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

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**SG 431-22  
GRAND VALLEY  
Garfield County , Colorado**

**Cement Surface Casing**  
**02-Aug-2013**

**Post Job Report**

## The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3013580	Quote #:	Sales Order #: 900635830
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Customer Rep: Duniho, Al		
Well Name: SG	Well #: 431-22	API/UWI #: 05-045-21748	
Field: GRAND VALLEY	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Lat: N 39.426 deg. OR N 39 deg. 25 min. 34.27 secs.	Long: W 108.088 deg. OR W -109 deg. 54 min. 43.211 secs.		
Contractor: CYCLONE 17	Rig/Platform Name/Num: 17		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	Job Type: Cement Surface Casing		
Sales Person: MAYO, MARK	Srv Supervisor: CARTER, ERIC	MBU ID Emp #: 345598	

## Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CARTER, ERIC Earl	0.0	345598	EICKHOFF, ROBERT Edward	0.0	495311	LINN, PAUL Andrew	0.0	479143

## Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10296152C	60 mile	11021972	60 mile	11027039	60 mile	11583933	60 mile
11808839	60 mile						

## Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours

TOTAL Total is the sum of each column separately

## Job

Formation Name					Date				Time	Time Zone		
Formation Depth (MD)		Top	Bottom		Called Out				01 - Aug - 2013	21:30	MST	
Form Type		BHST			On Location				02 - Aug - 2013	00:00	MST	
Job depth MD		1256.5 ft		Job Depth TVD		1256.5 ft		Job Started		02 - Aug - 2013	07:20	MST
Water Depth		Wk Ht Above Floor			5. ft		Job Completed		02 - Aug - 2013	08:14	MST	
Perforation Depth (MD)		From	To		Departed Loc				02 - Aug - 2013	09:00	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
OPEN HOLE				13.5				.	1271.		
SURFACE CASING	Unknown		9.625	9.001	32.3		H-40	.	1256.5		

## 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			
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

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

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		20.00	bbl	.	.0	.0	.0	
2	VariCem GJ! Lead Cement	VARICEM (TM) CEMENT (452009)	150.0	sacks	12.3	2.38	13.75		13.75
13.75 Gal		FRESH WATER							
3	VariCem GJ1 Tail Cement	VERSACEM (TM) SYSTEM (452010)	160.0	sacks	12.8	2.11	11.75		11.75
11.75 Gal		FRESH WATER							
4	Fresh Water Displacement		95.00	bbl	8.4	.0	.0	10.0	
Calculated Values		Pressures		Volumes					
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement		Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount	47.4 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> 3013580		<b>Quote #:</b>		<b>Sales Order #:</b> 900635830	
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS				<b>Customer Rep:</b> Dunihoo, Al			
<b>Well Name:</b> SG			<b>Well #:</b> 431-22			<b>API/UWI #:</b> 05-045-21748	
<b>Field:</b> GRAND VALLEY		<b>City (SAP):</b> PARACHUTE		<b>County/Parish:</b> Garfield		<b>State:</b> Colorado	
<b>Legal Description:</b>							
<b>Lat:</b> N 39.426 deg. OR N 39 deg. 25 min. 34.27 secs.				<b>Long:</b> W 108.088 deg. OR W -109 deg. 54 min. 43.211 secs.			
<b>Contractor:</b> CYCLONE 17			<b>Rig/Platform Name/Num:</b> 17				
<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> CARTER, ERIC			<b>MBU ID Emp #:</b> 345598	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	08/01/2013 21:30							
Depart Yard Safety Meeting	08/01/2013 23:00							ATTENDED BY ALL HES CREW
Crew Leave Yard	08/01/2013 23:10							
Arrive At Loc	08/02/2013 00:00							RIG DRILLING
Assessment Of Location Safety Meeting	08/02/2013 05:50							ATTENDED BY ALL HES CREW
Other	08/02/2013 06:00							SPOT EQUIPMENT
Pre-Rig Up Safety Meeting	08/02/2013 06:25							ATTENDED BY ALL HES CREW
Rig-Up Equipment	08/02/2013 06:30							
Pre-Job Safety Meeting	08/02/2013 07:00							ATTENDED BY ALL HES CREW, RIG CREW AND COMPANY REP
Start Job	08/02/2013 07:20							TP 1256.54', TD 1271', SJ 47.45', FC 1209.09', MW 9.7 PPG, CASING 9.625", 32.3#, H-40 , HOLE 13.5" 11 CENTRALIZERS, RIG CIRCULATED FOR 1 HR PRIOR TO JOB
Other	08/02/2013 07:20		2	2			34.0	FILL LINES
Test Lines	08/02/2013 07:22							PRESSURED UP TO 3950 PSI, PRESSURE HELD
Pump Spacer	08/02/2013 07:26		4	20			158.0	FRESH WATER
Activity Description	Date/Time	Cht	Rate bbl/min	Volume bbl		Pressure psig		Comments

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Quote # :

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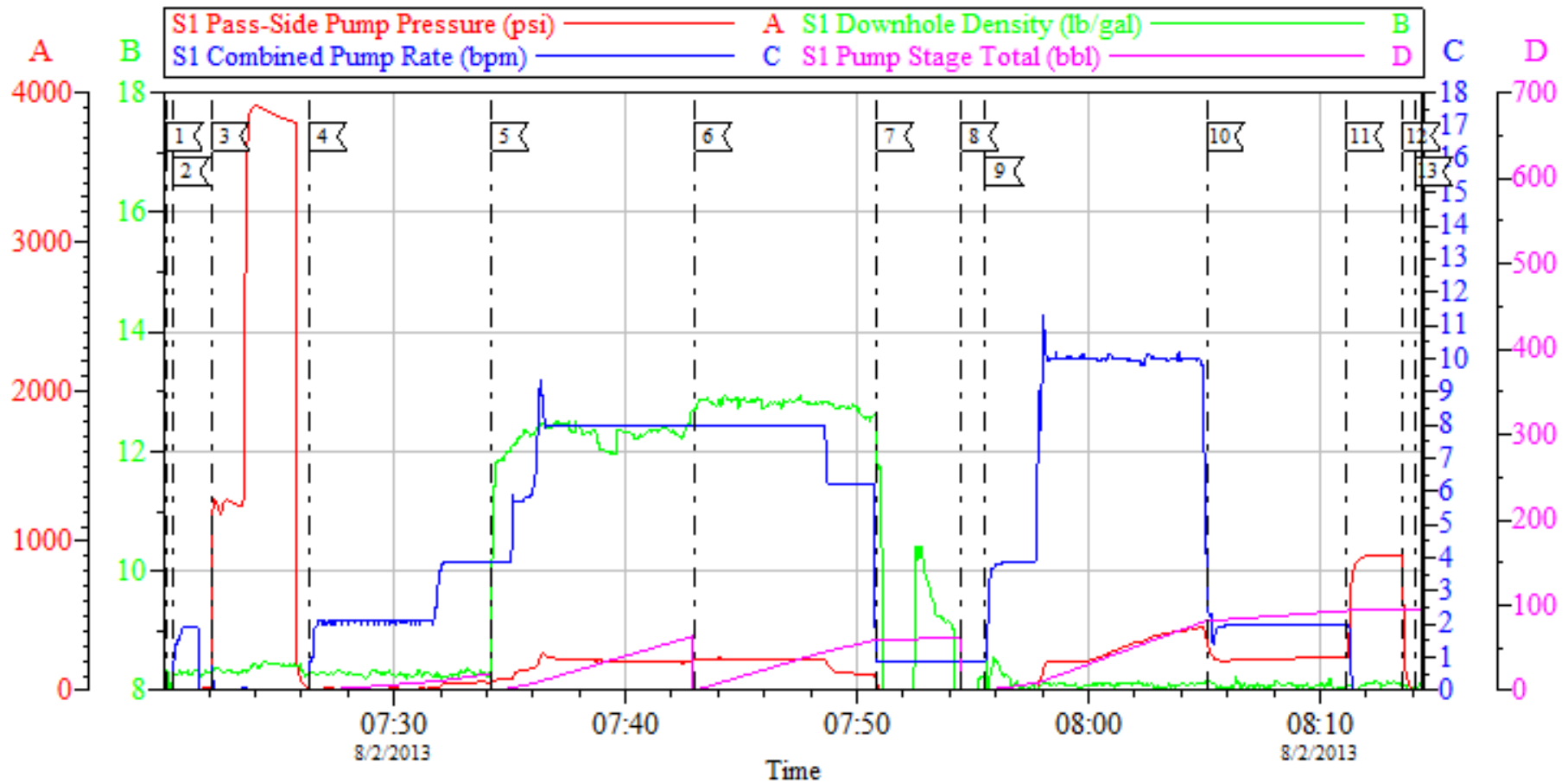
SUMMIT Version: 7.3.0106

Thursday, August 08, 2013 03:13:00

## Cementing Job Log

		#		Stage	Total	Tubing	Casing	
Pump Lead Cement	08/02/2013 07:34		8	63.6			221.0	150 SKS VARICEM MIXED AT 12.3 PPG, 2.38 YIELD, 13.75 GL/SK
Pump Tail Cement	08/02/2013 07:43		8	60.1			220.0	160 SKS VARICEM MIXED AT 12.8 PPG, 2.11 YIELD, 11.75 GL/SK
Shutdown	08/02/2013 07:50							
Drop Top Plug	08/02/2013 07:54							PLUG LUANCED
Pump Displacement	08/02/2013 07:55		10	95.2			433.0	FRESH WATER
Slow Rate	08/02/2013 08:05		2	10			230.0	
Bump Plug	08/02/2013 08:11						909.0	PLUG LANDED
Check Floats	08/02/2013 08:13							FLOATS HELD
End Job	08/02/2013 08:14							GOOD CIRCULATION THROUGH OUT JOB, PIPE NOT MOVED DURING JOB, 20 BBLS CEMENT TO SURFACE
Post-Job Safety Meeting (Pre Rig-Down)	08/02/2013 08:16							ATTENDED BY ALL HES CREW
Rig-Down Equipment	08/02/2013 08:20							
Depart Location Safety Meeting	08/02/2013 08:50							ATTENDED BY ALL HES CREW
Crew Leave Location	08/02/2013 09:00							THANK YOU FOR USING HALLIBURTON CEMENT, ERIC CARTER AND CREW.

WPX-SG 431-22  
9.625" SURFACE



Local Event Log

1 START JOB	07:20:09	2 FILL LINES	07:20:25	3 TEST LINES	07:22:08
4 PUMP SPACER	07:26:20	5 PUMP LEAD CEMENT	07:34:13	6 PUMP TAIL CEMENT	07:43:00
7 SHUTDOWN	07:50:51	8 DROP TOP PLUG	07:54:31	9 PUMP DISPLACEMENT	07:55:34
10 SLOW RATE	08:05:07	11 BUMP PLUG	08:11:09	12 CHECK FLOATS	08:13:37
13 END JOB	08:14:07				

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS  
 Well Description: SG 431-22  
 Company Rep: AL HARTL

Job Date: 02-Aug-2013  
 Job Type: SURFACE  
 Service Supervisor: ERIC CARTER

Sales Order #: 900635830  
 ADC Used: YES  
 ESite#Operator: 9/ANDREW LINN

OptiCem v6.4.10  
 02-Aug-13 08:36

# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: ERIC CARTER  
Attention: J.Trout  
Lease: CYCLONE 17  
Well #: SG 431-22

Date: 8/8/2013  
Date Rec.: 8/8/2013  
S.O.#: 900635830  
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>0</i> Mg / L
Hrdness	<i>500</i>	<i>250</i> Mg / L
Iron (FE2)	<i>300</i>	<i>0</i> Mg / L
Chlorides (Cl)	<i>3000</i>	<i>0</i> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<i>&lt;200</i> Mg / L
Temp	<i>40-80</i>	<i>70</i> Deg
Total Dissolved Solids		<i>450</i> Mg / L

Respectfully: ERIC CARTER

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 its use.

<b>Sales Order #:</b> 900635830	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 8/2/2013
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> AL HARTL		<b>API / UWI: (leave blank if unknown)</b> 05-045-21748
<b>Well Name:</b> SG		<b>Well Number:</b> 431-22
<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	8/2/2013
Survey Interviewer	The survey interviewer is the person who initiated the survey.	ERIC CARTER (HX15491)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	AL HARTL
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	GOOD JOB MEN!

CUSTOMER SIGNATURE



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<b>Customer Representative:</b> AL HARTL		<b>API / UWI: (leave blank if unknown)</b> 05-045-21748
<b>Well Name:</b> SG		<b>Well Number:</b> 431-22
<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> The date the survey was conducted	8/2/2013

Cementing KPI Survey	
<b>Type of Job</b> Select the type of job. (Cementing or Non-Cementing)	0
<b>Select the Maximum Deviation range for this Job</b> What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	3
<b>HSE Incident, Accident, Injury</b> HSE Incident, Accident, Injury. This should be recordable incidents only.	No
<b>Was the job purpose achieved?</b> Was the job delivered correctly as per customer agreed design?	Yes
<b>Operating Hours (Pumping Hours)</b> Total number of hours pumping fluid on this job. Enter in decimal format.	1
<b>Customer Non-Productive Rig Time (hrs)</b> 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.	0
<b>Type of Rig Classification Job Was Performed</b> Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
<b>Number Of JSAs Performed</b> Number Of Jsas Performed	5
<b>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	0
<b>Was this a Primary Cement Job (Yes / No)</b>	Yes

<b>Sales Order #:</b> 900635830	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 8/2/2013
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<b>Customer Representative:</b> AL HARTL		<b>API / UWI: (leave blank if unknown)</b> 05-045-21748
<b>Well Name:</b> SG		<b>Well Number:</b> 431-22
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<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	97
<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	97
<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