HALLIBURTON

Cementing

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

RGU 523-24-198

Cyclone 29

Post Job Summary
Cement Surface Casing

Date Prepared: 04/24/2014

Submitted by: Grand Junction Cement Engineering

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300721	**Ship To #:** 3276419	**Quote #:**	**Sales Order #:** 0901283008
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		**Customer Rep:** Andrew Brunk	
Well Name: FEDERAL	**Well #:** RGU 523-24-198		**API/UWI #:** 05-103-12079-00
Field: SULPHUR CREEK	**City (SAP):** MEE	**County/Parish:** RIO BLANCO	**State:** COLORADO
Legal Description: 24-1S-98W-2144FSL-1703FEL			
Contractor: CYCLONE		**Rig/Platform Name/Num:** CYCLONE 29	
Job BOM: 392189			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HAL7171		**Srvc Supervisor:** Edward Deussen	

Job

Formation Name					
Formation Depth (MD)	**Top**		**Bottom**		
Form Type			**BHST**		
Job depth MD	3988ft		**Job Depth TVD**		
Water Depth			**Wk Ht Above Floor**		
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
Open Hole Section			14.75				0	1750		0
Casing		9.625	8.921	36			0	3984	0	0
Open Hole Section			13.5				1750	3988	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe				3984		Top Plug			HES
Float Shoe						Bottom Plug			HES
Float Collar						SSR plug set			HES
Insert Float						Plug Container	9.625	1	HES
Stage Tool						Centralizers			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 Spacer	Fresh Water Spacer	40	bbl	8.34			4.0	

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	VersaCem (TM) System	VERSACEM (TM) SYSTEM	595	sack	12.8	1.77		8.0	9.32
9.33 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	VersaCem (TM) System	VARICEM (TM) CEMENT	230	sack	12.8	1.96		6.0	10.95
94 lbm		TYPE I / II CEMENT, BULK (101439798)							
10.90 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	Displacement	Displacement	306.4	bbl	8.34			10.0	

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
5	Fresh Water Spacer	Fresh Water Spacer	20	bbl	8.34			4.0	

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
6	VersaCem (TM) System	VERSACEM (TM) SYSTEM	1060	sack	12.8	1.96		8.0	10.95
10.90 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
7	Displacement	Fresh Water Spacer	141	bbl	8.34			10.0	

Cement Left In Pipe	Amount	25.01 ft	Reason	Shoe Joint
Comment				

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Summary Report

Crew: _____

Job Start Date: 4/19/2014

Sales Order #: 0901283008
WO #: 0901283008
PO/AFE #: N/A

Customer:	WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	**Field:**	SULPHUR CREEK	**Job Type:**	CMT MULTIPLE STAGES BOM
UWI / API Number:	05-103-12079-00	**County/Parish:**	RIO BLANCO	**Service Supervisor:**	Edward Deussen
Well Name:	FEDERAL	**State:**	COLORADO		
Well No:	RGU 523-24-198	**Latitude:**	39.947479		
		Longitude:	-108.339358	**Cust Rep Name:**	Andrew Brunk
		Sect / Twn / Rng:	24/1/98	**Cust Rep Phone #:**	

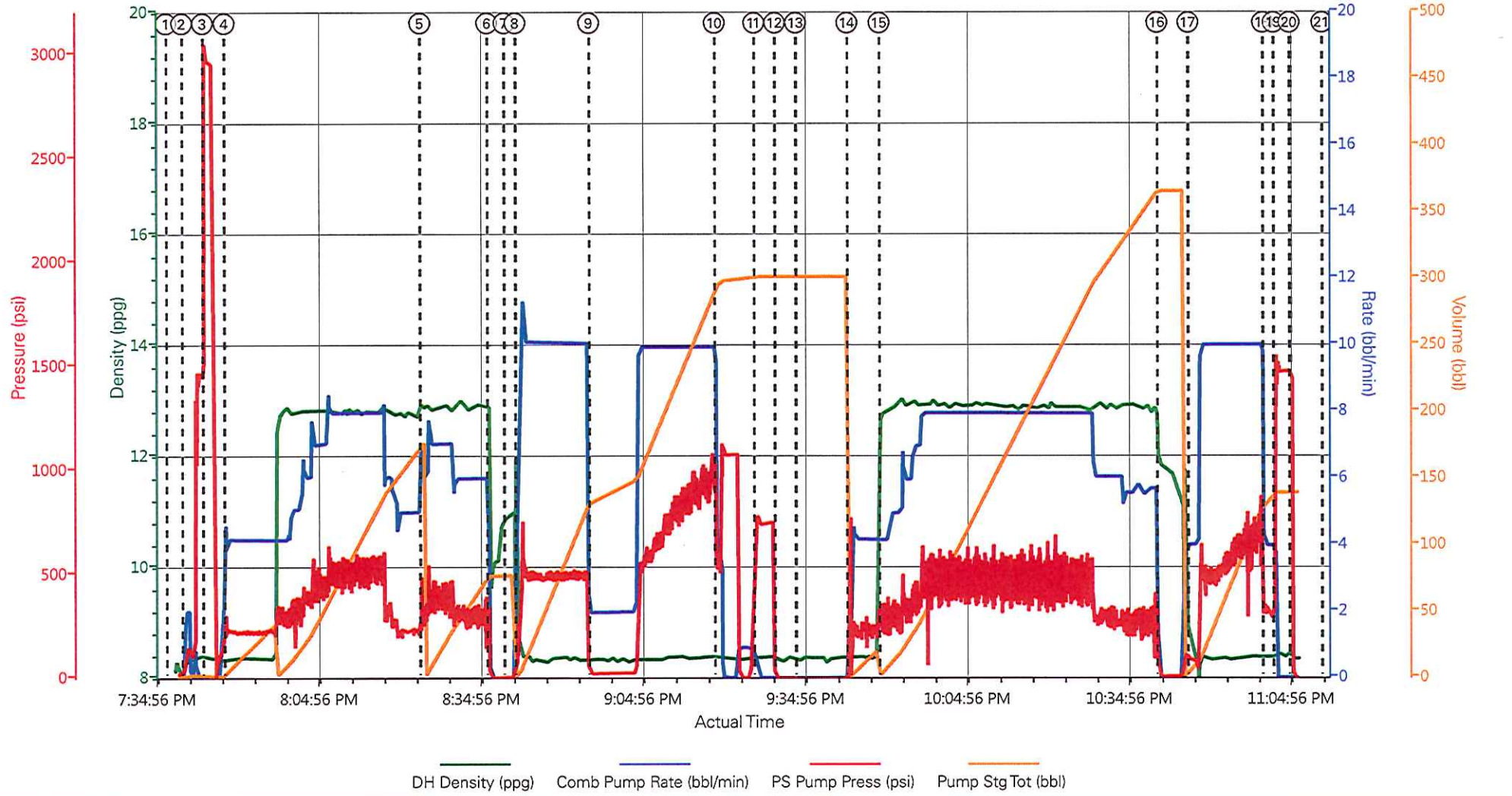
Remarks:

The Information Stated Herein Is Correct	Customer Representative Signature Customer Representative Printed Name	Date 4/19/2014

4.1 Job Event Log

Type	Seq. No.	Graph Label/Activity	Date	Time	Source	Pass-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pump Stage Total (bbl)	Comment
Event	1	Start Job	4/19/2014	19:37:16	USER					O/L time 1400 - TP 3988.83, SJ 25.01, MUD 9.5 ppg, 14 3/4" OH to 1750', 13 ½" OH to TD
Event	2	Test Lines	4/19/2014	19:40:11	USER	2971				Pressure Held Well
Event	3	Pump H20 Spacer	4/19/2014	19:44:01	USER	222	8.4	4.0	40	Fresh Water
Event	4	Pump Lead Cement	4/19/2014	19:48:02	USER	525	12.8	8.0	187.6	595 sks, 12.8 ppg, 1.77 yield, 9.32 gal/sk – Add 60 lbs tuff fiber to first 100 bbl
Event	5	Pump Tail Cement	4/19/2014	20:24:15	USER	305	12.8	6.0	80.3	230 sks, 12.8 ppg, 1.96 yield, 10.95 gal/sk
Event	6	Shutdown	4/19/2014	20:36:40	USER					
Event	7	Drop Plug	4/19/2014	20:39:50	USER					Rig supplied plug
Event	8	Pump Displacement	4/19/2014	20:41:52	USER	983	8.42	10.0	306.4	Fresh Water
Event	9	Slow Rate thru Tool	4/19/2014	20:55:31	USER			2.0	130-150	
Event	10	Slow Rate	4/19/2014	21:18:44	USER	534	8.39	4.0	290	
Event	11	Bump Plug	4/19/2014	21:26:01	USER	550				
Event	12	Check Floats	4/19/2014	21:29:53	USER	1070				Floats Held – 1 ½ bbl back
Event	13	Drop Opening Device	4/19/2014	21:33:44	USER					Free fall 10 minutes
Event	14	Open MSC	4/19/2014	21:43:15	USER	1240	8.41	0.8	20	
Event	15	Pump Tail Cement	4/19/2014	21:49:12	USER	470	12.8	8.0	370.0	1060 sks, 12.8 ppg, 1.96 yield, 10.95 gal/sk
Event	16	Shutdown	4/19/2014	22:40:40	USER					Wash up on top of plug
Event	17	Pump Displacement	4/19/2014	22:46:26	USER	708	8.40	10.0	141.0	Fresh Water-lost returns
Event	18	Slow Rate	4/19/2014	23:00:16	USER	292	8.38	4.0	130	
Event	19	Bump Plug	4/19/2014	23:02:15	USER	302				No Cement to surface
Event	20	Close MSC	4/19/2014	23:05:11	USER	1474				Floats held – 2 Add hours
Event	21	End Job	4/19/2014	23:11:15	USER					Thank you for using Halliburton

WPX - RGU 523-24-198 - 2 STAGE SURFACE



① Start Job n/a;n/a;n/a;n/a	⑦ Drop Plug 10.91;0;0.5;77.09	⑬ Drop Opening Device 8.27;0;-5.13;301.35	⑲ Bump Plug 8.42;0;1505.21;139.17
② Test Lines 8.29;1.7;71.75;0.29	⑧ Pump Displacement 8.58;5.67;184.25;2.7	⑭ Open MSC 8.42;1.06;770.2;0.67	20 Close MSC 8.37;0;1081.45;139.17
③ Pump H20 Spacer 8.41;0;2963.98;1.95	⑨ Slow Rate thru Tool 8.34;2.01;19.25;132.33	⑮ Pump Tail Cement 12.76;4.15;236.75;3.77	21 End Job n/a;n/a;n/a;n/a
④ Pump Lead Cement 8.28;4.16;209.56;3.86	⑩ Slow Rate 8.35;3.96;569.57;295.46	⑯ Shutdown 11.86;0;6.12;365.7	
⑤ Pump Tail Cement 12.87;6.05;298.63;175.99	⑪ Bump Plug 8.41;0;715.82;301.35	⑰ Pump Displacement 8.58;4;85.81;5.56	
⑥ Shutdown 9.6;0;-1.38;77.09	⑫ Check Floats 8.36;0;-4.19;301.35	⑱ Slow Rate 8.36;3.99;321.13;132.18	

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Created: 2014-04-19 23:27:12, Version: 3.0.121 Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 4/19/2014 7:38:16 PM

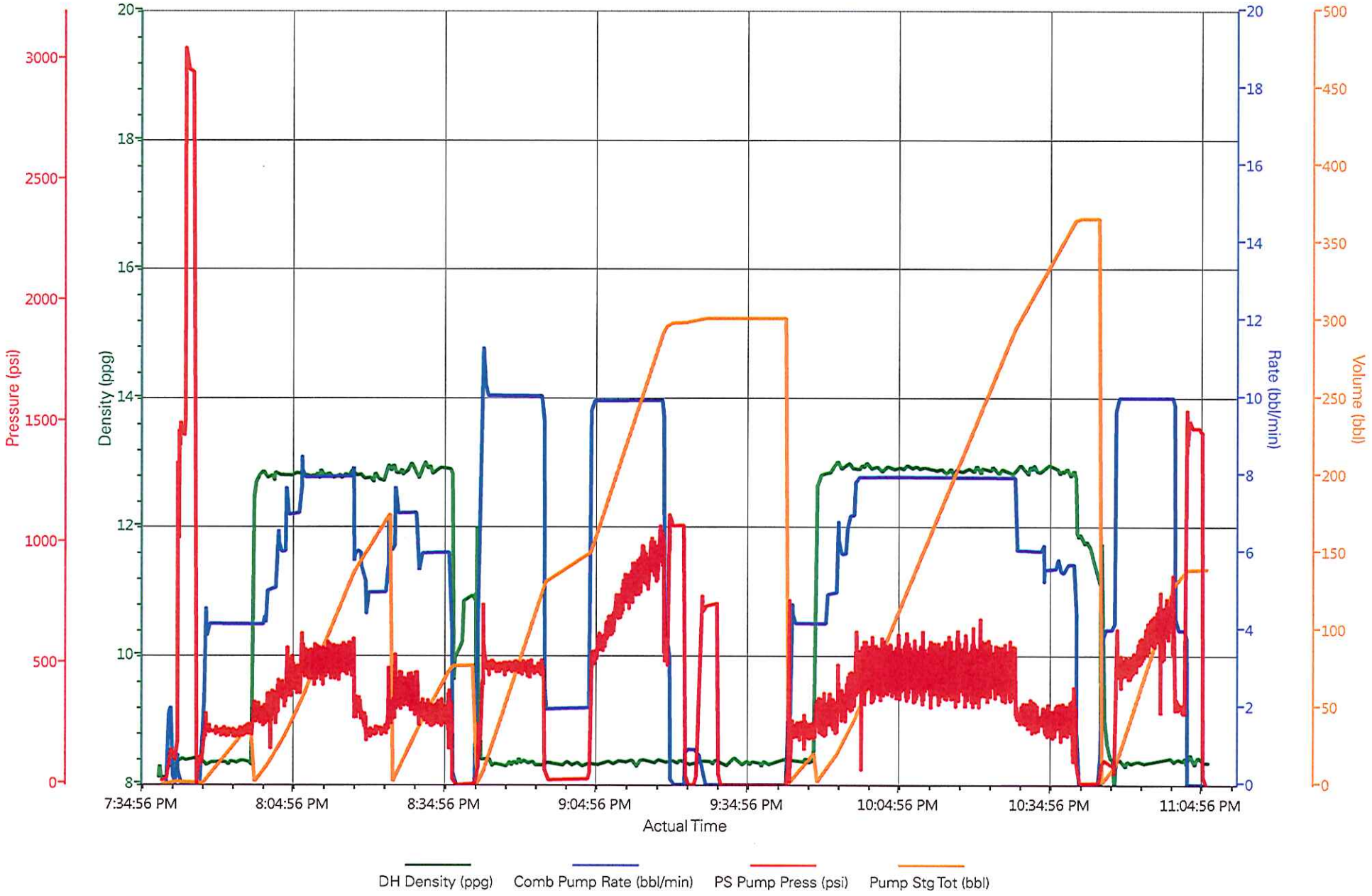
Well: FED RGU 523-24-198

Representative: Andrew Brunk

Sales Order #: 901283008

Elite #3: Ed Deussen / Rob Eickhoff

WPX - RGU 523-24-198 - 2 STAGE SURFACE



HALLIBURTON | iCem® Service

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Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 4/19/2014 7:38:16 PM

Well: FED RGU 523-24-198

Representative: Andrew Brunk

Sales Order #: 901283008

Elite #3: Ed Deussen / Rob Eickhoff

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Water Analysis Report

Company:	WPX	**Date:**	4/19/2014
Submitted by:	ED DEUSSEN	**Date Rec.:**	4/19/2014
Attention:	J.TROUT	**S.O.#**	901283008
Lease	FED RGU	**Job Type:**	SURFACE
Well #	523-24-198		

Specific Gravity	*MAX*	1
pH	*8*	7.5
Potassium (K)	*5000*	200 Mg / L
Calcium (Ca)	*500*	250 Mg / L
Iron (FE2)	*300*	0 Mg / L
Chlorides (Cl)	*3000*	0 Mg / L

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CUSTOMER SURVEY

Sales Order #:	Line Item:	Survey Conducted Date:
0901283008	10	4/20/2014
Customer:		**Job Type (BOM):**
WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		CMT MULTIPLE STAGES BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
TED RAGSDALE		05-103-12079-00
Well Name:		**Well Number:**
FEDERAL		0080359324
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	4/20/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB57194
Customer Participation	Did the customer partipcipate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	TED RAGSDALE
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	WELL DONE/THANKS

CUSTOMER SIGNATURE

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CUSTOMER SURVEY

Sales Order #:	Line Item:	Survey Conducted Date:
0901283008	10	4/20/2014
Customer:		**Job Type (BOM):**
WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		CMT MULTIPLE STAGES BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
TED RAGSDALE		05-103-12079-00
Well Name:		**Well Number:**
FEDERAL		0080359324
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	4/20/2014

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.	6
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
Operating Hours (Pumping Hours) Total number of hours pumping fluid on this job. Enter in decimal format.	3
Customer Non-Productive Rig Time (hrs) 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.	0
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	5
Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time.	0
Was this a Primary Cement Job (Yes / No)	Yes

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CUSTOMER SURVEY

Sales Order #:	Line Item:	Survey Conducted Date:
0901283008	10	4/20/2014
Customer:		**Job Type (BOM):**
WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		CMT MULTIPLE STAGES BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
TED RAGSDALE		05-103-12079-00
Well Name:		**Well Number:**
FEDERAL		0080359324
Well Type:	**Well Country:**	
DIRECTIONAL GAS	USA	
H2S Present:	**Well State:**	**Well County:**
No	COLORADO	RIO BLANCO

Primary Cement Job= Casing job, Liner job, or Tie-back job.	
Did We Run Wiper Plugs? Did We Run Top And Bottom Casing Wiper Plugs?	Top
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	98
Was Automated Density Control Used? Was Automated Density Control (ADC) Used ?	Yes
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	99
Nbr of Remedial Sqz Jobs Rqd - Competition Number Of Remedial Squeeze Jobs Required After Primary Job Performed By Competition	0
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