

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

GM 422-13

**H&P/318**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 05/02/2014

Job Date: 04/29/2014

Submitted by: Kory Hugentobler - Cement Engineer

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300721	<b>Ship To #:</b> 3273417	<b>Quote #:</b>	<b>Sales Order #:</b> 901304727
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Customer Rep:</b> Tower, Ron	
<b>Well Name:</b> GM		<b>Well #:</b> 422-13	<b>API/UWI #:</b> 05-045-22264
<b>Field:</b> GRAND VALLEY	<b>City (SAP):</b> PARACHUTE	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Lat:</b> N 39.446 deg. OR N 39 deg. 26 min. 44.149 secs.		<b>Long:</b> W 108.064 deg. OR W -109 deg. 56 min. 7.822 secs.	
<b>Contractor:</b> H&P		<b>Rig/Platform Name/Num:</b> H&P 318	
<b>Job Purpose:</b> Cement Surface Casing			
<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

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CAMPBELL, DAVID Arthur	27.5	544403	CARTER, ERIC Earl	27.5	345598	DAVIS, JOSEPH	27.5	558939
WESTFALL, DUSTIN A	27.5	555858						

**Equipment**

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10567589C	60 mile	10713212	60 mile	10867423	60 mile	10998512	60 mile
11562538	60 mile	11583933	60 mile	11808829	60 mile		

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
4/28/14	19	0	4/29/14	8.5				

**TOTAL** Total is the sum of each column separately

**Job**

**Job Times**

Formation Name	Date	Time	Time Zone
<b>Formation Depth (MD) Top</b> 0 FT. <b>Bottom</b> 1356 FT.	<b>Called Out</b> 28 - Apr - 2014	00:00	MST
<b>Form Type</b> BHST	<b>On Location</b> 28 - Apr - 2014	05:00	MST
<b>Job depth MD</b> 1356. ft <b>Job Depth TVD</b> 1356. ft	<b>Job Started</b> 29 - Apr - 2014	06:13	MST
<b>Water Depth</b> <b>Wk Ht Above Floor</b> 5. ft	<b>Job Completed</b> 29 - Apr - 2014	07:15	MST
<b>Perforation Depth (MD) From</b> <b>To</b>	<b>Departed Loc</b> 29 - Apr - 2014	08:30	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				.	1525.		
SURFACE CASING	Unknown		9.625	9.001	32.3		H-40	.	1356.		

**Tools and Accessories**

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	9.625"	1	HES
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 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	4	
2	VariCem GJ1 Lead Cement	VARICEM (TM) CEMENT (452009)	230.0	sacks	12.3	2.38	13.75	8	13.75
13.75 Gal		FRESH WATER							
3	VariCem GJ1 Tail Cement	VARICEM (TM) CEMENT (452009)	160.0	sacks	12.8	2.11	11.75	6	11.75
11.75 Gal		FRESH WATER							
4	Fresh Water Displacement		116.00	bbl	8.33	.0	.0	10.0	
Calculated Values			Pressures			Volumes			
Displacement	103.3	Shut In: Instant		Lost Returns	0	Cement Slurry	157.8	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	20	Actual Displacement	103.3	Treatment	
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	281.1
<i>Rates</i>									
Circulating	RIG	Mixing	7	Displacement	10	Avg. Job	8.5		
Cement Left In Pipe	Amount	44 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					

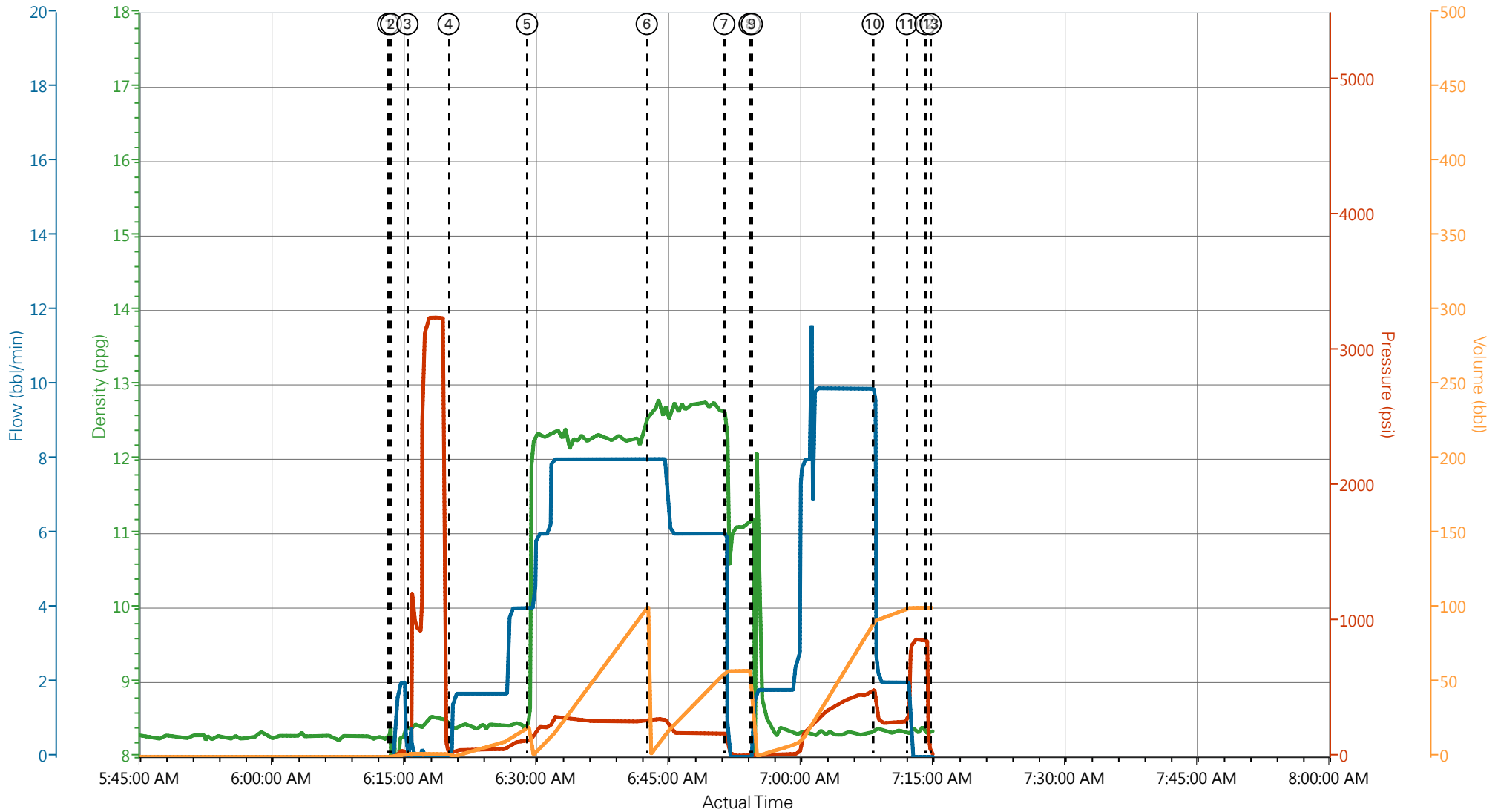
*The Road to Excellence Starts with Safety*

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<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 39.446 deg. OR N 39 deg. 26 min. 44.149 secs.		<b>Long:</b> W 108.064 deg. OR W -109 deg. 56 min. 7.822 secs.	
<b>Contractor:</b> H&P		<b>Rig/Platform Name/Num:</b> H&P 318	
<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	04/28/2014 00:00							
Depart Yard Safety Meeting	04/28/2014 03:50							ATTENDED BY ALL HES CREW
Crew Leave Yard	04/28/2014 04:00							
Arrive At Loc	04/28/2014 05:00							RIG PULLING DP
Assessment Of Location Safety Meeting	04/29/2014 04:30							ATTENDED BY ALL HES CREW
Other	04/29/2014 04:40							SPOT IN EQUIPMENT
Pre-Rig Up Safety Meeting	04/29/2014 04:50							ATTENDED BY ALL HES CREW
Rig-Up Equipment	04/29/2014 05:00							
Pre-Job Safety Meeting	04/29/2014 05:50							ATTENDED BY ALL HES CREW, RIG CREW AND COMPANY REP
Start Job	04/29/2014 06:13							TP 1356' , TD 1356' , SJ 44' , FC 1312' , MW 9.6 PPG, CASING 9.625" , 32.3 #, H-40 , HOLE 13.5" , CENTRALIZERS, RIG CIRCULATED FOR 1.5 HR'S PRIOR TO JOB
Other	04/29/2014 06:13		2	2			45.0	FILL LINES
Test Lines	04/29/2014 06:15							PRESSURED UP TO 3250 PSI, PRESSURE HELD
Pump Spacer	04/29/2014 06:20		4	20			115.0	FRESH WATER

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Lead Cement	04/29/2014 06:29		8	97.5			310.0	230 SKS, VERICEM MIXED AT 12.3 PPG, 2.38 YIELD, 13.75 GAL/SK
Pump Tail Cement	04/29/2014 06:42		6	60.1			190.0	160 SKS, VERICEM MIXED AT 12.8 PPG, 2.11 YIELD, 11.75 GAL/SK
Shutdown	04/29/2014 06:51							
Drop Top Plug	04/29/2014 06:54							PLUG LAUNCHED
Pump Displacement	04/29/2014 06:54		10	103.3			500.0	FRESH WATER
Slow Rate	04/29/2014 07:09		2	10			270.0	
Bump Plug	04/29/2014 07:12						870.0	PLUG LANDED
Check Floats	04/29/2014 07:14							FLOATS HELD
End Job	04/29/2014 07:15							GOOD CIRCULATION THROUGH OUT JOB, PIPE NOT MOVED DURING JOB, 20 BBLS CEMENT TO SURFACE
Post-Job Safety Meeting (Pre Rig-Down)	04/29/2014 07:20							ATTENDED BY ALL HES CREW
Rig-Down Equipment	04/29/2014 07:25							
Depart Location Safety Meeting	04/29/2014 08:20							ATTENDED BY ALL HES CREW
Crew Leave Location	04/29/2014 08:30							THANK YOU FOR USING HALLIBURTON CEMENT, ERIC CARTER AND CREW.

# WPX - GM 422-13 - SURFACE



DH Density (ppg) 8.32 PS Pump Press (psi) 12 Comb Pump Rate (bbbl/min) 0 Pump Stg Tot (bbl) 100.3

- ① Start Job 5.4;-1;0;0
- ② Other 8.28;-1;0;0
- ③ Test Lines 8.37;24;0.4;2.1
- ④ Pump Spacer 1 8.37;24;0.4;0
- ⑤ Pump Lead Cement 10.16;119;4;0.1
- ⑥ Pump Tail Cement 12.63;272;8;1.4
- ⑦ Shutdown 11.03;95;0;57.9
- ⑧ Drop Top Plug 11.21;9;0;57.9
- ⑨ Pump Displacement 10.34;17;1.8;0.2
- ⑩ Slow Rate 8.39;367;2.5;92.5
- ⑪ Bump Plug 8.32;735;0;100.3
- ⑫ Check Floats 8.3;112;0;100.3
- ⑬ End Job 8.31;12;0;100.3

**HALLIBURTON** | iCem® Service

Created: 2014-04-28 12:15:22, Version: 3.0.121

[Edit](#)

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 4/29/2014 5:00:31 AM

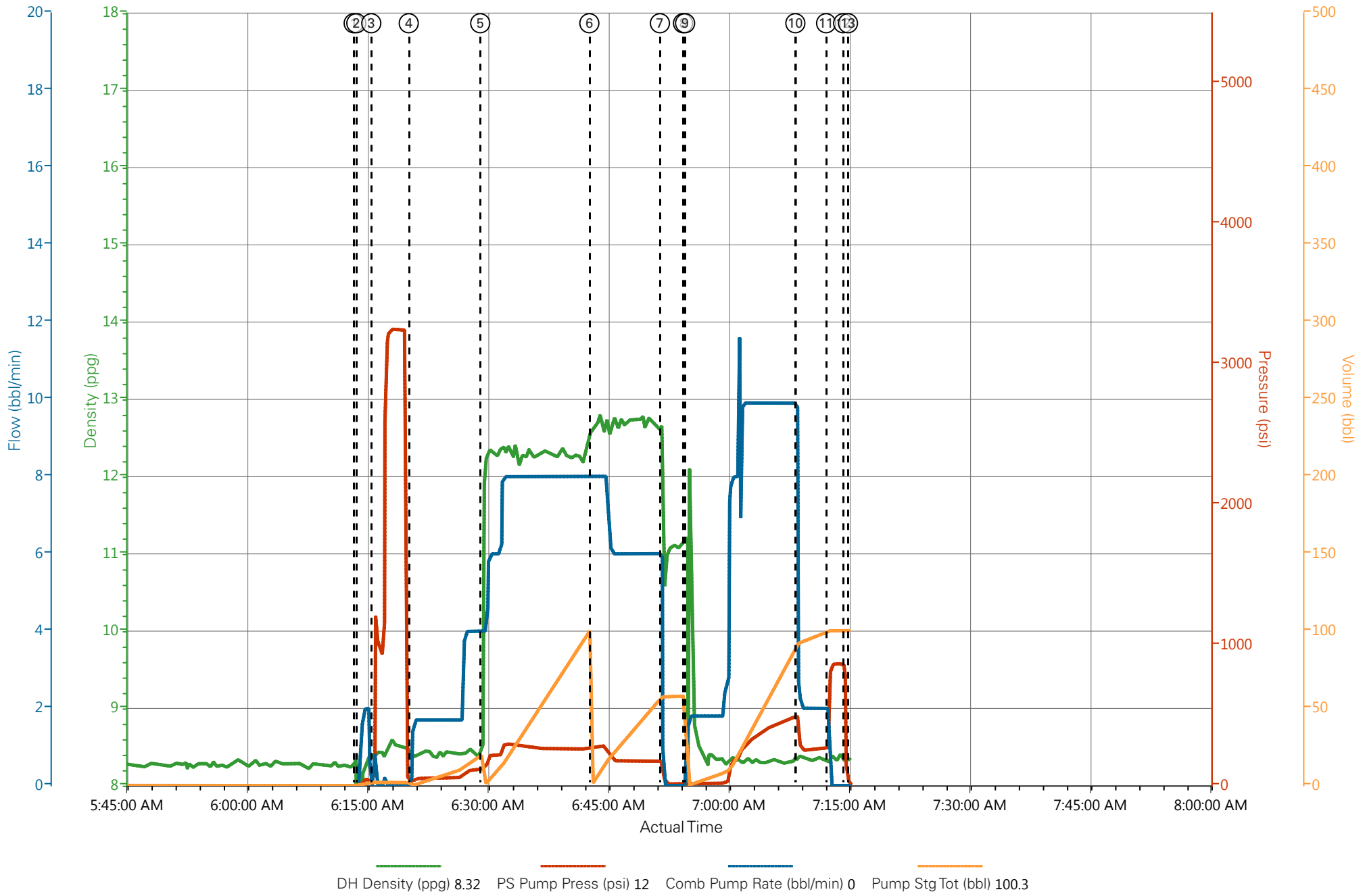
Well: GM 422-13

Representative: RON TOWERS

Sales Order #: 901304727

ERIC CARTER: DAVID CAMPBELL/ELITE 3

# WPX - GM 422-13 - SURFACE



# HALLIBURTON

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## Water Analysis Report

Company: WPX  
Submitted by: ERIC CARTER  
Attention: J.Trout  
Lease: H&P 318  
Well #: GM 422-13

Date: 5/2/2014  
Date Rec.: 5/2/2014  
S.O.#: 901304727  
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>8</b>
Potassium (K)	<i>5000</i>	<b>0 Mg / L</b>
Hrdness	<i>500</i>	<b>300 Mg / L</b>
Iron (FE2)	<i>300</i>	<b>0 Mg / L</b>
Chlorides (Cl)	<i>3000</i>	<b>0 Mg / L</b>
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>&lt;200 Mg / L</b>
Temp	<i>40-80</i>	<b>54 Deg</b>
Total Dissolved Solids		<b>490 Mg / L</b>

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 u

<b>Sales Order #:</b> 901304727	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 4/29/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> RON TOWERS		<b>API / UWI: (leave blank if unknown)</b> 05-045-22264
<b>Well Name:</b> GM		<b>Well Number:</b> 422-13
<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	4/29/2014
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	RON TOWERS
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> GM		<b>Well Number:</b> 422-13
<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>	4/29/2014
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
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

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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	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	96
<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