HALLIBURTON

Cementing

WPX Energy Rocky Mountain LLC- EBUS

RGU 534-24-198

Cyclone 29

Post Job Summary
Cement Production Casing

Date Prepared: 11/24/14
Job Date: 08/22/14

Submitted by: Evan Russell – Grand Junction Cement Engineer

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300721	**Ship To #:** 3276467	**Quote #:**	**Sales Order #:** 0901590766
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		**Customer Rep:** TOM BOWEN	
Well Name: FEDERAL	**Well #:** RGU 534-24-198		**API/UWI #:** 05-103-12077-00
Field: SULPHUR CREEK	**City (SAP):** MEEKER	**County/Parish:** RIO BLANCO	**State:** COLORADO
Legal Description: 24-1S-98W-2128FSL-1688FEL			
Contractor: CYCLONE		**Rig/Platform Name/Num:** CYCLONE 29	
Job BOM: 7523			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\H110657		**Srvc Supervisor:** Dustin Smith	

Job

Formation Name				
Formation Depth (MD)	**Top**		**Bottom**	
Form Type			**BHST**	
Job depth MD	12813ft		**Job Depth TVD**	12754
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	8.921	36		J-55	0	3947		0
Casing		4.5	4	11.6		P-110	0	12813		0
Open Hole Section			8.75				3947	10307	0	12754
Open Hole Section			7.875				10307	12813		

Tools and Accessories

Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	4.5	1		12813		**Top Plug**	4.5	1	Latchdown
Float Shoe	4.5	1							
Float Collar	4.5	1		12781					
						Plug Container	4.5	1	HES
						Centralizers	4.5		

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	100	bbl	8.33			8.0	

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	Extenda Cem	EXTENDACEM (TM) SYSTEM	655	sack	11	2.75		8	16.07
16.07 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	EconoCem GJ1	ECONOCEM (TM) SYSTEM	325	sack	12.7	1.91		8	10.07
10.07 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	Therma Cem GJ1	THERMACEM (TM) SYSTEM	810	sack	13.5	1.75		8	8.23

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
5	Displacement	FRESH WATER DISPLACEMENT	198.1		8.33			10	
8.32 Gal		FRESH WATER							

Cement Left In Pipe	Amount	31.89 ft	Reason	Shoe Joint

Comment

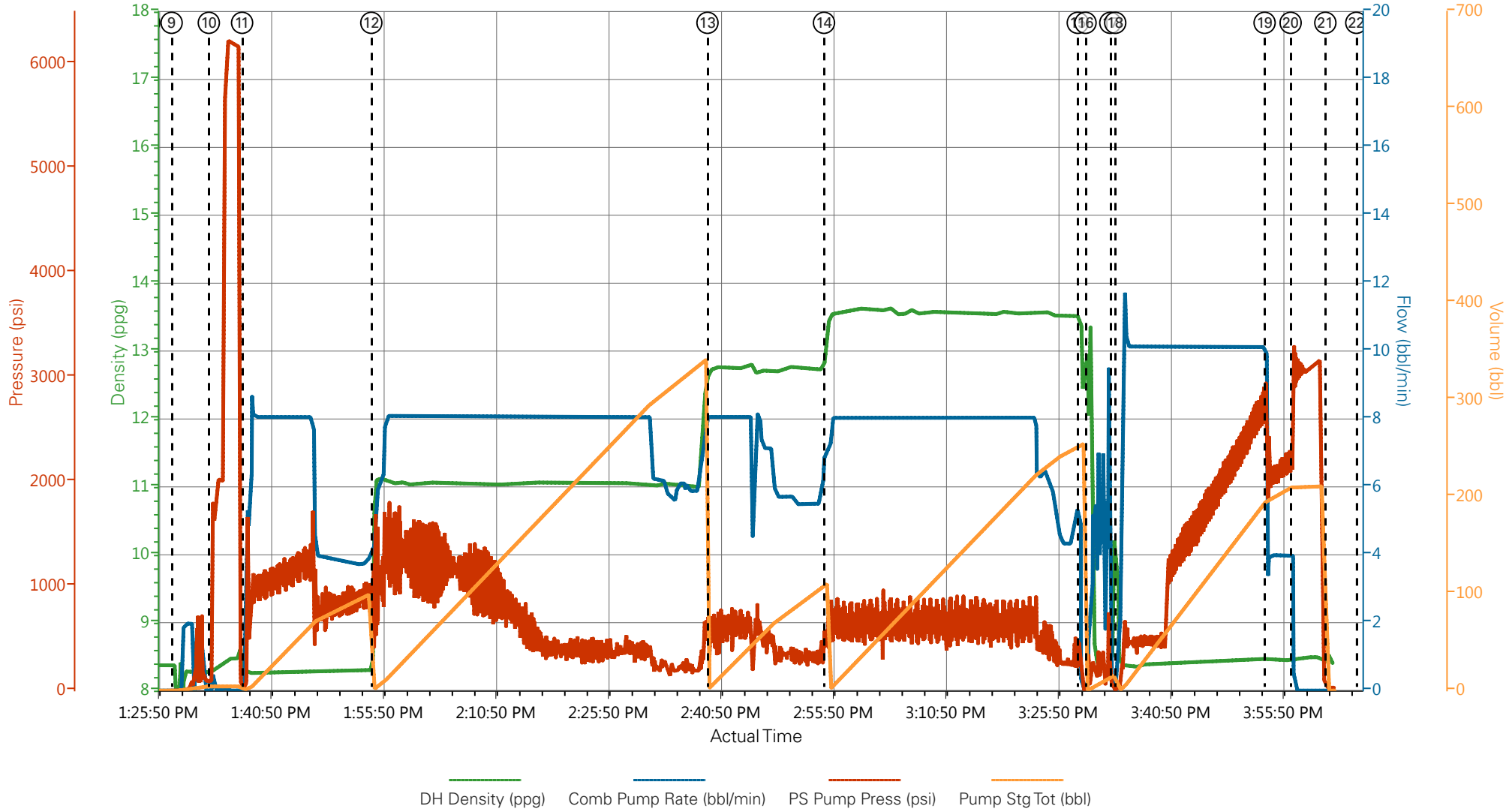
4.5 Job Event Log

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	Call Out	8/21/2014	18:00:00	USER					ELITE # 8
Event	2	Pre-Convoy Safety Meeting	8/21/2014	21:00:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	8/22/2014	00:00:00	USER					ARRIVED ON LOCATION 3 HOURS EARLY DIDNT START CHARGING TIME UNTIL REQUESTED ON LOCATION TIME RIG RUNNING CASING
Event	4	Assessment Of Location Safety Meeting	8/22/2014	04:30:00	USER					ALL HES EMPLOYEES
Event	5	Pre-Rig Up Safety Meeting	8/22/2014	04:45:00	USER					ALL HES EMPLOYEES
Event	6	Rig-Up Equipment	8/22/2014	05:10:00	USER					1 HT-400 PUMP TRUC (ELITE # 8) 1 660 BULK TRUCK 2 SILOS
Event	7	Pre-Job Safety Meeting	8/22/2014	13:15:00	USER					ALL HES EMPLOYEES AND RIG CREW
Event	8	Rig-Up Completed	8/22/2014	13:25:00	USER					RIG CIRCULATED FOR 4 1/2 HOURS @ 10 BPM GAS @ 816 @ 863 PSI
Event	9	Start Job	8/22/2014	13:28:00	USER					TD: 12812.89 TP: 12812.89 SJ: 31.89 CSG: 4 1/2 11.6# P-110 OH: 8 3/4 FROM 3947 TO 10307 7 7/8 TO TD MUD WT: 10.1 PPG TVD: 12754 TOG: 9322 SP@ 3947
Event	10	Test Lines	8/22/2014	13:32:57	USER	8.33	0.00	6200	2.0	PRESSURE TEST OK
Event	11	Pump Spacer 1	8/22/2014	13:37:23	USER	8.33	8.0	1100	100	PUMP 100 BBL FRESH WATER SPACER
Event	12	Pump Cement	8/22/2014	13:54:37	USER	11.0	8.0	1263	320.8	655 SKS 11.0 PPG 2,75 YIELD 16.07 GAL/SK SCAVENGER WEIGHT VERIFIED VIA MUD SCALES

Event	13	Pump Lead Cement	8/22/2014	14:39:27	USER	12.7	8.0	620	108.2	325 SKS 12.7 PPG 1.87 YIELD 10.07 GAL/SK LEAD CEMENT WEIGHT VERIFIED VIA MUD SCALES THROUGHOUT LEAD CEMENT
Event	14	Pump Tail Cement	8/22/2014	14:55:00	USER	13.5	8.0	660	252.5	810 SKS 13.5 PPG 1.75 YIELD 8.23 GAL/SK TAIL CEMENT WEIGHT VERIFIED VIA MUD SCALES THROUGHOUT TAIL CEMENT
Event	15	Shutdown	8/22/2014	15:28:51	USER					
Event	16	Clean Lines	8/22/2014	15:29:53	USER				15	CLEAN PUMPS AND LINES TO THE PIT
Event	17	Drop Top Plug	8/22/2014	15:33:11	USER					PLUG AWAY NO PROBLEMS COMPANY REP PROVIDED LATCH DOWN PLUG
Event	18	Pump Displacement	8/22/2014	15:33:50	USER	8.4	10	2800	198.1	1 GAL MMCR 3#S BE-6 1 BAG KCL/10 BBL FRESH WATER DISPLACEMENT
Event	19	Slow Rate	8/22/2014	15:53:46	USER	8.4	4.0	2200	188	SLOW RATE TO BUMP PLUG
Event	20	Bump Plug	8/22/2014	15:57:14	USER	8.4	4.0	3138	198.1	PSI BEFORE BUMPING PLUG @ 2200 BUMPED PLUG UP TO 3138 PSI
Event	21	Check Floats	8/22/2014	16:01:52	USER					FLOATS HELD 2 BBLS BACK TO DISPLACEMENT TANKS
Event	22	End Job	8/22/2014	16:06:00	USER					PIPE RECIPROCATED DURING JOB LOST RETURNS 30 BBLS INTO TAIL CEMENT AND GAINED RETURNS 100 BBLS INTO TAIL CEMENT LOST RETURNS AGAIN 200 BBLS INTO TAIL CEMENT AND NEVER GOT RETURNS BACK TOTAL TAIL LOSS 120 BBLS TOTAL LOSS 318 BBLS
Event	23	Pre-Rig Down Safety Meeting	8/22/2014	16:15:00	USER					ALL HES EMPLOYEES

Event	24	Rig-Down Equipment	8/22/2014	17:00:00	USER	
Event	25	Pre-Convoy Safety Meeting	8/22/2014	19:15:00	USER	ALL HES EMPLOYEES
Event	26	Crew Leave Location	8/22/2014	19:30:00	USER	THANK YOU FOR USING HALLIBURTON CEMENT DUSTIN SMITH AND CREW

WPX - FEDERAL RGU 534-24-198 - 4 1/2 PRODUCTION



① Call Out	⑦ Pre-Job Safety Meeting	⑬ Pump Lead Cement	⑲ Slow Rate	25 Pre-Convoy Safety Meeting
② Pre-Convoy Safety Meeting	⑧ Rig-Up Completed	⑭ Pump Tail Cement	20 Bump Plug	26 Crew Leave Location
③ Arrive At Loc	⑨ Start Job	⑮ Shutdown	21 Check Floats	
④ Assessment Of Location Safety Meeting	⑩ Test Lines	⑯ Clean Lines	22 End Job	
⑤ Pre-Rig Up Safety Meeting	⑪ Pump Fresh Water Spacer	⑰ Drop Top Plug	23 Pre-Rig Down Safety Meeting	
⑥ Rig-Up Equipment	⑫ Pump Scavenger	⑱ Pump Displacement	24 Rig-Down Equipment	

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Created: 2014-08-22 16:33:48, Version: 3.0.121 Edit

Customer : WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date : 8/22/2014 11:51:46 AM

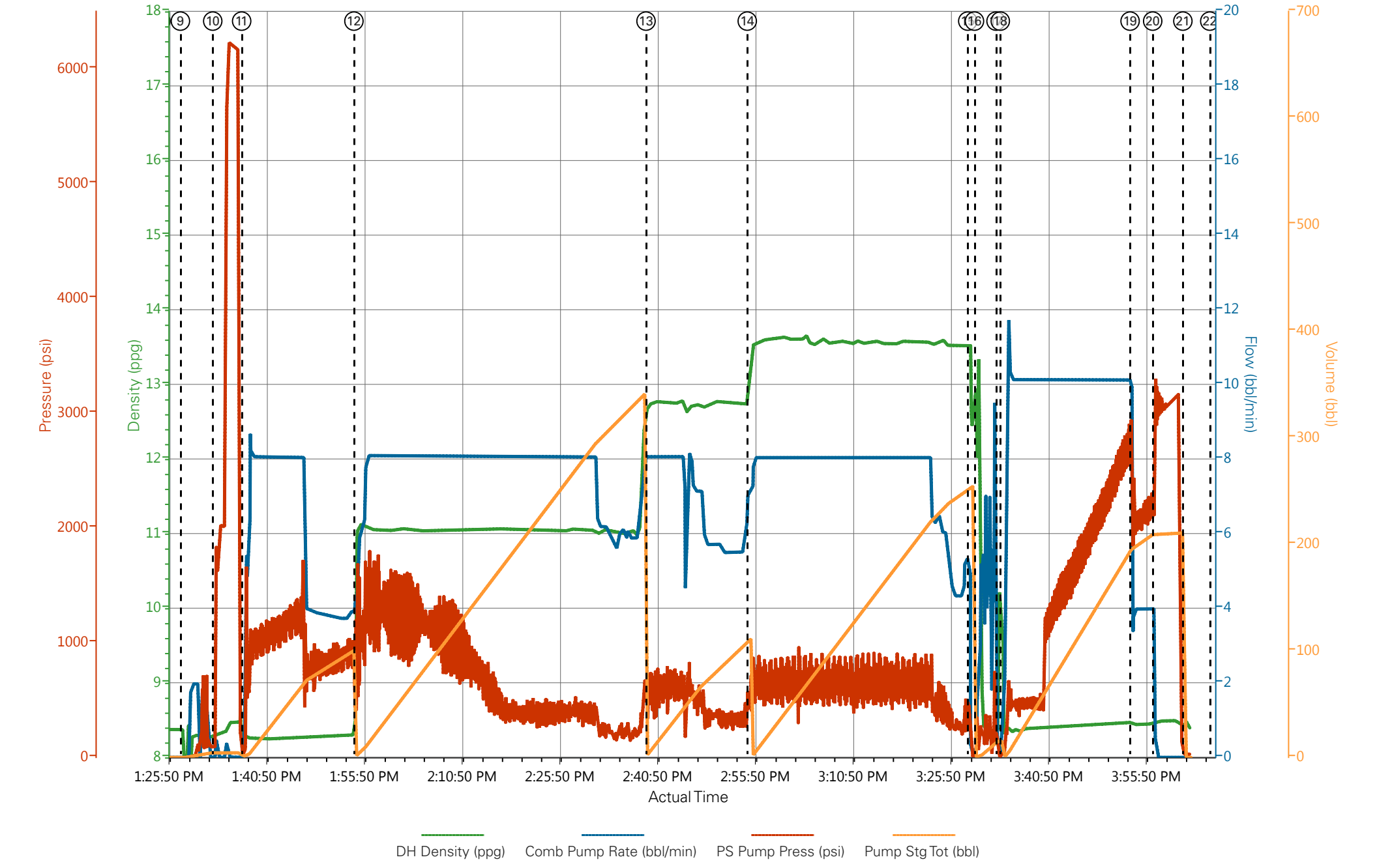
Well : FEDERAL RGU 534-24-298

Representative : TOM BOWEN

Sales Order # : 0901590766

ELITE # 8 : DUSTIN SMITH / ROB EICKHOFF

WPX - FEDERAL RGU 534-24-198 - 4 1/2 PRODUCTION



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HALLIBURTON

Water Analysis Report

Company:	WPX	**Date:**	8/23/2014
Submitted by:	DUSTIN SMITH	**Date Rec.:**	8/23/2014
Attention:		**S.O.#**	901590766
Lease	FEDERAL RGU	**Job Type:**	PRODUCTION
Well #	534-24-198		

Specific Gravity	*MAX*	1	
pH	*8*	8	
Potassium (K)	*5000*	200	Mg / L
Calcium (Ca)	*500*	120	Mg / L
Iron (FE2)	*300*	0	Mg / L
Chlorides (Cl)	*3000*	0	Mg / L
Sulfates (SO_4)	*1500*	UNDER 200	Mg / L
Chlorine (Cl_2)		0	Mg / L
Temp	*40-90*	70	Deg
Total Dissolved Solids		500	Mg / L

Respectfully: DUSTIN SMITH

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

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CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
0901590766	10	8/23/2014
Customer:		**Job Type (BOM):**
WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		CMT PRODUCTION CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
TOM BOWEN		05-103-12077-00
Well Name:		**Well Number:**
FEDERAL		0080359367
Well Type:	**Well Country:**	
DIRECTIONAL GAS	USA	
H2S Present:	**Well State:**	**Well County:**
No	COLORADO	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**	**8/23/2014**
Survey Interviewer	**The survey interviewer is the person who initiated the survey.**	**HX37079**
Customer Participation	**Did the customer partipcipate 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**	**GOOD CREW THX TOM. WOULD BE GOOD TO GET TANK COUNTING WASHERS ON TRUCK!**

CUSTOMER SIGNATURE

HALLIBURTON

CUSTOMER SURVEY

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Well Name:		**Well Number:**
FEDERAL		0080359367
Well Type:	**Well Country:**	
DIRECTIONAL GAS	USA	
H2S Present:	**Well State:**	**Well County:**
No	COLORADO	RIO BLANCO

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	8/23/2014

Cementing KPI Survey	
Type of Job Select the type of job. (Cementing or Non-Cementing)	0
Select the Maximum Deviation range for this Job What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
Total Operating Time (hours) Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	5
HSE Incident, Accident, Injury HSE Incident, Accident, Injury. This should be recordable incidents only.	No
Was the job purpose achieved? Was the job delivered correctly as per customer agreed design?	Yes
Pumping Hours Total number of hours pumping fluid on this job. Enter in decimal format.	3
Type of Rig Classification Job Was Performed Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
Number Of JSAs Performed Number Of Jsas Performed	6
Was this a Primary Cement Job (Yes / No) Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time.	0
Customer Non-Productive Rig Time (hrs)	0

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DIRECTIONAL GAS	USA	
H2S Present:	**Well State:**	**Well County:**
No	COLORADO	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.	
Did We Run Wiper Plugs? Did We Run Top And Bottom Casing Wiper Plugs?	Top
If a top plug was run, was the plug bumped? (Yes/No/N/A) If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
If applicable, did the floats hold? (Yes/No/N/A) If applicable, did the floats hold? (Yes/No/N/A)	Yes
Mixing Density of Job Stayed in Designed Density Range (0-100%) Density Range defined as +/- .20 ppg. Calculation: Total BBLs cment mixed at designed density divided by total BBLs of cement multiplied by 100	90
Pump Rate (percent) of Job Stayed At Designed Pump Rate 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	90
If applicable, were there returns throughout the job? (Yes/No/N/A) If applicable, were there returns throughout the job? (Yes/No/N/A)	NO
Nbr of Remedial Plug Jobs Rqd - HES Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
Nbr of Remedial Sqz Jobs Rqd - HES Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0