

WPX Energy Rocky Mountain LLC- EBUS

RU 443-7

**Nabors 576**

# **Post Job Summary**

## **Cement Production Casing**

Date Prepared: 02/20/15  
Job Date: 02/09/15

Submitted by: Evan Russell – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3600391	Quote #:	Sales Order #: 0902106585
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Rick Oaks	
Well Name: YOUNBERG RU	Well #: 443-7	API/UWI #: 05-045-22521-00	
Field: RULISON	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: SE SE-7-7S-93W-1168FSL-1181FEL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS 576	
Job BOM: 7523			
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	10047ft	Job Depth TVD	10047ft
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			0	1306	0	1306
Casing	3	4.5	4	11.6	8 RD (LT&C)	P-110	0	10037	0	10037
Open Hole Section			8.75				1306	10047	0	10047

### Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	4.5	1		10037	Top Plug	4.5	1	HES
Float Shoe	4.5	1			Bottom Plug	4.5		HES
Float Collar	4.5	1		10008.99	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	10	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	EconoCem GJ2	ECONOCEM (TM) SYSTEM	275	sack	12.7	1.674	8.69	8	
8.69 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/mi n</b>	<b>Total Mix Fluid Gal</b>
3	ThermaCem GJ2	THERMACEM (TM) SYSTEM	790	sack	13.5	1.74	7.61	8	
7.72 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/mi n</b>	<b>Total Mix Fluid Gal</b>
4	Fresh Water Displacement	Fresh Water Displacement	155.1	bbl	8.34			10	
<b>Cement Left In Pipe</b>		<b>Amount</b>	28 ft		<b>Reason</b>			Shoe Joint	
<b>Comment</b> TOP OF TAIL 5571 FEET, THERE WERE GOOD RETURNS THROUGHOUT THE CEMENT JOB									

## 1.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pass-Side Pump Pressure (psi)	Pump Stage Total (bbl)	Comments
Event	1	Call Out	2/9/2015	02:30:00	USER					ALL HES
Event	2	Pre-Convoy Safety Meeting	2/9/2015	04:30:00	USER					ALL HES
Event	3	Crew Leave Yard	2/9/2015	04:45:00	USER					1-F-550 PICKUP, 1-ELITE PUMP TRUCK, 1-660 BULK TRUCK
Event	4	Arrive At Loc	2/9/2015	06:30:00	USER					HES CREW ARRIVED ON TIME
Event	5	Assessment Of Location Safety Meeting	2/9/2015	06:45:00	USER					RIG WAS ON BOTTOM CIRCULATING, HES SPOTTED EQUIPMENT AND HELD SAFETY MEETING
Event	6	Pre-Rig Up Safety Meeting	2/9/2015	06:50:00	USER					ALL HES
Event	7	Rig-Up Equipment	2/9/2015	07:00:00	USER					RIG UP IRON TO THE STAND PIPE AND WASH UP LINE TO THE PIT, WATER HOSES TO THE UPRIGHT AND DAY TANK, BULK EQUIPMENT TO PUMP TRUCK
Event	8	Rig-Up Completed	2/9/2015	08:00:00	USER					COMPLETED
Event	9	Pre-Job Safety Meeting	2/9/2015	08:15:00	USER					ALL HES AND RIG CREW
Event	10	Start Job	2/9/2015	08:40:36	USER					TD: 10047FT TP: 10037.17FT SJ: 28.18FT CSG: 4.5 11.6# P-110 OH: 8.75 SRFCSG: 1305.7FT 9.625 32.3#

										MUD WT: 11.5 VISC: 70
Event	11	Prime Pumps	2/9/2015	08:41:48	RTD Import	8.34	2	433	2	FILL LINES TO PRESSURE TEST
Event	17	Test Lines	2/9/2015	08:44:18	RTD Import	8.34		5552	2	PRESSURE TEST LINES TO 5000 PSI, PRESSURE TEST OK
Event	18	Pump Spacer 1	2/9/2015	08:47:10	RTD Import	8.34	4	500	10	10 BBL FRESH WATER SPACER
Event	35	Pump Lead Cement	2/9/2015	08:52:31	RTD Import	12.7	8	1370	81.8	275 SKS OF ECONOCEM CEMENT 12.7PPG 1.67YIELD 8.69GAL/SK WEIGHT OF CEMENT VERIFIED VIA MUD SCALES THROUGHOUT LEAD CEMENT
Event	39	Mud Cup Sample	2/9/2015	08:54:26	RTD Import	12.7				CEMENT SAMPLE
Event	63	Pump Tail Cement	2/9/2015	09:05:28	RTD Import	13.5	8	700	244.8	790 SKS OF THERMACEM CEMENT 13.5PPG 1.74YIELD 7.61GAL/SK WEIGHT OF CEMENT VERIFIED VIA MUD SCALES THROUGHOUT TAIL CEMENT
Event	77	Slow Rate	2/9/2015	09:37:52	USER	13.5	6	570	220	SLOW RATE TO END ON CEMENT
Event	144	Shutdown	2/9/2015	09:43:21	RTD Import	13.5			244.8	SHUTDOWN END OF CEMENT
Event	145	Clean Lines	2/9/2015	09:44:36	RTD Import					CLEAN LINES TO THE PIT
Event	147	Drop Plug	2/9/2015	09:48:33	RTD Import					PLUG AWAY NO PROBLEMS
Event	148	Pump Displacement	2/9/2015	09:49:39	RTD Import	8.45	10	2440	145.1	FRESH WATER DISPLACEMENT WITH KCL, 1GAL MMCR AND 3

										POUNDS OF BE-6
Event	150	Other	2/9/2015	10:04:49	RTD Import	8.44	4	2073	10	SLOW RATE TO BUMP PLUG
Event	151	Bump Plug	2/9/2015	10:07:34	RTD Import			2200	155.1	BUMPED PLUG AT 2200 PSI TOOK TO 2700 PSI
Event	152	Other	2/9/2015	10:11:23	RTD Import					CHECK FLOATS, COMPANY REP WANTED TO RE-PRESSURE UP ON THE PLUG AFTER RECIEVING 2 BBLS BACK TO TANKS
Event	154	Pressure Up	2/9/2015	10:16:40	USER	8.45	2	2720	2	PRESSURE BACK UP ON THE PLUG TAKING PRESSURE UP TO 2720 PSI
Event	155	Check Floats	2/9/2015	10:19:54	USER	8.47		2894	2	CHECKED FLOATS AGAIN, FLOATS HELD 2 BBLS BACK TO TANKS
Event	156	End Job	2/9/2015	10:21:11	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT CARL KUKUS AND CREW
Event	157	Pre-Rig Down Safety Meeting	2/9/2015	10:25:00	USER					ALL HES
Event	158	Rig-Down Equipment	2/9/2015	10:30:00	USER					BLOW DOWN BULK EQUIPMENT, WASH UP AND BLOW DOWN PUMP TRUCK, RIG DOWN AND RACK UP ALL LINES
Event	159	Rig-Down Completed	2/9/2015	12:30:00	USER					COMPLETED
Event	160	Pre-Convoy Safety Meeting	2/9/2015	12:45:00	USER					ALL HES

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Event	161	Crew Leave Location	2/9/2015	13:00:00	USER	1-F-550 PICKUP, 1-ELITE PUMP TRUCK, 1-660 BULK TRUCK
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EVENT #	EVENT	VOLUME	SACKS	WEIGHT	YIELD	GAL/ SK
1	Start Job					
6	Test Lines	5000.0				
	Spacer	10.0		8.34		
	Lead Cement	81.8	275	12.7	1.67	8.69
15	Tail Cement	244.8	790	13.5	1.74	7.61
	SHUTDOWN/DROP PLUG	0.0				
23	Displace w/Fresh Water	155.1		8.34		
	SLOW RATE	145.1				
26	Land Plug	2136.0		500	OVER	
2	Release Psi / Job Over	0.0				
			<b>Do Not Overdisplace</b>			
DISPLACEMENT	TOTAL PIPE	SHOE JOINT LENGTH	FLOAT COLLAR	BBL/FT	H2O REQ.	
155.10	10037.17	28.18	10008.99	0.0155	365	
PSI to Lift Pipe		<b>*****Use Mud Scales on Each Tier*****</b>				
Total Displacement	155.10					
<b>CALCULATED DIFFERENTIAL PSI</b>		2136	<b>TOTAL FLUID PUMPED</b>		492	
Collapse		Burst		SO#	902106585	

# HALLIBURTON

## Water Analysis Report

Company: WPX

Submitted by: Carl Kukus

Attention: J.Trout

Lease YOUBERG

Well # RU 443-7

Date: 2/9/2015

Date Rec.: 2/9/2015

S.O.# 902106585

Job Type: Production

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

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 i