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**WPX ENERGY ROCKY MOUNTAIN LLC-EBUS**

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**PA 324-12  
Parachute  
Garfield County , Colorado**

**Cement Surface Casing**  
**25-Jul-2013**

**Post Job Report**

## The Road to Excellence Starts with Safety

Sold To #:	300721	Ship To #:	3012014	Quote #:		Sales Order #:	900616388		
Customer:	WPX ENERGY ROCKY MOUNTAIN LLC-EBUS			Customer Rep:				Wilson, W.C	
Well Name:	PA	Well #:	324-12	API/UWI #:	05-045-20653				
Field:	Parachute	City (SAP):	PARACHUTE	County/Parish:	Garfield	State:	Colorado		
Lat:	N 39.452 deg. OR N 39 deg. 27 min. 7.484 secs.			Long:	W 107.95 deg. OR W -108 deg. 3 min. 0.814 secs.				
Contractor:	NABORS 577		Rig/Platform Name/Num:					NABORS 577	
Job Purpose:	Cement Surface Casing								
Well Type:	Development Well			Job Type:					Cement Surface Casing
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	5.5	439784	BRENNECKE, ANDREW Bailey	5.5	486345	SALAZAR, PAUL Omar	5.5	445614
SPARKS, CLIFFORD Paul	5.5	502476						

## Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10565341	60 mile	10616651C	60 mile	10951246	60 mile	10995025	60 mile
11808827	60 mile						

## Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
7-25-2013	5.5	3						

TOTAL	Total is the sum of each column separately							
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## Job

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	25 - Jul - 2013	09:00	MST
Form Type		BHST	Job Started	25 - Jul - 2013	12:31	MST
Job depth MD	1025. ft	Job Depth TVD	1025. ft	Job Completed	25 - Jul - 2013	13:31
Water Depth		Wk Ht Above Floor	3. ft	Departed Loc	25 - Jul - 2013	14:30
Perforation Depth (MD)	From	To				

## 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	9 5/8	1	HES
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 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		20.00	bbl	.	.0	.0	4	
2	VariCem GJ1 Tail Cement	VARICEM (TM) CEMENT (452009)	275.0	sacks	12.8	2.11	11.75	7	11.75
11.75 Gal		FRESH WATER							
3	Fresh Water Displacement		76.8	bbl	.	.0	.0	10	
Calculated Values		Pressures		Volumes					
Displacement	76.8	Shut In: Instant		Lost Returns		Cement Slurry	103.4	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	15	Actual Displacement	76.8	Treatment	
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	200.2
Rates									
Circulating	RIG	Mixing	7	Displacement	10	Avg. Job	8		
Cement Left In Pipe	Amount	43.9 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*

<b>Sold To #:</b> 300721		<b>Ship To #:</b> 3012014		<b>Quote #:</b>		<b>Sales Order #:</b> 900616388	
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS				<b>Customer Rep:</b> Wilson, W.C			
<b>Well Name:</b> PA			<b>Well #:</b> 324-12			<b>API/UWI #:</b> 05-045-20653	
<b>Field:</b> Parachute		<b>City (SAP):</b> PARACHUTE		<b>County/Parish:</b> Garfield		<b>State:</b> Colorado	
<b>Legal Description:</b>							
<b>Lat:</b> N 39.452 deg. OR N 39 deg. 27 min. 7.484 secs.				<b>Long:</b> W 107.95 deg. OR W -108 deg. 3 min. 0.814 secs.			
<b>Contractor:</b> NABORS 577			<b>Rig/Platform Name/Num:</b> NABORS 577				
<b>Job Purpose:</b> Cement Surface Casing						<b>Ticket Amount:</b>	
<b>Well Type:</b> Development Well			<b>Job Type:</b> Cement Surface Casing				
<b>Sales Person:</b> MAYO, MARK			<b>Srvc Supervisor:</b> ARNOLD, EDWARD			<b>MBU ID Emp #:</b> 439784	

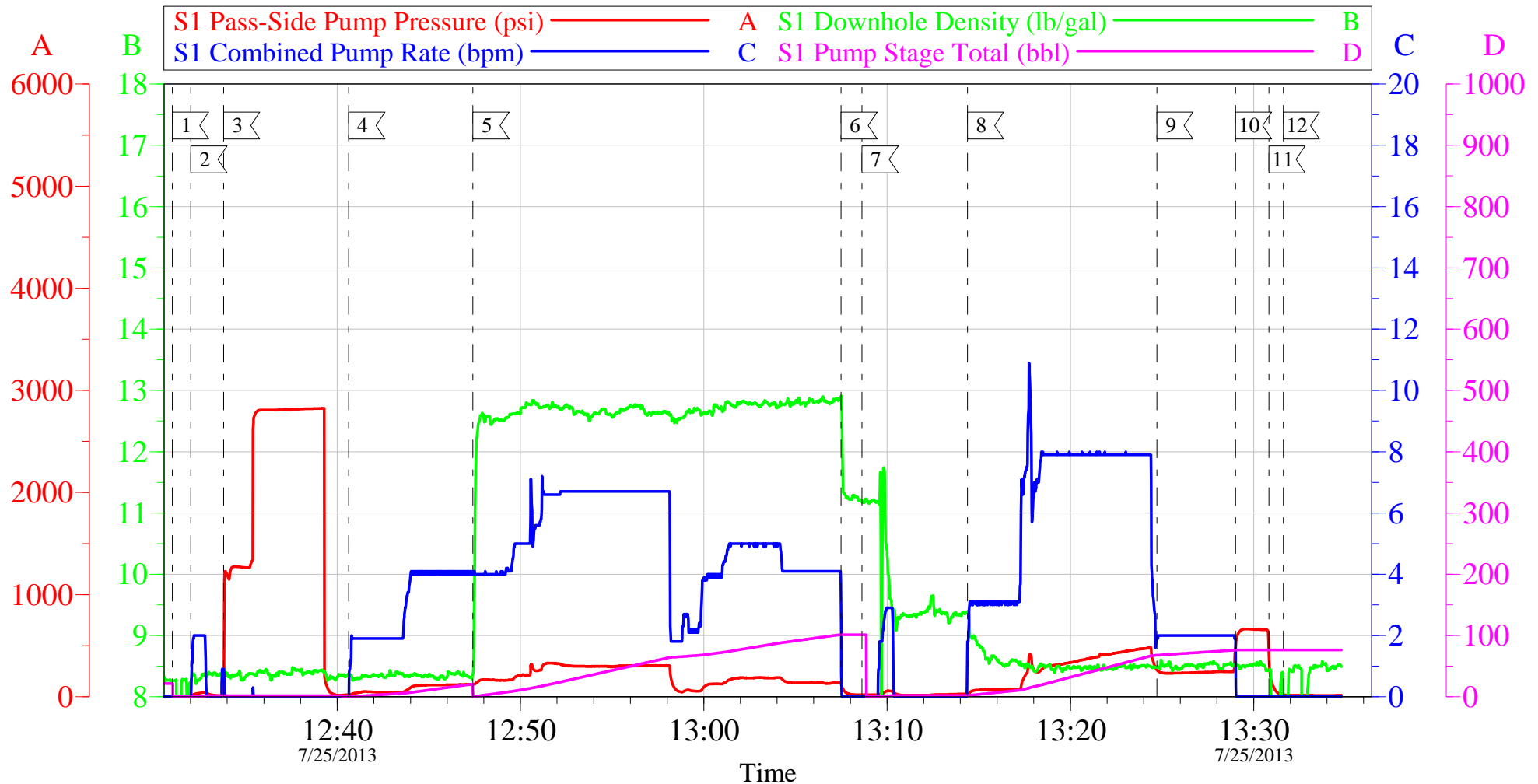
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	07/25/2013 04:30							Crew in the field. Andrew brought out the bulk truck.
Pre-Convoy Safety Meeting	07/25/2013 08:30							Including entire cement crew.
Arrive At Loc	07/25/2013 09:00							Rig still Running casing.
Assessment Of Location Safety Meeting	07/25/2013 11:00							Water; PH 7; KCL 250; So4 <200; Fe 0; Calcium 120; Chlorides 50; Temp 75; TDS 270.
Pre-Rig Up Safety Meeting	07/25/2013 11:10							Including entire cement crew.
Rig-Up Equipment	07/25/2013 11:15							1 Elite # 4; 1 660 bulk truck; 1 hard line to floor; 1 line to upright; 1 line to rig tank. 9.625" compact head.
Rig-Up Completed	07/25/2013 12:00							
Pre-Job Safety Meeting	07/25/2013 12:10							Including everyone on location.
Start Job	07/25/2013 12:31							TD 1025; TP 1019.7; SJ 43.9; OH 13 1/2"; Casing 9.625" 32.3# H-40; Mud 10 ppg.
Pump Water	07/25/2013 12:32		2	2			41.0	Fill lines with fresh water.
Test Lines	07/25/2013 12:33					2809.0		Good pressure test, no leaks.
Pump Spacer 1	07/25/2013 12:40		4	20			120.0	20 BBL fresh water spacer.
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

## Cementing Job Log

Pump Tail Cement	07/25/2013 12:47		8	103.4			305.0	275 sks Tail Cement, 12.8 ppg, 2.11 cf3, 11.75 gal/sk. Flecs shut down during cement. It rebooted right away. Did not lose any data on chart.
Shutdown	07/25/2013 13:07							
Drop Plug	07/25/2013 13:08							Plug left container.
Pump Displacement	07/25/2013 13:14		10	66.8			460.0	Fresh water displacement.
Slow Rate	07/25/2013 13:24			10			235.0	Slow rate 10 BBL's prior to bumping the plug.
Bump Plug	07/25/2013 13:29				76.8		659.0	Bumped plug, took 500 PSI over.
Check Floats	07/25/2013 13:30							Floats held, 1 BBL back. 15 BBL's of good cement to surface.
End Job	07/25/2013 13:31							
Pre-Rig Down Safety Meeting	07/25/2013 13:40							Including entire cement crew.
Rig-Down Equipment	07/25/2013 13:45							
Rig-Down Completed	07/25/2013 14:15							
Pre-Convoy Safety Meeting	07/25/2013 14:20							Including entire cement crew.
Crew Leave Location	07/25/2013 14:30							Crew leave location for Service Center or another location.
Other	07/25/2013 14:30							Thank You for using Halliburton. Ed Arnold and Crew.

# WPX - PA 243-13

9 5/8" SURFACE



## Local Event Log

1 START JOB	12:31:01	2 FILL LINES	12:32:01	3 TEST LINES	12:33:48
4 H2O SPACER	12:40:38	5 CEMENT	12:47:24	6 SHUT DOWN	13:07:29
7 DROP PLUG	13:08:38	8 H2O DISPLACEMENT	13:14:23	9 SLOW RATE	13:24:43
10 BUMP PLUG	13:29:01	11 CHECK FLOATS	13:30:50	12 END JOB	13:31:37

Customer: WPX  
Well Description: PA 243-12  
Company Rep: WC WILSON

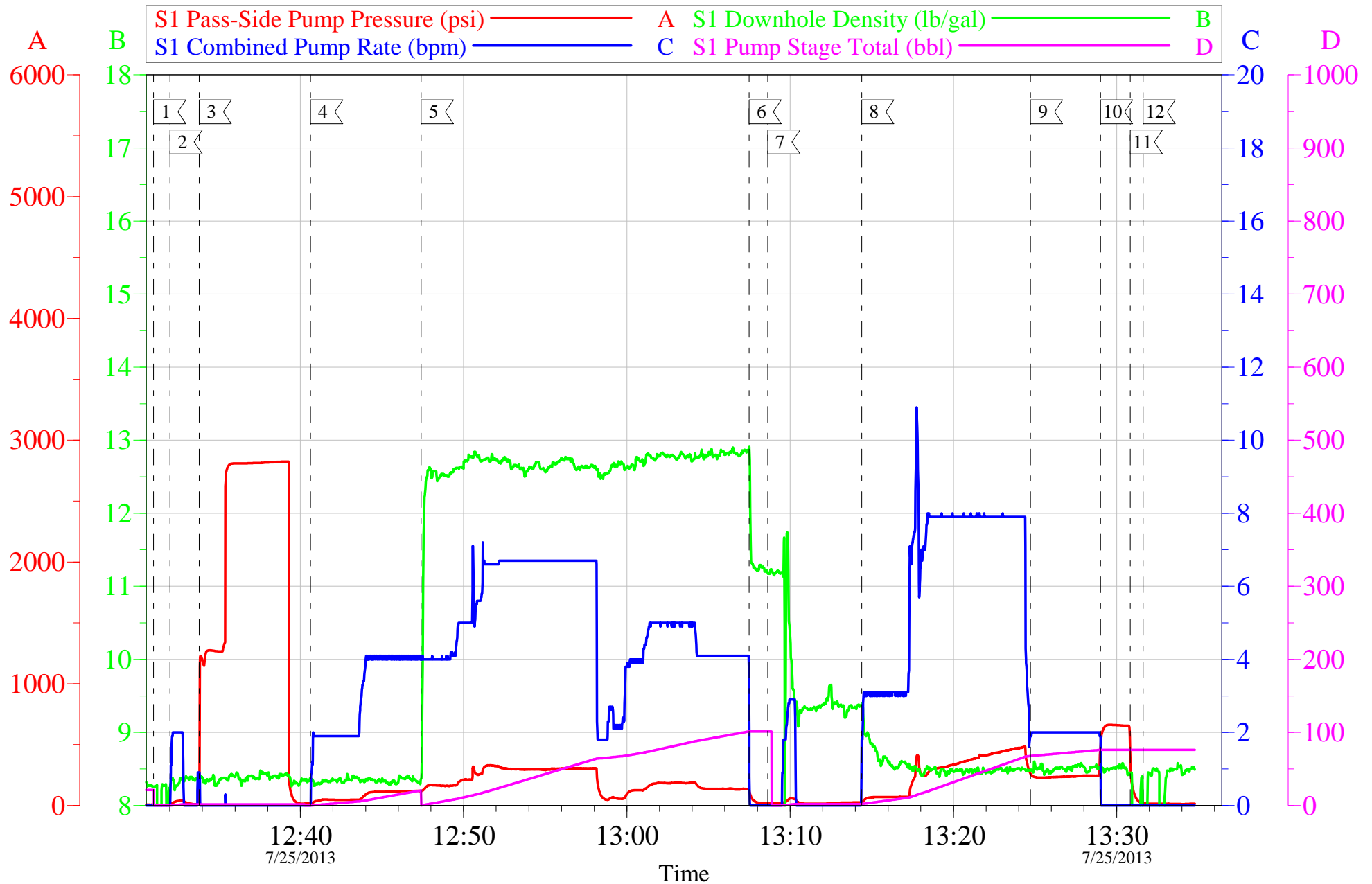
Job Date: 25-Jul-2013  
Job Type: SURFACE  
Cement Supervisor: ED ARNOLD

Sales Order #: 900616388  
ADC Used: YES  
Elite #4: CLIFF SPARKS

OptiCem v6.4.10  
25-Jul-13 13:46

# WPX - PA 243-13

9 5/8" SURFACE



Customer: WPX	Job Date: 25-Jul-2013	Sales Order #: 900616388
Well Description: PA 243-12	Job Type: SURFACE	ADC Used: YES
Company Rep: WC WILSON	Cement Supervisor: ED ARNOLD	Elite #4: CLIFF SPARKS

OptiCem v6.4.10  
25-Jul-13 13:47

<b>Sales Order #:</b> 900616388	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 7/25/2013
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> WC WILSON		<b>API / UWI: (leave blank if unknown)</b> 05-045-20653
<b>Well Name:</b> PA		<b>Well Number:</b> 324-12
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and service of a standard unmatched in the service sector of the energy industry.

Please take the time to let us know if our performance met with your satisfaction. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

### CUSTOMER SATISFACTION SURVEY

CATEGORY	CUSTOMER SATISFACTION RESPONSE	
Survey Conducted Date	The date the survey was conducted	7/25/2013
Survey Interviewer	The survey interviewer is the person who initiated the survey.	EDWARD ARNOLD (HX46731)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	WC WILSON
HSE	Was our HSE performance satisfactory? Circle Y or N	Yes
Equipment	Were you satisfied with our Equipment? Circle Y or N	Yes
Personnel	Were you satisfied with our people? Circle Y or N	Yes
Customer Comment	Customer's Comment	

<b>CUSTOMER SIGNATURE</b>
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<b>Well Name:</b> PA		<b>Well Number:</b> 324-12
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b>	7/25/2013
The date the survey was conducted	

Cementing KPI Survey	
<b>Type of Job</b>	0
Select the type of job. (Cementing or Non-Cementing)	
<b>Select the Maximum Deviation range for this Job</b>	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
<b>Total Operating Time (hours)</b>	3.5
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
<b>HSE Incident, Accident, Injury</b>	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
<b>Was the job purpose achieved?</b>	Yes
Was the job delivered correctly as per customer agreed design?	
<b>Operating Hours (Pumping Hours)</b>	1
Total number of hours pumping fluid on this job. Enter in decimal format.	
<b>Customer Non-Productive Rig Time (hrs)</b>	0
Lost time due to Halliburton in the start, execution, or completion of an ordered service or product, or delays in a follow-on service. Enter in decimal format. 0 if none.	
<b>Type of Rig Classification Job Was Performed</b>	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
<b>Number Of JSAs Performed</b>	5
Number Of Jsas Performed	
<b>Number of Unplanned Shutdowns</b>	0
Unplanned shutdown is when injection stops for any period of time.	
<b>Was this a Primary Cement Job (Yes / No)</b>	Yes

<b>Sales Order #:</b> 900616388	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 7/25/2013
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<b>Customer Representative:</b> WC WILSON		<b>API / UWI: (leave blank if unknown)</b> 05-045-20653
<b>Well Name:</b> PA		<b>Well Number:</b> 324-12
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

Primary Cement Job= Casing job, Liner job, or Tie-back job.	
<b>Did We Run Wiper Plugs?</b> Did We Run Top And Bottom Casing Wiper Plugs?	Top
<b>Mixing Density of Job Stayed in Designed Density Range (0-100%)</b> Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	98
<b>Was Automated Density Control Used?</b> Was Automated Density Control (ADC) Used ?	Yes
<b>Pump Rate (percent) of Job Stayed At Designed Pump Rate</b> Pump Rate range defined as +/- 1bbl/min. Calculation: Total BBLs of fluid pumped at the designed rate divided by Total BBLs of fluid pumped, multiplied by 100	93
<b>Nbr of Remedial Sqz Jobs Rqd - Competition</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By Competition	0
<b>Nbr of Remedial Plug Jobs Rqd - HES</b> Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
<b>Nbr of Remedial Sqz Jobs Rqd - HES</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0