

**HALLIBURTON**

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

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**RGU 521-36-198  
SULPHUR CREEK  
Rio Blanco County , Colorado**

## **Cement Multiple Stages**

**12-Sep-2012**

## **Post Job Reports**

*The Road to Excellence Starts with Safety*

Sold To #: 300721	Ship To #: 2950673	Quote #:	Sales Order #: 9808773
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Customer Rep: Brunk, Andrew		
Well Name: RGU	Well #: 521-36-198	API/UWI #: 05-103-198	
Field: SULPHUR CREEK	City (SAP): MEEKER	County/Parish: Rio Blanco	State: Colorado
Lat: N 39.928 deg. OR N 39 deg. 55 min. 40.555 secs.	Long: W 108.346 deg. OR W -109 deg. 39 min. 13.428 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	Srv 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	0.0	439784	LAULAINEN, ROGER Edward	0.0	524413	SINCLAIR, DAN J	0.0	338784
VANALSTYNE, TROY L	0.0	420256	WALPOLE, DARREN Livingston	0.0	485294			

**Equipment**

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10567589C	30 mile	10713212	30 mile	10867304	30 mile	10876398	30 mile
10998054	30 mile	11259882	30 mile	11360871	30 mile	11808829	30 mile

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
9-12-2012	15	9						

**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	11 - Sep - 2012	19:00 MST
Form Type		BHST		On Location	12 - Sep - 2012	00:00 MST
Job depth MD	3945. ft	Job Depth TVD	3945. ft	Job Started	12 - Sep - 2012	06:14 MST
Water Depth		Wk Ht Above Floor	4. ft	Job Completed	12 - Sep - 2012	12:29 MST
Perforation Depth (MD)	From	To		Departed Loc	12 - Sep - 2012	14:00 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
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**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	9.625	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 ft3/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 ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk		

Stage/Plug #: 1									
1	Fresh Water Spacer		40.00	bbl	8.33	.0	.0	4	
2	1st Stage Lead Cement	VERSACEM (TM) SYSTEM (452010)	550.0	sacks	12.8	1.77	9.34	6	9.34
	0.25 lbm	POLY-E-FLAKE (101216940)							
	0.25 %	HR-5, 50 LB SK (100005050)							
	0.125 lbm	TUF FIBER 594, 15 LB BOX (101350514)							
	9.34 Gal	FRESH WATER							
3	1st Stage Tail Cement	VERSACEM (TM) SYSTEM (452010)	170.0	sacks	12.8	1.96	10.95	6	10.95
	10.95 Gal	FRESH WATER							
4	Displacement		300.00	bbl	8.33	.0	.0	8	
5	Fresh Water Spacer		20.00	bbl	8.33	.0	.0	2	
6	2nd Stage Tail	VERSACEM (TM) SYSTEM (452010)	780.0	sacks	12.8	1.96	10.95	6	10.95
	10.95 Gal	FRESH WATER							
7	Displacement		143.00	bbl	8.33	.0	.0	8	
8	Top Out Cement	HALCEM (TM) SYSTEM (452986)	200.0	sacks	15.8	1.15	5.0		5.0
	5 Gal	FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement	443.9	Shut In: Instant		Lost Returns		Cement Slurry	545	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	90	Actual Displacement	443.9	Treatment	
Frac Gradient		15 Min		Spacers	60	Load and Breakdown		Total Job	1049.5
Rates									
Circulating	RIG	Mixing	6	Displacement	8	Avg. Job	7		
Cement Left In Pipe	Amount	45.45 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*

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Field: SULPHUR CREEK	City (SAP): MEEKER	County/Parish: Rio Blanco	State: Colorado
Legal Description:			
Lat: N 39.928 deg. OR N 39 deg. 55 min. 40.555 secs.		Long: W 108.346 deg. OR W -109 deg. 39 min. 13.428 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	Srv 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	09/11/2012 19:00							
Pre-Convoy Safety Meeting	09/11/2012 20:45							Including entire cement crew.
Crew Leave Yard	09/11/2012 21:00							
Arrive At Loc	09/12/2012 00:00							Rig still Running casing.
Rig-Up Equipment	09/12/2012 05:00							1 Elite # 3; 1 660 bulk truck; 1 hard line to floor; 1 line to upright; 1 line to rig tank. 9.625" compact head.
Assessment Of Location Safety Meeting	09/12/2012 05:30							Water; PH 7; KCL 250; So4 <200; Fe 0; Calcium 120; Chlorides 0; Temp 75; TDS 190.
Pre-Rig Up Safety Meeting	09/12/2012 05:45							Including entire cement crew.
Rig-Up Completed	09/12/2012 05:45							
Pre-Job Safety Meeting	09/12/2012 06:00							Including everyone on location.
Start Job	09/12/2012 06:14							TD 3945; TP 3945.08"; SJ 45.53; OH 14.3/4 to 1780, 13 1/2 to TD; Casing 9.625" 36# First 9 joints 40#; Mud 9.2 ppg. Tool set at 1850'
Pump Water	09/12/2012 06:15		2	2			40.0	Fill lines with fresh water.
Test Lines	09/12/2012 06:17					2736.0		Good pressure test, no leaks.
Pump Spacer 1	09/12/2012 06:22		4	40			116.0	40 BBL fresh water spacer.

## Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Lead Cement	09/12/2012 06:34		6	173.4			219.0	550 sks First Stage Lead Cement, 12.8 ppg, 1.77 cf3, and 9.34 gal/sk. used 2.5 boxes of tuff fiber in first 100 BBL's of cement.
Pump Tail Cement	09/12/2012 07:06		6	59.3			220.0	170 sks First Stage Tail Cement, 12.8 ppg, 1.96 cf3, 10.95 gal/sk.
Shutdown	09/12/2012 07:16							
Drop Plug	09/12/2012 07:18							Dropped First Stage wiper plug supplied with Stage tool.
Pump Displacement	09/12/2012 07:20		8	290.9			830.0	Fresh water displacement. Slowed rate to allow plug to pass through tool at 133 gone and resumed rate at 153 gone.
Slow Rate	09/12/2012 08:01		2	10			900.0	Slow rate last 10 BBL's of displacement prior to bumping the plug.
Bump Plug	09/12/2012 08:03				300.9		1120.0	Bumped plug, took 500 PSI over.
Check Floats	09/12/2012 08:06							Floats held, 1.5 BBL back
Drop Opening Device For Multiple Stage Cementer	09/12/2012 08:12							Dropped Opening tool for multi stage cementer.
Open Multiple Stage Cementer	09/12/2012 08:23		1	0.5			250.0	Dropped Opening tool at 0812. and opened tool at 0823.
Pump Spacer 1	09/12/2012 08:23		2	20			280.0	20 BBL fresh water spacer.
Pump Tail Cement	09/12/2012 08:32		6	272.3			219.0	780 sks Second Stage Tail Cement, 12.8 ppg, 1.96 cf3, 10.95 gal/sk.
Shutdown	09/12/2012 09:25							
Drop Plug	09/12/2012 09:26							Dropped closing plug for multi stage cementer. Plug left container.
Pump Displacement	09/12/2012 09:28		8	133			556.0	Fresh water displacement.
Slow Rate	09/12/2012 09:43		2	10			430.0	Slow rate 10 BBL's prior to bumping the plug.
Bump Plug	09/12/2012 09:51				143		1225.0	Bumped plug, took 500 PSI over.

Sold To #: 300721

Ship To #: 2950673

Quote #:

Sales Order #: 9808773

SUMMIT Version: 7.3.0040

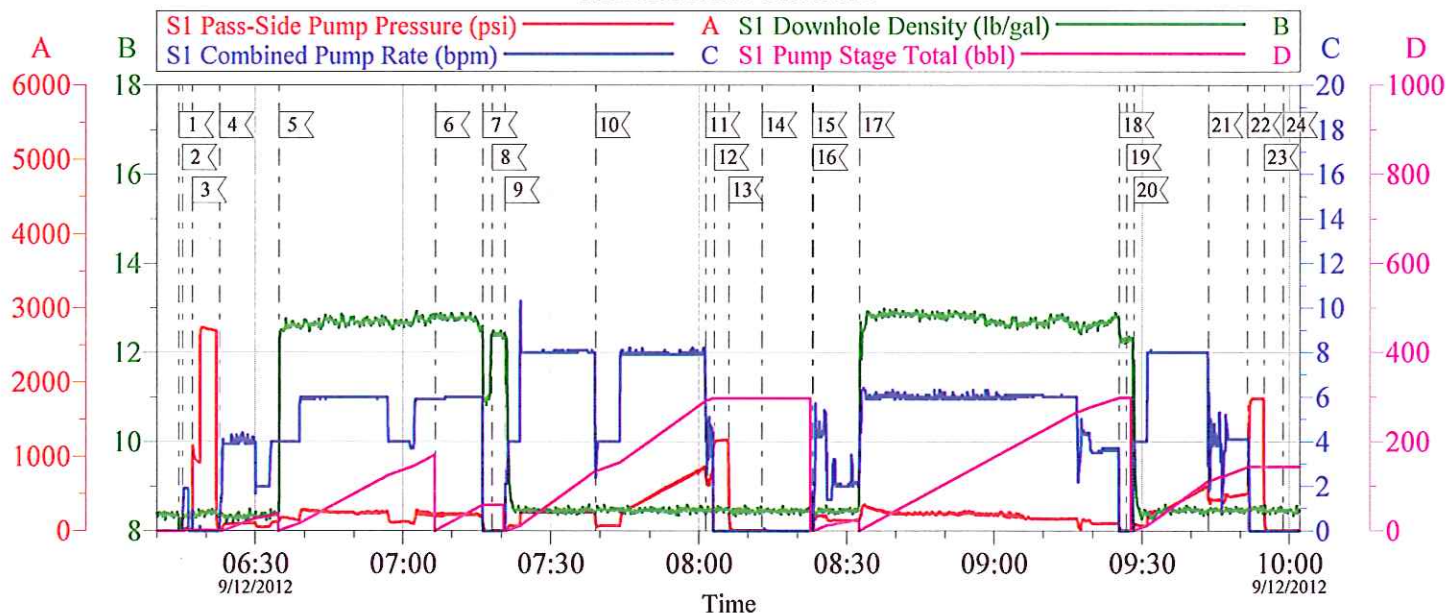
Saturday, September 22, 2012 11:45:00



## Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Check Floats	09/12/2012 09:54							Floats held, 1 BBL back
End Job	09/12/2012 09:58							
Start Job	09/12/2012 11:02							Top Out on Wells RGU 521-36-198 and RGU 321-36-198
Pump Water	09/12/2012 11:05			1			.0	Fill lines with fresh water.
Pump Tail Cement	09/12/2012 11:06		2	40.9			20.0	200 sks Top out cement. 15.8 ppg, 1.15 cf3, 5 gal/sk. 34 BBL's in well 521-36-198, 6 BBL's in well 321-36-198. Returning 150 sks of cement. added 7 tons to ticket for return charge. no sugar used.
Shutdown	09/12/2012 12:27							
End Job	09/12/2012 12:29							
Pre-Rig Down Safety Meeting	09/12/2012 12:40							Including entire cement crew.
Rig-Down Equipment	09/12/2012 12:45							
Rig-Down Completed	09/12/2012 14:00							
Pre-Convoy Safety Meeting	09/12/2012 14:30							Including entire cement crew.
Crew Leave Location	09/12/2012 15:00							Crew leave location for Service Center or another location.
Other	09/12/2012 15:00							Thank You for using Halliburton. Ed Arnold and Crew.

# WPX - RGU 521-36-198 MULTI STAGE SURFACE



## Local Event Log

1 START JOB	06:14:29	2 FILL LINES	06:15:09	3 TEST LINES	06:17:10
4 H2O SPACER	06:22:43	5 FIRST STAGE LEAD CEMENT	06:34:50	6 FIRST STAGE TAIL CEMENT	07:06:37
7 SHUT DOWN	07:16:13	8 DROP PLUG	07:18:09	9 H2O DISPLACEMENT	07:20:44
10 SLOW RATE FOR TOOL	07:39:06	11 SLOW RATE	08:01:23	12 BUMP PLUG	08:03:07
13 CHECK FLOATS	08:06:07	14 DROP OPENING TOOL	08:12:49	15 OPEN TOOL	08:23:02
16 H2O SPACER	08:23:12	17 SECOND STAGE CEMENT	08:32:39	18 SHUT DOWN	09:25:21
19 DROP PLUG	09:26:51	20 H2O DISPLACEMENT	09:28:20	21 SLOW RATE	09:43:32
22 BUMP PLUG	09:51:28	23 CHECK FLOATS	09:54:53	24 END JOB	09:58:44

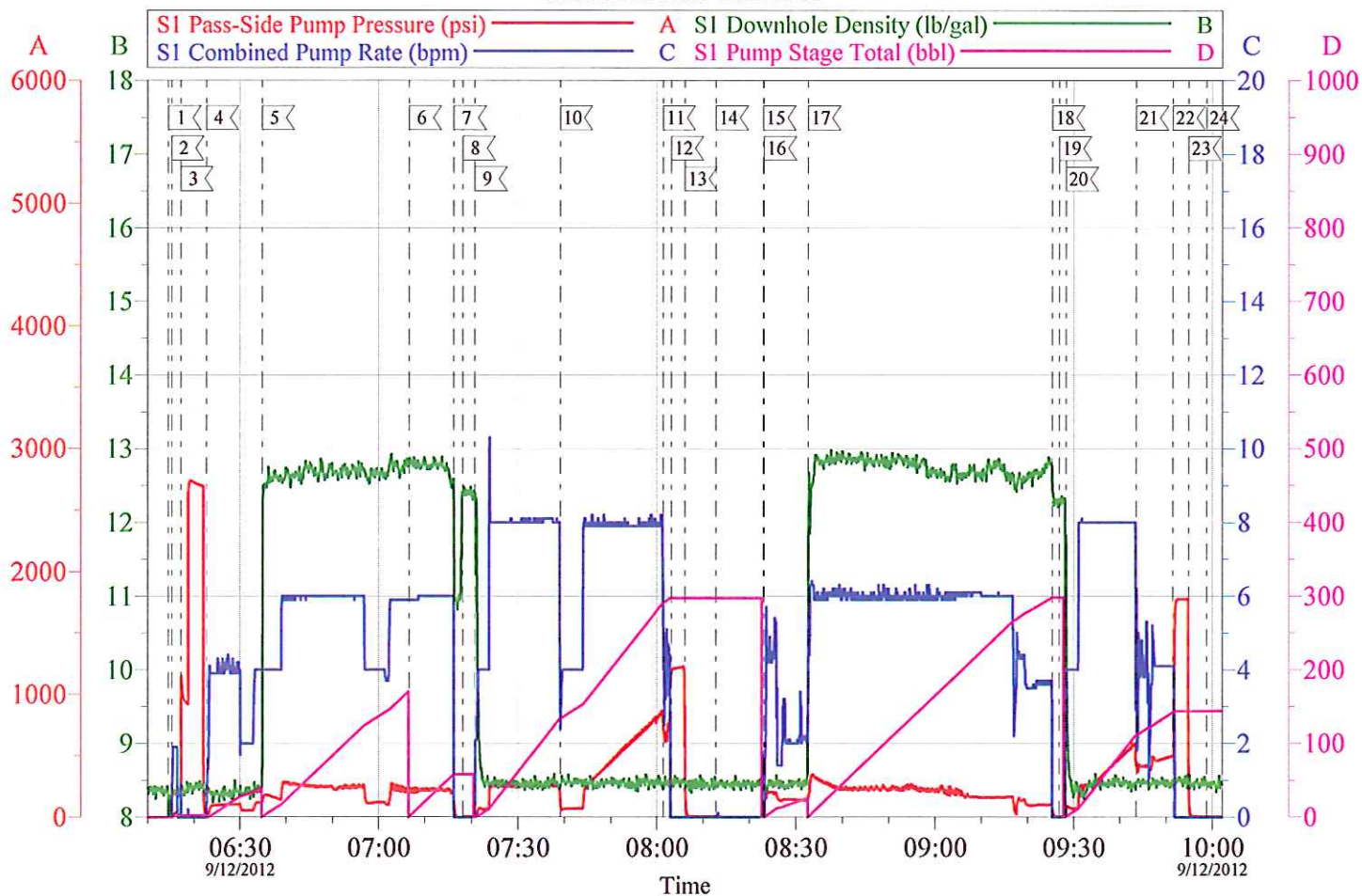
Customer: WPX  
Well Description: RGU 521-36-198  
Company Rep: TED RAGSDALE

Job Date: 12-Sep-2012  
Job Type: MULTI STAGE SURFACE  
Cement Supervisor: ED ARNOLD

Sales Order #: 9808773  
ADC Used: YES  
Elite #3: TROY VANALSTYNE

OptiCem v6.4.10  
12-Sep-12 10:22

# WPX - RGU 521-36-198 MULTI STAGE SURFACE



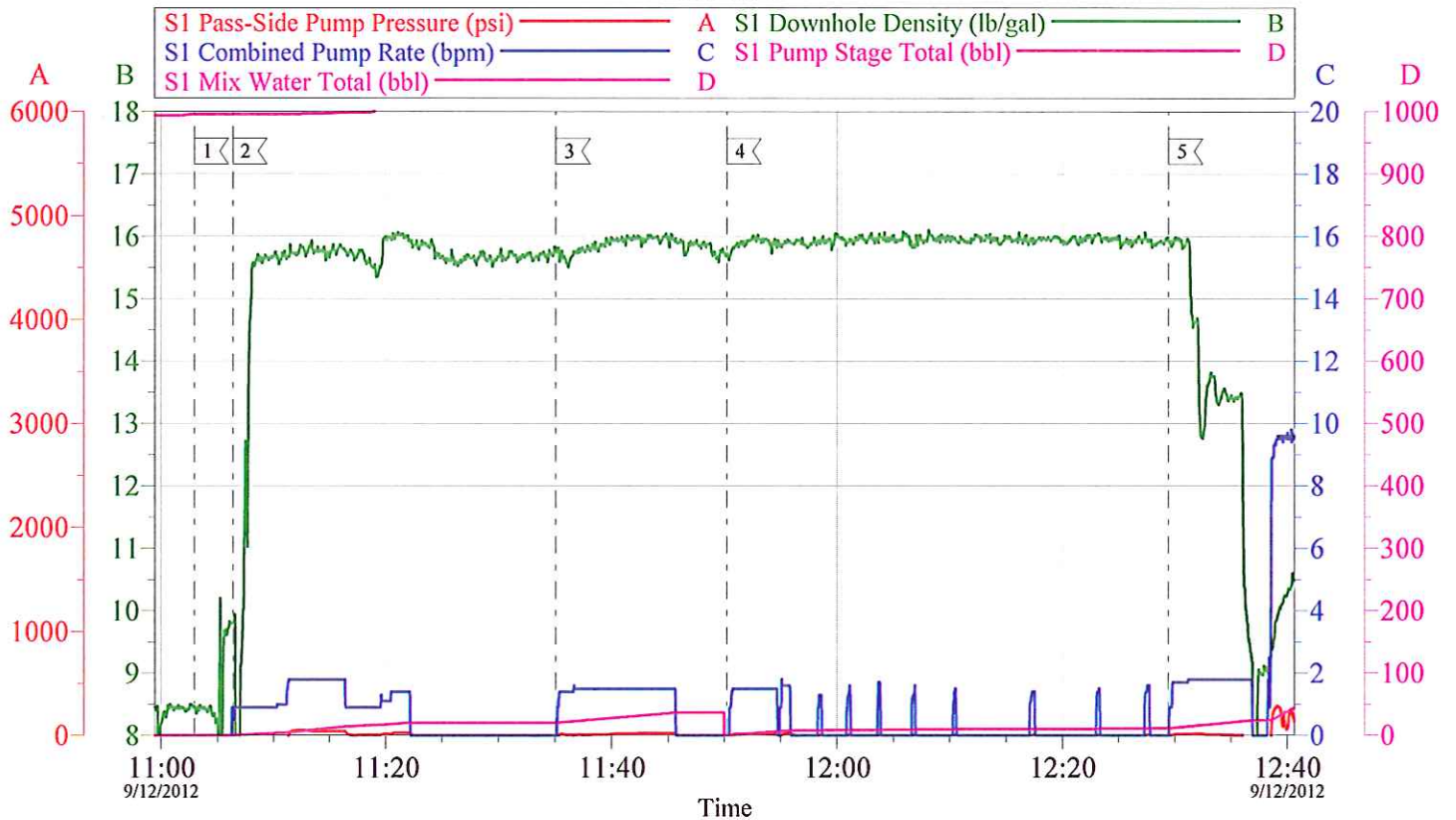
Customer: WPX	Job Date: 12-Sep-2012	Sales Order #: 9808773
Well Description: RGU 521-36-198	Job Type: MULTI STAGE SURFACE	ADC Used: YES
Company Rep: TED RAGSDALE	Cement Supervisor: ED ARNOLD	Elite #3: TROY VANALSTYNE

OptiCem v6.4.10  
12-Sep-12 10:22



# WPX - RGU 05-103-198 / RGU 321-36-198

TOP OUT



## Local Event Log

1 START JOB	11:02:56	2 TOP OUT WELL 05-103-198	11:06:22	3 TOP OUT WELL 321-36-198	11:35:05
4 TOP OUT WELL 05-103-198	11:50:13	5 END JOB	12:29:25		

Customer: WPX  
Well Description: RGU 05-103-198 / 321-36-198  
Company Rep: TED RAGSDALE

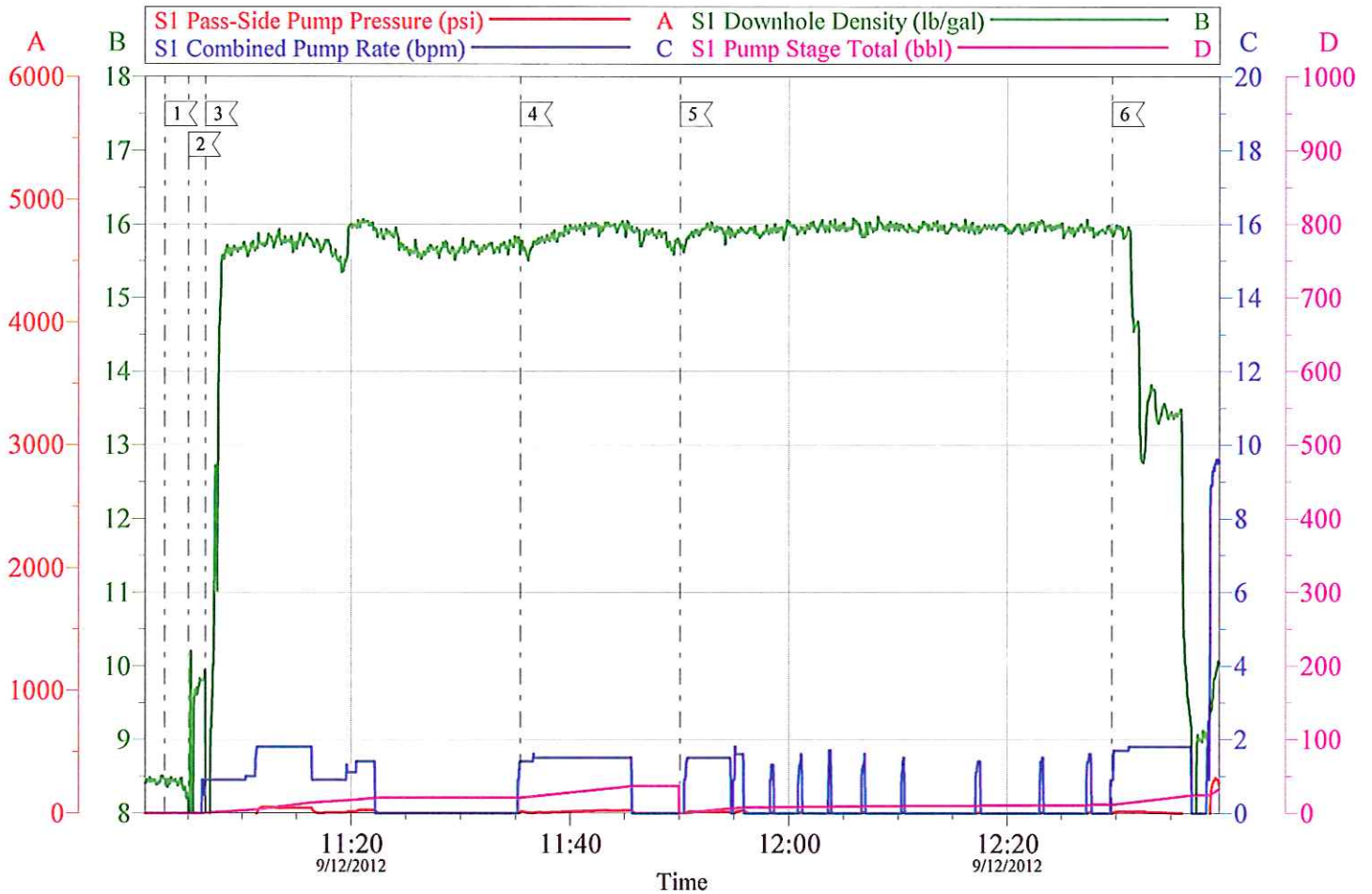
Job Date: 12-Sep-2012  
Job Type: TOP OUT  
Cement Supervisor: DE ARNOLD

Sales Order #: 9808773  
ADC Used: YES  
Elite #3: TROY VANALSTYNE

OptiCem v6.4.10  
12-Sep-12 13:04

# WPX - RGU 521-36-198 / RGU 321-36-198

TOP OUT

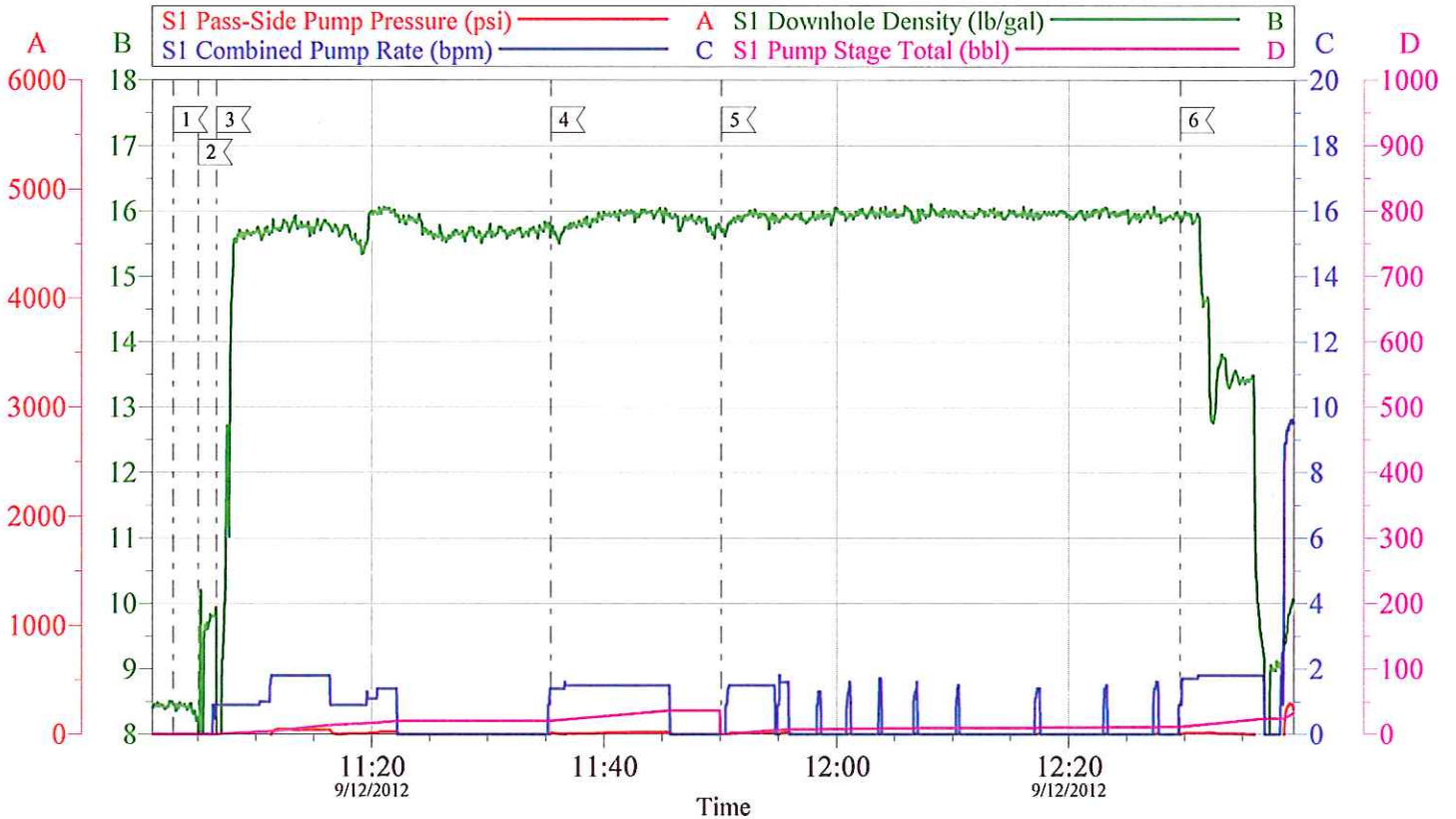


Customer: WPX	Job Date: 12-Sep-2012	Sales Order #: 9808773
Well Description: RGU 521-36-198/RGU 321-36-198	Job Type: TOP OUT	ADC Used: YES
Company Rep: TED RAGSDALE	Cement Supervisor: ED ARNOLD	Elite #3: TROY VANALSTYNE

OptiCem v6.4.10  
12-Sep-12 14:09

# WPX - RGU 521-36-198 / RGU 321-36-198

TOP OUT



## Local Event Log

1	START JOB	11:02:52	2	FILL LINES	11:05:02	3	TOP OUT RGU 521-36-198	11:06:37
4	TOP OUT RGU 321-36-198	11:35:26	5	TOP OUT RGU 521-36-198	11:50:05	6	END JOB	12:29:36

Customer:	WPX	Job Date:	12-Sep-2012	Sales Order #:	9808773
Well Description:	RGU 521-36-198/RGU 321-36-198	Job Type:	TOP OUT	ADC Used:	YES
Company Rep:	TED RAGSDALE	Cement Supervisor:	ED ARNOLD	Elite #3:	TROY VANALSTYNE

OptiCem v6.4.10  
12-Sep-12 14:08