

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

RWF 511-25

Cyclone/17

Post Job Summary

Cement Surface Casing

Date Prepared: 04/15/2014

Submitted by: Grand Junction Cement Engineering

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3123553	Quote #:	Sales Order #: 0901139640
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Mike Brunk	
Well Name: SAVAGE		Well #: RWF 511-25	API/UWI #: 05-045-21969-00
Field: RULISON	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: SE NW-25-6S-94W-2454FNL-1422FWL			
Contractor:		Rig/Platform Name/Num: Cyclone 17	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srvc Supervisor: Carlton Kukus	
Job			

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	1210ft		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
Casing	0	9.625	9.001	32.3	8 RD	H-40	0	1191	0	1191
Open Hole Section			13.5				0	1210		1210

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	9.625	1		1191		Top Plug	9.625	1	HES
Float Shoe	9.625	1				Bottom Plug	9.625	1	HES
Float Collar	9.625	1				SSR plug set	9.625	1	HES
Insert Float	9.625	1				Plug Container	9.625	1	HES
Stage Tool	9.625	1				Centralizers	9.625	1	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	20	bbl	8.33			8		
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	Lead Cement	VARICEM (TM) CEMENT	160	Sack/Ton	12.3	2.38		8	13.75	

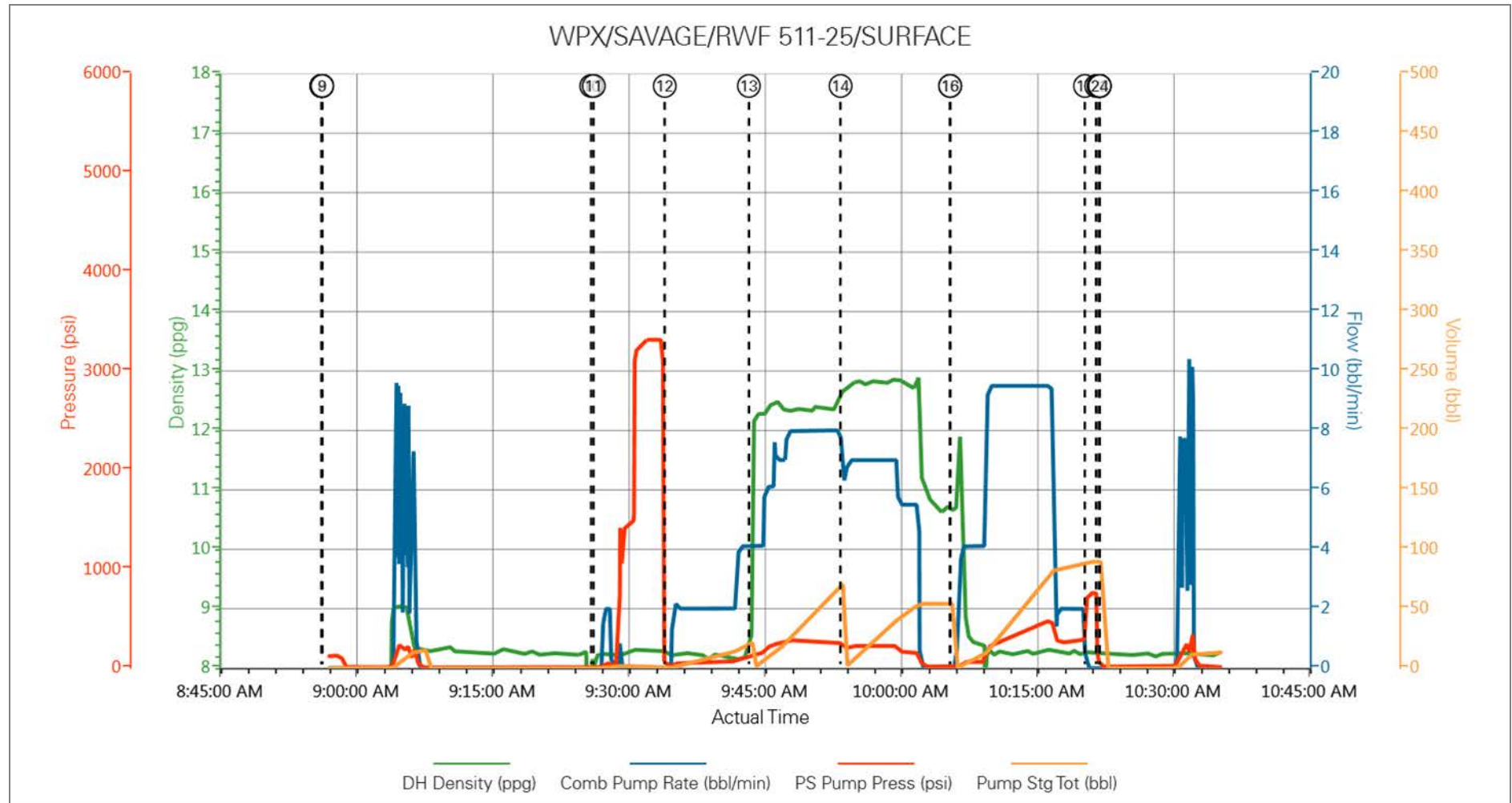
13.75 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	VersaCem Tail	VERSACEM (TM) SYSTEM	160	Sack/Ton	12.8	2.11		8	11.77
11.76 Gal		FRESH WATER							
94 lbm		TYPE I / II CEMENT, BULK (101439798)							
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	0	bbl	8.3				
Cement Left In Pipe		Amount	46 ft		Reason		Shoe Joint		
Comment									

4.1 Job Event Log

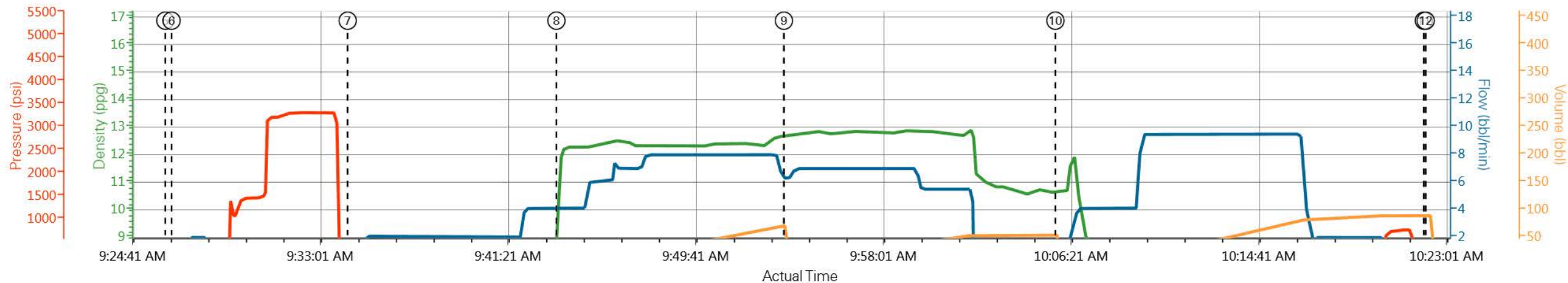
Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comment
Event	1	Call Out 22:00	2/22/2014	08:56:29	USER					CREW CALLED OUT
Event	2	Crew Called Out 22:01	2/22/2014	08:56:30	USER					CREW ARRIVED AT YARD AT 22:30
Event	3	Pre-Convoy Safety Meeting 00:45	2/23/2014	08:56:31	USER	0.62	0.00	100.00	0.0	ALL HES EMPLOYEES
Event	4	Crew Leaves Yard 01:00	2/23/2014	08:56:32	USER	0.62	0.00	100.00	0.0	ALL HES EMPLOYEES
Event	5	Crew Arrives At Location 02:30	2/23/2014	08:56:33	USER	0.61	0.00	102.00	0.0	CREW ARRIVED 1HOUR 30MINS EARLY RIG WAS RUNNING CASING
Event	6	Assesment Of Location 02:45	2/23/2014	08:56:34	USER	0.59	0.00	105.00	0.0	HES WAITED TO SPOT EQUIPMENT
Event	7	Pre Rig Up Safety Meeting 06:00	2/23/2014	08:56:35	USER	0.58	0.00	107.00	0.0	HES SPOTTED EQUIPMENT AND BEGAN RIG UP
Event	8	Rig Up Equipment 06:30	2/23/2014	08:56:36	USER	0.58	0.00	109.00	0.0	HES RIGGED UP EQUIPMENT
Event	9	Pre Job Safety Meeting 09:00	2/23/2014	08:56:37	USER	0.58	0.00	110.00	0.0	HES HAD PUMP GO DOWN AND RIG HAD TO WAIT 2 HOURS FOR REPLACEMENT PUMP
Event	10	Start Job 09:25	2/23/2014	09:26:15	COM8	8.20	0.00	4.00	0.0	TD:1210ft, TP: 119ft, SJ: 46ft, OH: 13 1/2", CSG: 9 5/8 32.3# H-40
Event	11	Test Lines 09:32	2/23/2014	09:26:31	COM8	8.22	0.00	4.00	0.0	HES TESTED LINES TO 3000 PSI
Event	12	Fresh Water Spacer 09:34	2/23/2014	09:34:20	COM8	8.24	0.00	15.00	0.0	20 BBLS FRESH WATER SPACER
Event	13	Pump Lead Cement 09:43	2/23/2014	09:43:36	COM8	10.71	4.10	127.00	0.0	160 SKS 12.3PPG 2.38YIELD 13.75GAL/SK @260 PSI
Event	14	Pump Tail Cement 09:53	2/23/2014	09:53:42	COM8					160 SKS 12.8PPG 2.11YIELD 11.77GAL/SK @220 PSI
Event	15	Drop Top Plug 10:05	2/23/2014	10:05:46	USER	10.69	0.00	11.00	0.0	TOP PLUG AWAY NO PROBLEMS
Event	16	Pump Displacement 10:06	2/23/2014	10:05:47	COM8	10.69	0.00	11.00	0.0	HES WASHED UP ON TOP OF PLUG
Event	17	Bump Plug 10:20	2/23/2014	10:20:38	USER	8.30	0.00	748.00	89.5	PLUG BUMPED @285 PSI TOOK TO 760PSI
Event	18	Realese Pressure/Check Floats 10:21	2/23/2014	10:21:52	USER	8.25	0.00	33.00	89.5	HES RELEASED PSI TO CHECK FLOATS .5 BBL BACK TO TANKS
Event	19	End Job 10:22	2/23/2014	10:22:07	COM8	8.24	0.00	16.00	89.5	THANK YOU FOR CHOOSING HALLIBURTON CEMENT CARL KUKUS AND CREW
Event	20	Post Job Safety Meeting	2/23/2014	10:22:12	COM8	8.23	0.00	14.00	89.5	ALL HES EMPLOYEES

10:25										
Event	21	Rig Down Equipment 10:30	2/23/2014	10:22:13	USER	8.21	0.00	13.00	89.5	ALL HES EMPLOYEES
Event	22	Pre Convoy Safety Meeting 11:30	2/23/2014	10:22:14	USER	8.20	0.00	13.00	89.5	ALL HES EMPLOYEES
Event	23	Crew Leaves Location 11:45	2/23/2014	10:22:15	USER	8.21	0.00	13.00	89.5	ALL HES EMPLOYEES
Event	24	Crew Arrives At Yard 14:00	2/23/2014	10:22:16	USER	8.20	0.00	13.00	89.5	ALL HES EMPLOYEES

5.2 Custom Graph



WPX/SAVAGE/RWF 511-25/SURFACE



- | | | | |
|--------------------------|-------------------------|--|-------------------------------------|
| ① Start Job 0.63;0;126;0 | ④ End Job 8.28;0;5;0 | ⑦ Pump Spacer 1 8.24;0;15;0 | ⑩ Pump Displacement 10.71;0;11;54.1 |
| ② Start Job 0.59;0;2;0 | ⑤ Start Job 8.2;0;5;0 | ⑧ Pump Lead Cement 10.71;4.1;127;0 | ⑪ End Job 8.24;0;16.41;89.5 |
| ③ Prime Pumps 0.59;0;1;0 | ⑥ Test Lines 8.22;0;4;0 | ⑨ Pump Tail Cement 12.67;6.3;193;40.88 | ⑫ Start Job 8.23;0;14;89.5 |

▼ **HALLIBURTON** | iCem® Service

Created: 2014-02-23 08:53:17, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 2/23/2014 8:56:32 AM

Well: **RWF 511-25**

Representative: Carl Kukus/Rob Eickhoff E-3

Sales Order #: 901139640

Sales Order #: 0901139640	Line Item: 10	Survey Conducted Date: 2/23/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative:		API / UWI: (leave blank if unknown) 05-045-21969-00
Well Name: SAVAGE		Well Number: 0080125627
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: 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	2/23/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB44726
Customer Participation	Did the customer participate in this survey? (Y/N)	No
Customer Representative	Enter the Customer representative name	
HSE	Was our HSE performance satisfactory? Circle Y or N	
Equipment	Were you satisfied with our Equipment? Circle Y or N	
Personnel	Were you satisfied with our people? Circle Y or N	
Customer Comment	Customer's Comment	

CUSTOMER SIGNATURE

Sales Order #: 0901139640	Line Item: 10	Survey Conducted Date: 2/23/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative:		API / UWI: (leave blank if unknown) 05-045-21969-00
Well Name: SAVAGE		Well Number: 0080125627
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

KEY PERFORMANCE INDICATORS

General

Survey Conducted Date	2/23/2014
The date the survey was conducted	

Cementing KPI Survey

Type of Job	0
Select the type of job. (Cementing or Non-Cementing)	
Select the Maximum Deviation range for this Job	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
Total Operating Time (hours)	4
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
HSE Incident, Accident, Injury	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
Was the job purpose achieved?	No
Was the job delivered correctly as per customer agreed design?	
Operating Hours (Pumping Hours)	1
Total number of hours pumping fluid on this job. Enter in decimal format.	
Customer Non-Productive Rig Time (hrs)	2
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.	
Reason For Non-Productive Rig Time	PUMP TRUCK WENT DOWN AND CUSTOMER HAD TO WAIT FOR A RELIEF PUMP TRUCK
Reason For Non-productive Rig Time (Cementing PSL Responsibility)	
Type of Rig Classification Job Was Performed	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
Number Of JSAs Performed	6
Number Of Jsas Performed	

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Customer Representative:		API / UWI: (leave blank if unknown) 05-045-21969-00
Well Name: SAVAGE		Well Number: 0080125627
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time.	0
Was this a Primary Cement Job (Yes / No) Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
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 cement mixed at designed density divided by total BBLs of cement multiplied by 100	90
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	6
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