

**HALLIBURTON**

---

# **WPX ENERGY ROCKY MOUNTAIN LLC-EBUS**

---

**FEDERAL RGU 431-27-198**  
**RYAN GULCH**  
**Rio Blanco County , Colorado**

## **Cement Multiple Stages**

**02-Aug-2013**

### **Post Job Report**

## The Road to Excellence Starts with Safety

The Road to Excellence Starts With Safety			
Sold To #: 300721	Ship To #: 300721	Quote #:	Sales Order #: 900628376
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Ragsdale, Ted	
Well Name: FEDERAL RGU		Well #: 431-27-198	API/UWI #:
Field: RYAN GULCH	City (SAP): TULSA	County/Parish: Rio Blanco	State: Colorado
Contractor: CYCLONE 29		Rig/Platform Name/Num: CYCLONE 29	
Job Purpose: Cement Multiple Stages			
Well Type: Development Well		Job Type: Cement Multiple Stages	
Sales Person: MAYO, MARK		Srvc Supervisor: ARNOLD, EDWARD	MBU ID Emp #: 439784

## Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ARNOLD, EDWARD John	14.5	439784	MCINTOSH, ROBERT James	14.5	547652	SALAZAR, PAUL Omar	14.5	445614
SPARKS, CLIFFORD Paul	14.5	502476						

## Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10551730C	mile	10564022	mile	10867322	mile	10998512	mile
11259882	mile	11808841	mile				

## Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
8-2-2013	14	7	8-3-2013	.5	.5			

TOTAL Total is the sum of each column separately

Job				Job Times			
Formation Name				Date	Time	Time Zone	
Formation Depth (MD)	Top	Bottom		Called Out	02 - Aug - 2013 05:00	MST	
Form Type	BHST			On Location	02 - Aug - 2013 10:00	MST	
Job depth MD	3798. ft			Job Started	02 - Aug - 2013 18:13	MST	
Water Depth	Wk Ht Above Floor 3. ft			Job Completed	02 - Aug - 2013 22:52	MST	
Perforation Depth (MD)	From	To		Departed Loc	03 - Aug - 2013 00:30	MST	

## Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
OPEN HOLE				13.5				1750.	3845.		
OPEN HOLE				14.75				.	1750.		
SURFACE CASING	New		9.625	8.921	36.		I-80	.	3845.		

## Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	9 5/8"	1	HES
Stage Tool										Centralizers			

## 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> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk		

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water Spacer		40.00	bbl	8.33	.0	.0	4	
2	VersaCem GJ1 1st Stage Lead	VERSACEM (TM) SYSTEM (452010)	650.0	sacks	12.85	1.77	9.34	7	9.34
	9.34 Gal	FRESH WATER							
3	VersaCem GJ2 1st Stage tail	VERSACEM (TM) SYSTEM (452010)	200.0	sacks	12.8	1.96	10.95	7	10.95
	10.95 Gal	FRESH WATER							
4	Displacement		287.00	bbl	8.33	.0	.0	8	
5	Fresh Water Spacer		20.00	bbl	8.33	.0	.0	4	
6	VersaCem GJ2 2nd Stage Tail	VERSACEM (TM) SYSTEM (452010)	880.0	sacks	12.8	1.96	10.95	7	10.95
	10.95 Gal	FRESH WATER							
7	Displacement		136.00	bbl	8.33	.0	.0	8	
Calculated Values		Pressures		Volumes					
Displacement	423.9	Shut In: Instant		Lost Returns		Cement Slurry	580.9	Pad	
Top Of Cement	Surface	5 Min		Cement Returns	110	Actual Displacement	423.9	Treatment	
Frac Gradient		15 Min		Spacers	60	Load and Breakdown		Total Job	1064.8
Rates									
Circulating	RIG	Mixing	7	Displacement	8	Avg. Job	7		
Cement Left In Pipe	Amount	27.2 FT	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature					



*The Road to Excellence Starts with Safety*

Sold To #: 300721		Ship To #: 300721		Quote #:		Sales Order #: 900628376	
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS				Customer Rep: Ragsdale, Ted			
Well Name: FEDERAL RGU			Well #: 431-27-198			API/UWI #:	
Field: RYAN GULCH		City (SAP): TULSA		County/Parish: Rio Blanco		State: Colorado	
Legal Description:							
Lat:				Long:			
Contractor: CYCLONE 29			Rig/Platform Name/Num: CYCLONE 29				
Job Purpose: Cement Multiple Stages						Ticket Amount:	
Well Type: Development Well			Job Type: Cement Multiple Stages				
Sales Person: MAYO, MARK			Srvc Supervisor: ARNOLD, EDWARD			MBU ID Emp #: 439784	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	08/02/2013 05:00							
Pre-Convoy Safety Meeting	08/02/2013 06:45							Including entire cement crew.
Crew Leave Yard	08/02/2013 07:00							
Arrive At Loc	08/02/2013 10:00							Rig still pulling pipe.
Assessment Of Location Safety Meeting	08/02/2013 10:15							Water; PH 7.5; KCL 0; So4 <200; Fe 3; Calcium 250; Chlorides 0; Temp 75; TDS 340.
Pre-Rig Up Safety Meeting	08/02/2013 17:00							Including entire cement crew.
Rig-Up Equipment	08/02/2013 17:05							1 Elite # 2; 1 660 bulk truck; 2 field storage silo's; 1 hard line to floor; 1 line to upright; 1 line to rig tank. 9.625" compact head. Multi stage job, using customer supplied plug set.
Rig-Up Completed	08/02/2013 17:50							
Pre-Job Safety Meeting	08/02/2013 18:00							Including everyone on location.
Start Job	08/02/2013 18:13							TD 3798; TP 3788; Tool 1761; SJ 27.19; OH 14 1/2" to 1650 13 1/2" to TD; Casing 9.625" 2071.29 40# J-55 and 1694 36# J-55; Mud 9.0 ppg; Tool set at 1761.
Test Lines	08/02/2013 18:19					3000.0		Good pressure test, no leaks.

Sold To #: 300721

Ship To #: 300721

Quote #:

Sales Order #: 900628376

SUMMIT Version: 7.3.0106

Monday, August 12, 2013 03:14:00

## Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Spacer 1	08/02/2013 18:25		4	40			123.0	40 BBL fresh water spacer.
Pump 1st Stage Lead Slurry	08/02/2013 18:39		6	204.9			366.0	650 sks Stage 1 Lead Cement, 12.8 ppg, 1.77 cf3, 9.34 gal/sk.
Pump 1st Stage Tail Slurry	08/02/2013 19:08		6	69.8			150.0	200 sks Stage 1 Tail Cement, 12.8 ppg, 1.96 cf3, 10.34 gal/sk.
Shutdown	08/02/2013 19:25							
Drop Plug	08/02/2013 19:29							Plug left container.
Pump Displacement	08/02/2013 19:31		8	277.9			899.0	Fresh water displacement. Slow rate at 136 BBL's gone to 4 BBL/MIN for 20 BBL's to allow wiper plug to pass through tool.
Slow Rate	08/02/2013 20:16		2	10			687.0	Slow rate last 10 BBL's of displacement prior to bumping the plug.
Bump Plug	08/02/2013 20:19				287.9		1305.0	Bumped plug, took 500 PSI over.
Check Floats	08/02/2013 20:23							Floats held, 1.5 BBL back.
Drop Opening Device For Multiple Stage Cementer	08/02/2013 20:27							Allow 10 min for device to reach tool. Opening pressure at 600 psi.
Next Stage	08/02/2013 20:40							
Pump Spacer 1	08/02/2013 20:43		4	20			150.0	20 BBL fresh water spacer. Tool opened at 350 psi.
Pump 2nd Stage Tail Slurry	08/02/2013 20:53		7	307.1			410.0	880 sks Stage Tail Cement, 12.8 ppg, 1.96 cf3, 10.34 gal/sk. Got 50 BBL's of good cement to surface from the first stage.
Shutdown	08/02/2013 21:45							Including entire cement crew.
Drop Plug	08/02/2013 21:46							Drop closing device for multi stage cementer.
Pump Displacement	08/02/2013 21:47		8	100			491.0	Fresh Water displacement.
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

Sold To # : 300721

Ship To # : 300721

Quote # :

Sales Order # : 900628376

SUMMIT Version: 7.3.0106

Monday, August 12, 2013 03:14:00

# HALLIBURTON

## Cementing Job Log

Slow Rate	08/02/2013 22:05		2	36			480.0	Slow rate last 36 bbl.'s of displacement prior to bumping plug. Bumped closing plug 3 times to make sure DV tool was closed.
Bump Plug	08/02/2013 22:23				136		2400.0	Bump plug. Take 1200 over circulating pressure to close tool.
Check Floats	08/02/2013 22:48							Floats held, 1 BBL back. Got 60 BBL.'s of good cement to surface on second stage.
End Job	08/02/2013 22:52							
Pre-Rig Down Safety Meeting	08/02/2013 23:00							Discussed safety and job at hand.
Rig-Down Equipment	08/02/2013 23:05							
Rig-Down Completed	08/03/2013 00:15							
Pre-Convoy Safety Meeting	08/03/2013 00:20							Discussed route and safety.
Crew Leave Location	08/03/2013 00:30							
Other	08/03/2013 00:30							Thank You for using Halliburton. Ed Arnold And Crew.
Pump Water	08/03/2013 18:16		2	2			58.0	Fill lines with fresh water.

Sold To # : 300721

Ship To # :300721

Quote # :

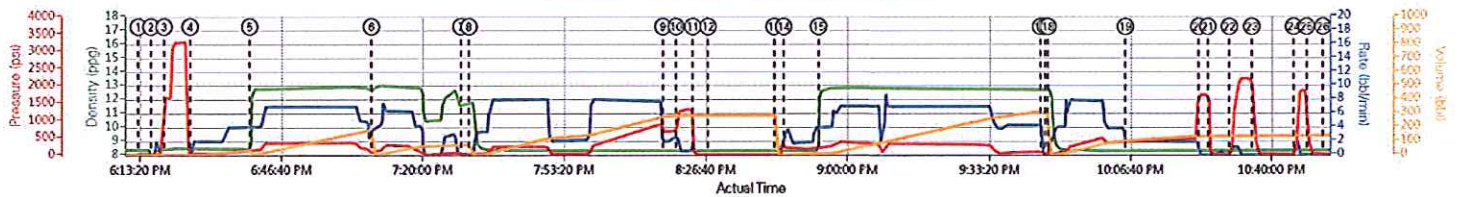
Sales Order # : 900628376

SUMMIT Version: 7.3.0106

Monday, August 12, 2013 03:14:00



# WPX - RGU 431-21-196 - MULTI STAGE SURFACE



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

- |               |                               |                      |  |                               |                      |                 |                 |                 |
|---------------|-------------------------------|----------------------|--|-------------------------------|----------------------|-----------------|-----------------|-----------------|
| 1 Start Job   | 2 Pump Spacer 1               | 3 Drop Plug          | 4 Bump Plug  | 5 Pump Spacer 1               | 6 Shutdown           | 7 Slow Rate     | 22 Bump Plug    | 25 Check Floats |
| 8 Pump Water  | 9 Pump 1st Stage Lead Slurry  | 10 Pump Displacement | 11 Check Floats                                    | 12 Open DV Tool               | 13 Drop Plug         | 20 Bump Plug    | 23 Check Floats | 26 End Job      |
| 14 Test Lines | 15 Pump 1st Stage Tail Slurry | 16 Slow Rate         | 17 Drop Opening Device For Multiple Stage Cementer | 18 Pump 2nd Stage Tail Slurry | 19 Pump Displacement | 21 Check Floats | 24 Bump Plug    |                 |

▼ Halliburton | ICem Service®

Created: 2013-03-02 15:55:26, Version 1.4.55

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-  
EBUS

Job Date: 8/2/2013 4:48:19 PM

Well: RGU 431-27-198

Representative: Ted Ragsdale

Sales Order #: 900628378

Elite# 2: Ed Arnold/ Cliff Sparks