

**HALLIBURTON**

---

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

---

**BCU 411-31-198  
SULPHUR CREEK  
Rio Grande County , Colorado**

## **Cement Multiple Stages**

**28-Jun-2012**

### **Post Job Report**

*The Road to Excellence Starts with Safety*

Sold To #: 300721	Ship To #: 2934571	Quote #:	Sales Order #: 9608521
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Brunk, Andrew	
Well Name: BCU	Well #: 411-31-198	API/UWI #: 05-103-11917	
Field: SULPHUR CREEK	City (SAP): MEEKER	County/Parish: Rio Grande	State: Colorado
Lat: N 40.147 deg. OR N 40 deg. 8 min. 50.388 secs.		Long: W 108.442 deg. OR W -109 deg. 33 min. 30.132 secs.	
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		Srcv Supervisor: SLAUGHTER, JESSE MBU ID Emp #: 454315	

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BLANCHETTE, JAMES George	10.5	371360	GOWEN, WESLEY M	10.5	496205	HAMMOND, ANSON Perry	2	421370
SILVERTHORN, AARON Jacob	10.5	491305	SLAUGHTER, JESSE Dean	10.5	454315	KUKUS, CRAIG	10.5	369124

**Equipment**

HES Unit #	Distance-1 way						
10025118	30 mile	10551730C	30 mile	10784064	30 mile	10867094	30 mile
10867304	30 mile	10876398	30 mile	10897925	30 mile	10998054	30 mile
11006314	30 mile	11259881	30 mile	11360881	30 mile	11808841	30 mile
4902	30 mile	4905	30 mile				

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
6-28-2012	10.5	8						
<b>TOTAL</b>			<i>Total is the sum of each column separately</i>					

**Job**

**Job Times**

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	28 - Jun - 2012	06:00	MST
Form Type		BHST	Job Started	28 - Jun - 2012	12:00	MST
Job depth MD	3184. ft	Job Depth TVD	Job Completed	28 - Jun - 2012	15:51	MST
Water Depth		Wk Ht Above Floor	Departed Loc	28 - Jun - 2012	19:11	MST
Perforation Depth (MD)	From	To		28 - Jun - 2012	22:30	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

**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	9.625	1	HES
Insert Float										Plug Container	9.625	1	HES
Stage Tool	9.625	1		1387						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 Gall/sk

**Stage/Plug #: 1**

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	FRESH WATER	20.00	bbl	8.33	.0	.0	4	
2	1st Stage Lead Cement	VERSACEM (TM) SYSTEM (452010)	540.0	sacks	12.8	1.77	9.34	8	9.34
	9.34 Gal	FRESH WATER							
3	1st Stage Tail Cement	VERSACEM (TM) SYSTEM (452010)	200.0	sacks	12.8	1.96	10.95	8	10.95
	10.95 Gal	FRESH WATER							
5	Displacement	FRESH WATER	242.7	bbl	.	.0	.0	8	
6	Fresh Water Spacer	FRESH WATER	20.00	bbl	.	.0	.0	4	
7	2nd Stage Tail Cement	VERSACEM (TM) SYSTEM (452010)	725.0	sacks	12.8	1.96	10.95	8	10.95
	10.95 Gal	FRESH WATER							
8	Displacement	FRESH WATER	107.2	bbl	8.33	.0	.0	8	
<b>Calculated Values</b>			<b>Pressures</b>			<b>Volumes</b>			
Displacement	242.7	Shut In: Instant		Lost Returns	NO	Cement Slurry	493	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	67	Actual Displacement	242.7	Treatment	
Frac Gradient		15 Min		Spacers	40	Load and Breakdown		Total Job	883
<b>Rates</b>									
Circulating		Mixing	8	Displacement	8	Avg. Job	8		
Cement Left In Pipe	Amount	0 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 #: 2934571	Quote #:	Sales Order #: 9608521
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Brunk, Andrew	
Well Name: BCU	Well #: 411-31-198	API/UWI #: 05-103-11917	
Field: SULPHUR CREEK	City (SAP): MEEKER	County/Parish: Rio Grande	State: Colorado
<b>Legal Description:</b>			
Lat: N 40.147 deg. OR N 40 deg. 8 min. 50.388 secs.		Long: W 108.442 deg. OR W -109 deg. 33 min. 30.132 secs.	
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: SLAUGHTER, JESSE	MBU ID Emp #: 454315

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	06/28/2012 06:00							TD 3188 FT, TP 3184 FT, SHOE 44 FT, MSC 1387 FT, CSG 9 5/8 IN 36 LB/FT, HOLE 14 3/4 IN TO 1350 13 1/2 IN TO 3188, MUD WT 8.8 PPG
Pre-Convoy Safety Meeting	06/28/2012 09:20							WITH ALL HES PERSONNEL
Crew Leave Yard	06/28/2012 09:30							
Arrive At Loc	06/28/2012 12:00							RIG WAS RUNNING CASING UPON HES ARRIVAL
Assessment Of Location Safety Meeting	06/28/2012 12:10							WITH ALL HES PERSONNEL
Other	06/28/2012 12:20							SPOT EQUIPMENT
Pre-Rig Up Safety Meeting	06/28/2012 12:30							WITH ALL HES PERSONNEL
Rig-Up Equipment	06/28/2012 12:40							MSC TOOL AND PLUG SET PROVIDED BY WEATHERFORD, WITH NO WEATHERFORD HAND ON SITE HES RAN PLUG SET
Pre-Job Safety Meeting	06/28/2012 15:40							WITH ALL PERSONNEL ON LOCATION
Start Job	06/28/2012 15:51							STAGE 1
Other	06/28/2012 15:52		2	2			186.0	FILL LINES WITH FRESH WATER
Test Lines	06/28/2012 15:53							TESTED LINES TO 4100 PSI PRESSURE HOLDING

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Spacer	06/28/2012 15:58		4	20			197.0	FRESH WATER
Pump Lead Cement	06/28/2012 16:07		8	170.2			470.0	540 SKS AT 12.8 PPG, 1.77 FT3/SK, 9.34 GAL/SK. AT ROUGHLY ABOUT 500 BBL GONE DOWN HOLE SUCKED DRY DUE TO INSUFFICIENT WATER. HES PUT 45 LB OF TUFF FIBER INTO FIRST 100 BLL OF LEAD CEMENT AS PER COMANY REP.
Pump Tail Cement	06/28/2012 16:32		8	69.8			415.0	200 SKS AT 12.8 PPG, 1.96 FT3/SK, 10.95 GAL/SK. SLOWED RATE DUE TO CELLAR PUMP NOT KEEPING UP.
Shutdown	06/28/2012 16:44							WASH ON TOP OF PLUG AS PER CUSTOMER
Drop Top Plug	06/28/2012 16:48							DROP WIPER DART. PLUG LAUNCHED
Pump Displacement	06/28/2012 16:52		8	232.7			300.0	FRESH WATER.
Slow Rate	06/28/2012 17:06		5	97			122.0	SLOWED RATE AT 97 BBL GONE FOR WIPER DART TO PASS THROUGH THE MSC TOOL
Resume	06/28/2012 17:10		8	117			810.0	RESUMED RATE AT 117 BBL GONE ONCE ESTABLISHED PLUG WAS THROUGH
Slow Rate	06/28/2012 17:24		2	10			630.0	SLOWED RATE 10 BBLS PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	06/28/2012 17:30		2		242.7		975.0	PLUG BUMPED
Check Floats	06/28/2012 17:31							FLOATS HOLDING. HES RETURNED 1 BBL H2O TO PUMP
Drop Opening Device For Multiple Stage Cementer	06/28/2012 17:36							DROP BOMB WAIT 10 MINUTES
Activity Description	Date/Time	Cht	Rate bbl/min	Volume bbl		Pressure psig		Comments

Sold To #: 300721

Ship To #: 2934571

Quote #:

Sales Order #:

9608521

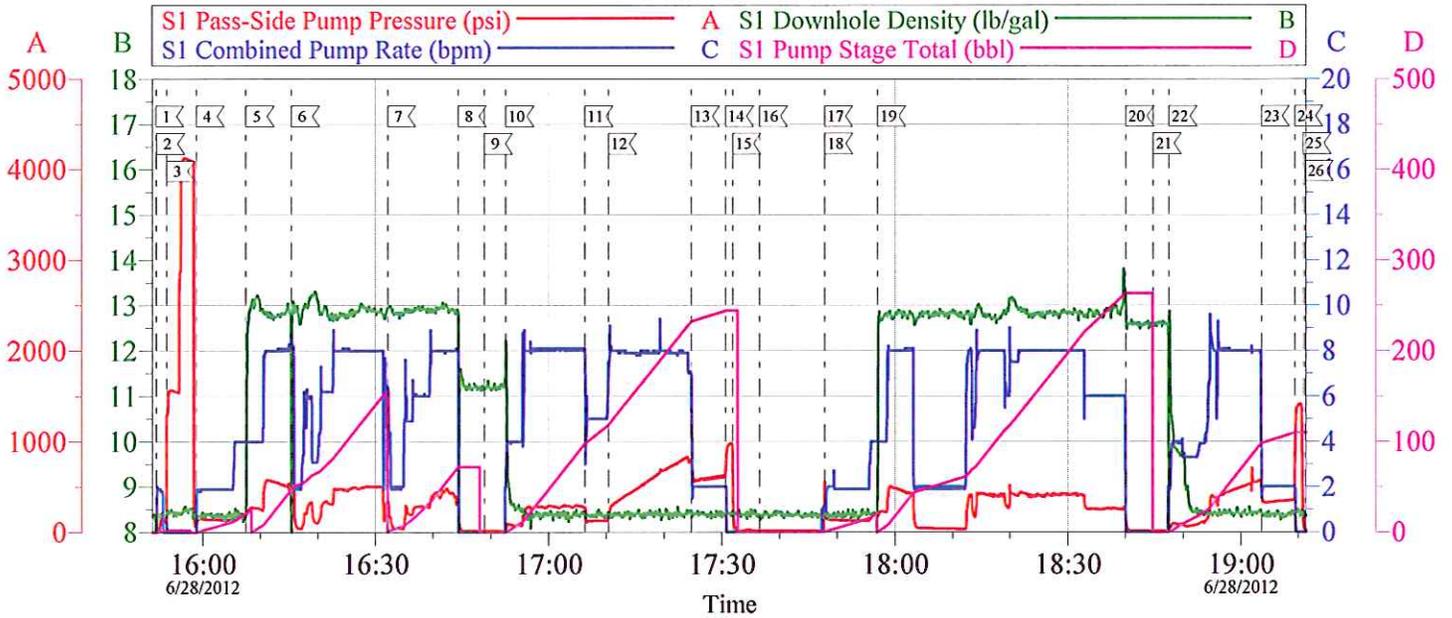
SUMMIT Version: 7.3.0030

Friday, December 28, 2012 05:29:00

		#		Stage	Total	Tubing	Casing	
Open Multiple Stage Cementer	06/28/2012 17:47		1	1			700.0	MSC TOOL PRESSURED UP TO 700 PSI. ONCE HES OPENED MSC TOOL STARTED TO PUMP THE 2ND STAGE AS PER COMPANY REP
Pump Spacer	06/28/2012 17:47		4	20			190.0	FRESH WATER
Pump Tail Cement	06/28/2012 17:57		8	253.1			670.0	725 SKS AT 12.8 PPG, 1.96 FT3/SK, 10.95 GAL/SK. HES SLOWED RATE FOR THE CELLAR PUMP TO CATCH UP. HES PUT 45 LB TUFF FIBER IN THE LAST 100 BBL OF CEMENT PROVIDED BY RIG.
Shutdown	06/28/2012 18:40							
Drop Plug	06/28/2012 18:44							MSC TOOL CLOSING DEVICE. PLUG LAUNCHED
Pump Displacement	06/28/2012 18:47		8	97.2			608.0	FRESH WATER
Slow Rate	06/28/2012 19:03		2	10			355.0	SLOW RATE 10 BBL PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	06/28/2012 19:09		2		107.2		1400. 0	PLUG BUMPED.
Close Multiple Stage Cementer	06/28/2012 19:09							MSC TOOL CLOSED AT 1400 PSI
Release Casing Pressure	06/28/2012 19:10							RELEASED PRESSURE ON CASING HES RETURNED 1 BBL H2O TO PUMP
End Job	06/28/2012 19:11							PIPE WAS STATIC DURING JOB, GODD CIRCULATION THROUGHOUT JOB. HES RETURNED 67 BBL CEMENT TO SURFACE
Pre-Rig Down Safety Meeting	06/28/2012 19:15							WITH ALL HES PERSONNEL
Rig-Down Equipment	06/28/2012 19:20							
Pre-Convoy Safety Meeting	06/28/2012 22:20							WITH ALL HES PERSONNEL

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Crew Leave Location	06/28/2012 22:30							
Comment	06/28/2012 22:31							THANK YOU FOR USING HALLIBURTON CEMENT DEPARTMENT JESSE SLAUGHTER

**WPX BCU 411-31-198**  
**9 5/8 2-STAGE**



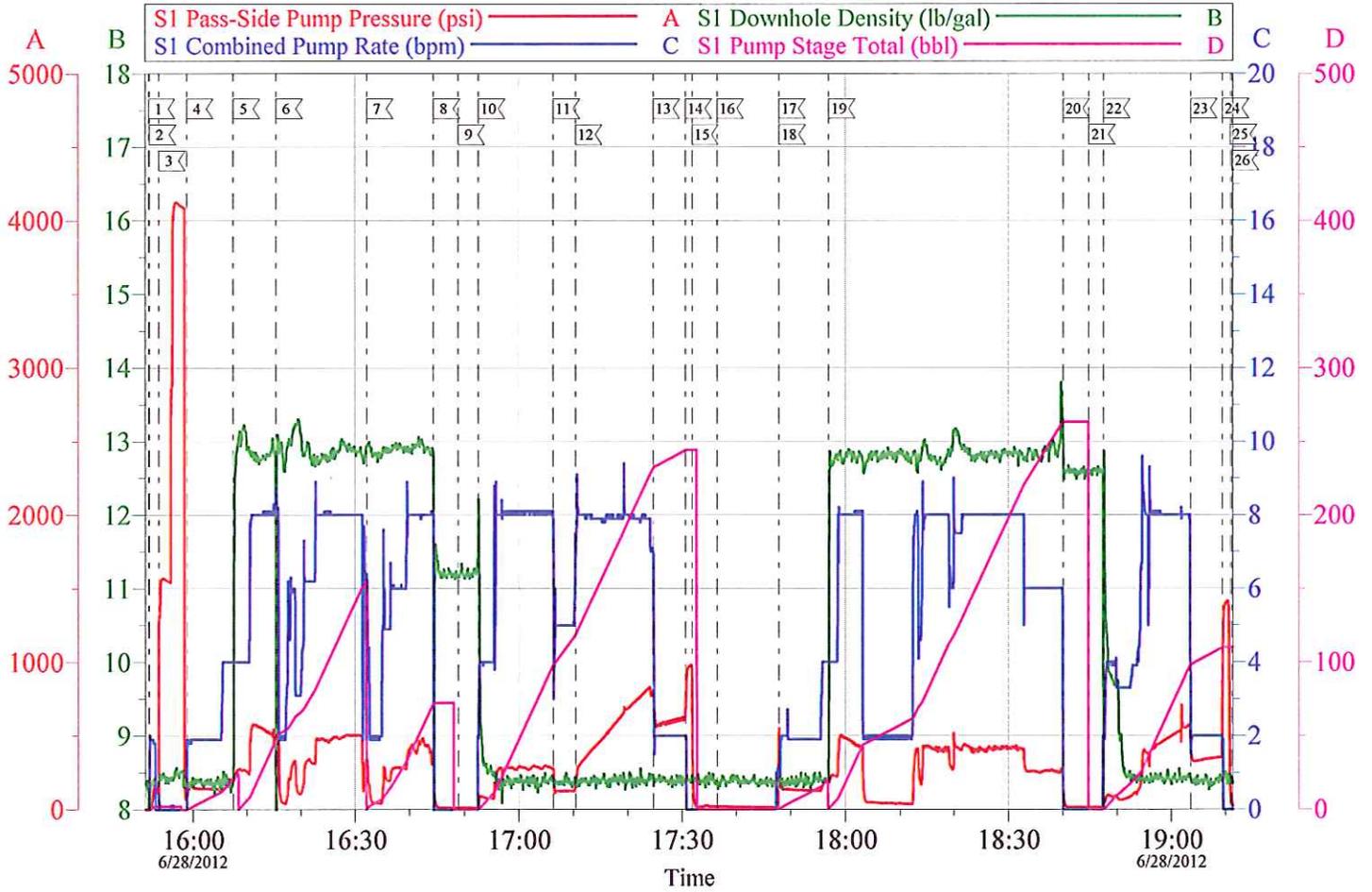
**Local Event Log**

1	START JOB	15:51:50	2	PRIME LINES	15:52:00	3	TEST LINES	15:53:45
4	PUMP H2O SPACER	15:58:54	5	PUMP LEAD CEMENT	16:07:33	6	SUCKED AIR ON DOWNHOLE	16:15:27
7	PUMP TAIL CEMENT	16:32:08	8	SHUTDOWN	16:44:22	9	DROP WIPER DART	16:48:54
10	PUMP DISPLACEMENT	16:52:38	11	SLOW RATE TO PASS MSC TOOL	17:06:19	12	RESUME RATE	17:10:23
13	SLOW RATE	17:24:45	14	BUMP PLUG	17:30:38	15	CHECK FLOATS	17:31:53
16	DROP MSC OPEN DEVICE	17:36:31	17	OPEN MSC TOOL	17:47:49	18	PUMP H2O SPACER	17:47:51
19	PUMP TAIL CEMENT	17:57:00	20	SHUTDOWN	18:40:05	21	DROP TOP PLUG	18:44:50
22	PUMP DISPLACEMENT	18:47:34	23	SLOW RATE	19:03:35	24	BUMP PLUG	19:09:25
25	CHECK FLOATS	19:10:53	26	END JOB	19:11:14			

Customer:	WPX	Job Date:	28-Jun-2012	Sales Order #:	9608521
Well Description:	BCU 411-31-198	Job Type:	2-STAGE	ADC Used:	YES
Customer Rep:	ANDREWBRUNK	Cement Supervisor:	JESSE SLAUGHTER	Elite #2:	AARON SILVERTHORN

OptiCem v6.4.10  
28-Jun-12 19:21

**WPX BCU 411-31-198**  
**9 5/8 2-STAGE**



Customer: WPX	Job Date: 28-Jun-2012	Sales Order #: 9608521
Well Description: BCU 411-31-198	Job Type: 2-STAGE	ADC Used: YES
Customer Rep: ANDREWBRUNK	Cement Supervisor: JESSE SLAUGHTER	Elite #2: AARON SILVERTHORN

OptiCem v6.4.10  
 28-Jun-12 19:21