH WATER LINES , BULK LINES, WASH UP AND BLOW DOWN PUMP
Event	27	Pre-Convoy Safety Meeting	1/24/2015	10:50:25	USER					ALL HES CREW MEMBERS
Event	28	Crew Leave Location	1/24/2015	11:00:26	USER					THANK YOU FOR USING HALLIBURTON CEMENT CHRIS KUKUS AND CREW

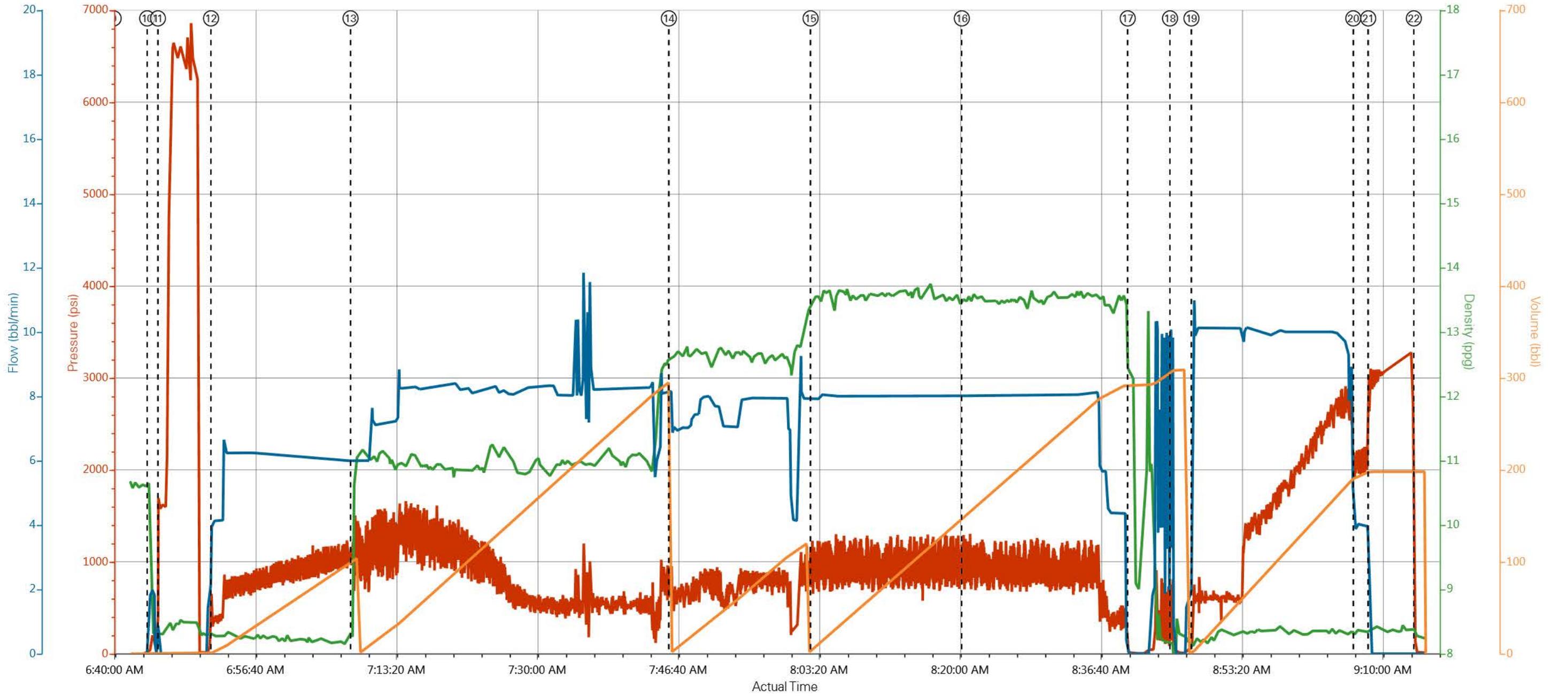
WPX ENERGY / FEDERAL RGU 433-26-198 / 4 1/2 PRODUCTION CASING



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

- ① Call Out
- ② Pre-Convoy Safety Meeting
- ③ Crew Leave Yard
- ④ Arrive at Location from Service Center
- ⑤ Assessment Of Location Safety Meeting
- ⑥ Pre-Rig Up Safety Meeting
- ⑦ Rig-Up Equipment
- ⑧ Pre-Job Safety Meeting
- ⑨ Start Job
- ⑩ Prime Lines
- ⑪ Pressure Test
- ⑫ Pump Fresh Water Spacer
- ⑬ Pump Cement
- ⑭ Pump Lead Cement
- ⑮ Pump Tail Cement
- ⑯ Comment
- ⑰ Shutdown / Clean Lines
- ⑱ Drop Top Plug
- ⑲ Pump Displacement
- 20 Slow Rate
- 21 Bump Plug
- 22 Check Floats
- 23 End Job
- 24 Post-Job Safety Meeting (Pre Rig-Down)
- 25 Pre-Rig Down Safety Meeting
- 26 Rig-Down Equipment
- 27 Pre-Convoy Safety Meeting
- 28 Crew Leave Location

WPX ENERGY / FEDERAL RGU 433-26-198 / 4 1/2 PRODUCTION CASING



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

<b>Sales Order #:</b> 0902040448	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 1/24/2015
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT PRODUCTION CASING BOM
<b>Customer Representative:</b> TOM BOWEN		<b>API / UWI: (leave blank if unknown)</b> 05-103-11963-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 0080129266
<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> RIO BLANCO

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	1/24/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX35027
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	TOM BOWEN
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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<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> RIO BLANCO

### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b>	1/24/2015
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>	6
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>Pumping Hours</b>	3
Total number of hours pumping fluid on this job. Enter in decimal format.	
<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>	6
Number Of Jsas Performed	
<b>Was this a Primary Cement Job (Yes / No)</b>	Yes
Primary Cement Job= Casing job, Liner job, or Tie-back job.	
<b>Number of Unplanned Shutdowns</b>	0
Unplanned shutdown is when injection stops for any period of time.	
<b>Customer Non-Productive Rig Time (hrs)</b>	0

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<b>Customer Representative:</b> TOM BOWEN		<b>API / UWI: (leave blank if unknown)</b> 05-103-11963-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 0080129266
<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> RIO BLANCO

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)	No
<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	80
<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	80
<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)	No
<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

# HALLIBURTON

## Water Analysis Report

Company: WPX ENERGY

Date: 1/24/2015

Submitted by: CHRIS KUKUS

Date Rec.: 1/24/2015

Attention: LARRY COOKSEY

S.O.# 902040448

Lease FEDERAL

Job Type: PRODUCTION

Well # RGU 433-26-198

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>0 Mg / L</b>
Calcium (Ca)	<i>500</i>	<b>120 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>UNDER 400 Mg / L</b>
Hardness		<b>50 Mg / L</b>
Temp	<i>40-80</i>	<b>65 Deg</b>
Total Dissolved Solids		<b>200 Mg / L</b>

Respectfully: CHRIS KUKUS

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 i