

WPX Energy Rocky Mountain LLC - EBUS

RWF 341-23

**Nabors 577**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 2/25/2015

Job Date: 2/07/2015

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

## The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3122902	Quote #:	Sales Order #: 0902114387
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Scott Geary	
Well Name: MEAD -RWF-		Well #: 341-23	API/UWI #: 05-045-20046-00
Field: RULISON	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: NE SE-23-6S-94W-2303FSL-219FEL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS 577	
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	1190ft 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	3	9.625	9.001	32.3	8 RD		0	1177	0	1177
Open Hole Section			13.5				0	1190	0	1190

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	9.625	1		1177		Top Plug	9.625	1	HES
Float Shoe	9.625					Bottom Plug	9.625		HES
Float Collar	9.625	1		1133		SSR plug set	9.625		HES
Insert Float	9.625					Plug Container	9.625	1	HES
Stage Tool	9.625					Centralizers	9.625		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	20	bbl	8.34			4	

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	VariCem GJ1	VARICEM (TM) CEMENT	160	sack	12.3	2.38	13.77	8	

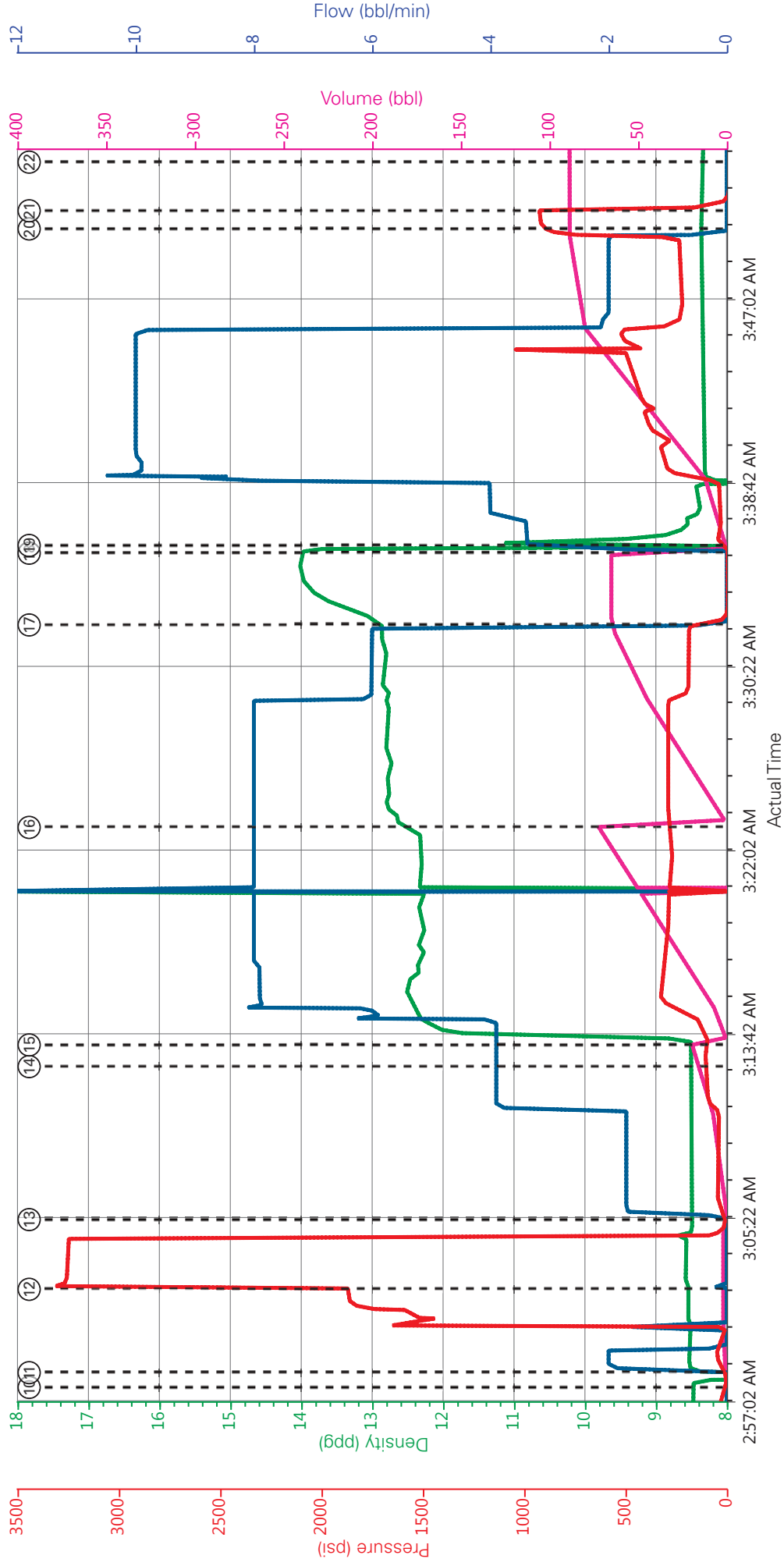
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	VariCem GJ1	VARICEM (TM) CEMENT	165	sack	12.8	2.11	11.77	8	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Fresh Water Displacement	Fresh Water Displacement	89.2	bbl	8.34			10	
Cement Left In Pipe		Amount	44 ft		Reason		Shoe Joint		
Comment 30 BBLs OF CEMENT TO SURFACE, RIG USED 40 POUNDS OF SUGAR									

## 1.1 Job Event Log

Type	Seq. Activity No.	Date	Time	Source	DH Density (ppg)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comb Pump Rate (bbl/min)	Comments
Event	1	Call Out	2/6/2015	22:00:00	USER				ALL HES
Event	2	Pre-Convoy Safety Meeting	2/6/2015	23:30:00	USER				ALL HES
Event	3	Crew Leave Yard	2/7/2015	00:01:00	USER				1-F-550 PICKUP, 1-ELITE PUMP TRUCK, 1-660 BULK TRUCK
Event	4	Arrive At Loc	2/7/2015	01:30:00	USER				HES ARRIVED 30 MINS EARLY
Event	5	Assessment Of Location Safety Meeting	2/7/2015	01:45:00	USER				RIG WAS RUNNING CASING, HES SPOTTED EQUIPMENT AND HELD SAFETY MEETING
Event	6	Pre-Rig Up Safety Meeting	2/7/2015	01:50:00	USER				ALL HES
Event	7	Rig-Up Equipment	2/7/2015	02:00:00	USER				RIG UP IRON TO THE STAND PIPE, WATER HOSES TO UPRIGHT, BULK HOSE TO BULK TRUCK
Event	8	Rig-Up Completed	2/7/2015	02:30:00	USER				COMPLETED
Event	9	Pre-Job Safety Meeting	2/7/2015	02:45:00	USER				ALL HES AND RIG CREW TO DISCUSS JOB PROCEDURES
Event	10	Start Job	2/7/2015	02:57:50	COM5				TD: 1190FT TP: 1177FT SJ: 44FT OH: 44FT CSG: 9.625 32.3# H-40 MUD WT: 10.7 VISC: 85

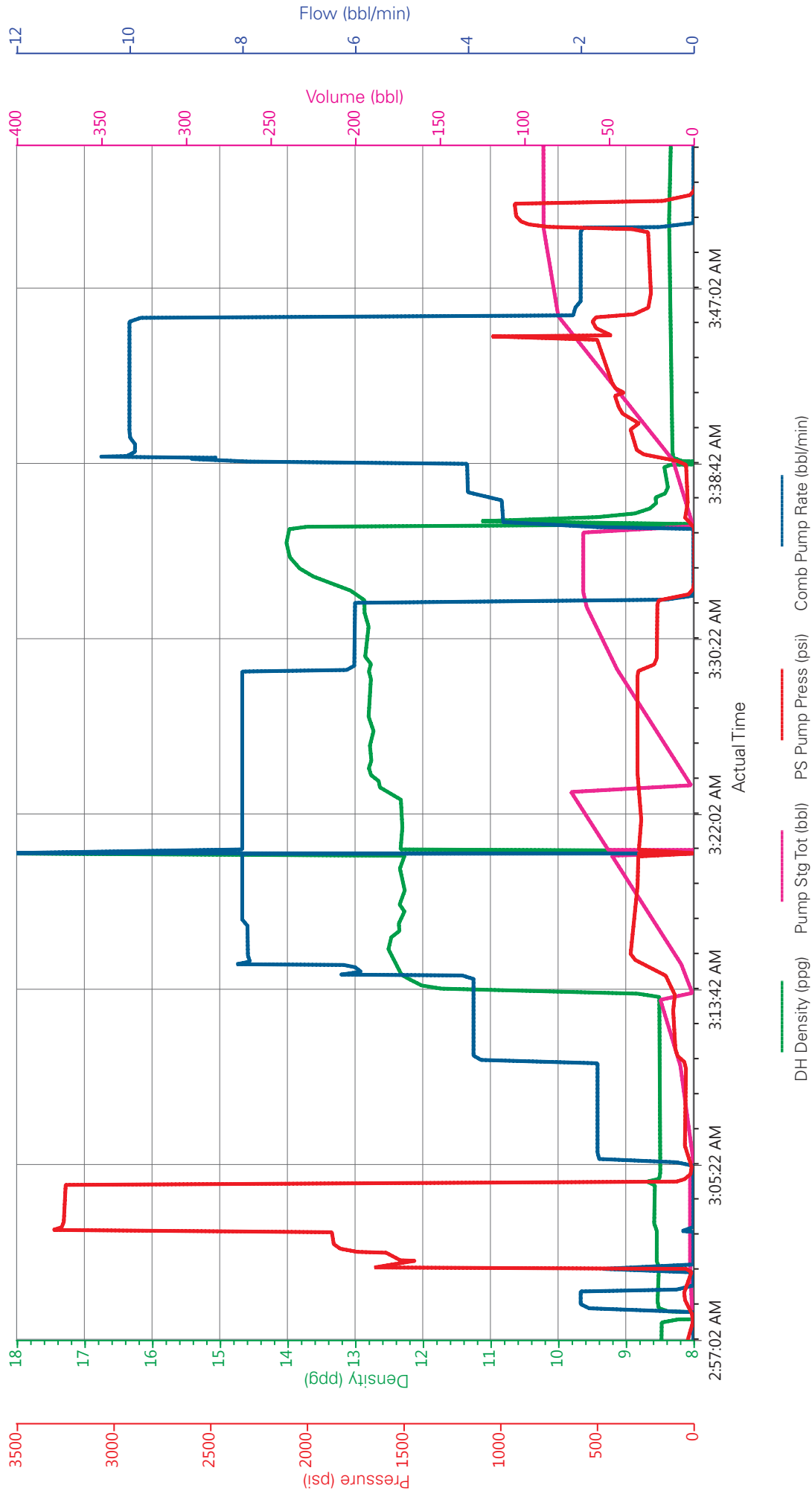
Event	11	Prime Pumps	2/7/2015	02:58:31	USER	8.34	48	2	2	FILL LINES TO PRESSURE TEST
Event	12	Test Lines	2/7/2015	03:02:17	COM5	8.34	3298	2		PRESSURE TEST LINES TO 3000 PSI, PRESSURE TEST OK
Event	13	Pump Spacer 1	2/7/2015	03:05:27	COM5	8.34	105	20	4	20 BBL FRESH WATER SPACER
Event	14	Check Weight	2/7/2015	03:12:23	COM5					VERIFIED WEIGHT OF CEMENT PRIOR TO PUMPING IT DOWNHOLE
Event	15	Pump Lead Cement	2/7/2015	03:13:22	COM5	12.3	315	67.8	8	160 SKS OF VARICEM CEMENT 12.3PPG 2.38YIELD 13.77GAL/SK WEIGHT OF CEMENT VERIFIED VIA MUD SCALES THROUGHOUT LEAD CEMENT
Event	16	Pump Tail Cement	2/7/2015	03:23:14	COM5	12.8	294	62	8	165 SKS OF VARICEM CEMENT 12.8PPG 2.11YIELD 11.77GAL/SK WEIGHT OF CEMENT VERIFIED VIA MUD SCALES THROUGHOUT TAIL CEMENT
Event	17	Shutdown	2/7/2015	03:32:25	COM5	12.8		62		SHUTDOWN END OF CEMENT
Event	18	Drop Plug	2/7/2015	03:35:41	COM5					PLUG AWAY NO PROBLEMS
Event	19	Pump Displacement	2/7/2015	03:36:02	COM5	8.34	530	89.2	10	FRESH WATER DISPLACEMENT, HES WASHED UP ON TOP OF PLUG
Event	20	Bump Plug	2/7/2015	03:50:23	COM5	8.34	220	89.2		BUMPED PLUG AT 234 PSI TOOK TO 926 PSI, 30 BBLs OF CEMENT TO SURFACE, RIG USED 40

		POUNDS OF SUGAR				
Event	21 Other	2/7/2015	03:51:13	COM5	8.34	916 89.2
Event	22 End Job	2/7/2015	03:53:25	COM5	THANK YOU FOR CHOOSING HALLIBURTON CEMENT CARL KUKUS AND CREW	
Event	23 Pre-Rig Down Safety Meeting	2/7/2015	04:00:00	USER	ALL HES	
Event	24 Rig-Down Equipment	2/7/2015	04:10:00	USER	WASH UP BLOW DOWN PUMP TRUCK, RIG DOWN ALL LINES AND EQUIPMENT	
Event	25 Rig-Down Completed	2/7/2015	04:30:00	USER	COMPLETED	
Event	26 Pre-Convoy Safety Meeting	2/7/2015	04:45:00	USER	ALL HES	
Event	27 Crew Leave Location	2/7/2015	05:00:00	USER	1-F-550 PICKUP, 1-ELITE PUMP TRUCK, 1-660 BULK TRUCK	



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

- 11 Fill Lines 8.51;0.1;26;1.6
- 12 Test Lines 8.55;2;3298;0
- 13 Fresh Water Spacer 8.49;0;10;0
- 14 Check weight 8.5;16.4;103;3.9
- 15 Pump Lead Cement 8.5;0.1;90;3.9
- 16 Pump Tail Cement 12.65;3705;280.49;8
- 17 Shutdown 12.88;65.1;36.04;0
- 18 Drop Plug 13.93;0;5;1.7
- 19 Pump Displacement 10.53;1.1;46;3.4
- 20 Bump Plug 8.36;88.7;914;0
- 21 Check Floats 8.34;88.7;120;0
- 22 End Job 8.33;88.7;13;0
- 23 Pre-Rig Down Safety Meeting
- 24 Rig-Down Equipment
- 25 Rig-Down Completed
- 26 Pre-Convoy Safety Meeting
- 27 Crew Leave Location





# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: Carl Kukus  
Attention: J.Trout  
Lease: MEAD -RWF-  
Well #: 341-23

Date: 1/7/2015  
Date Rec.: 1/7/2015  
S.O.#: 902114387  
Job Type: Surface

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>200</b> Mg / L
Calcium (Ca)	<i>500</i>	<b>120</b> Mg / L
Iron (FE2)	<i>300</i>	<b>3</b> Mg / L
Chlorides (Cl)	<i>3000</i>	<b>0</b> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>200</b> Mg / L
Chlorine (Cl <sub>2</sub> )		<b>0</b> Mg / L
Temp	<i>40-80</i>	<b>60</b> Deg
Total Dissolved Solids		<b>250</b> Mg / L

Respectfully: Carl 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 if