

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

GM 322-13

H&P 318

# **Post Job Summary**

## **Cement Surface Casing**

Date Prepared: 05/09/2014  
Job Date: 05/05/2014

Submitted by: Tony Eschete - Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3273414	Quote #:	Sales Order #: 0901325418
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: W. C. Wilson	
Well Name: C&C ENERGY	Well #: GM 322-13	API/UWI #: 05-045-22270-00	
Field: GRAND VALLEY	City (SAP): PAR	County/Parish: GARFIELD	State: COLORADO
Legal Description: SW SW-12-7S-96W-269FSL-1022FWL			
Contractor:		Rig/Platform Name/Num: H&P 318	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HAM2616		Srcv Supervisor: Dustin Hyde	
<b>Job</b>			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1542.6ft Job Depth TVD
Water Depth	Wk Ht Above Floor
Perforation Depth (MD)	From To

### Well Data

Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Open Hole Section			13.5				0	1542.6		0
Casing		9.625	9.001	32.3	8 RD	H-40	0	1542.6	0	0

### Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625			1542.6	Top Plug	9.625	1	HES
Float Shoe	9.625				Bottom Plug	9.625		HES
Float Collar	9.625				SSR plug set	9.625		HES
Insert Float	9.625				Plug Container	9.625	1	HES
Stage Tool	9.625				Centralizers	9.625		HES

### 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/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water	Fresh Water	30	bbl	8.34			4		
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	Lead Cement	Type I-II Cement	260	sack	12.3	2.38		8	13.77	
0.25 lbm			POLY-E-FLAKE (101216940)							

2 %	CAL-SEAL 60, BULK (100064022)									
5.64 lbm	SALT, BULK (100003695)									
0.25 %	D-AIR 5000, 50 LB SACK (102068797)									
2 %	ECONOLITE (100001580)									
13.72 Gal	FRESH WATER									
94 lbm	TYPE I / II CEMENT, BULK (101439798)									
0.30 %	VERSASET, 55 LB SK (101376573)									
<b>Fluid #    Stage Type    Fluid Name    Qty    Qty UoM    Mixing Density lbm/gal    Yield ft3/sack    Mix Fluid Gal    Rate bbl/min    Total Mix Fluid Gal</b>										
3	Tail Cement	VARICEM (TM) CEMENT	160	sack	12.8	2.11		8	11.77	
11.71 Gal		FRESH WATER								
<b>Fluid #    Stage Type    Fluid Name    Qty    Qty UoM    Mixing Density lbm/gal    Yield ft3/sack    Mix Fluid Gal    Rate bbl/min    Total Mix Fluid Gal</b>										
4	Displacement	Displacement	117.9	bbbl	8.34			10		
<b>Cement Left In Pipe</b>		<b>Amount</b>	43.95 ft		<b>Reason</b>			Shoe Joint		
<b>Comment</b>										

# Summary Report



Sales Order #: 0901325418  
WO #: 0901325418  
PO/AFE #: NA

Crew: \_\_\_\_\_

Job Start Date: 5/5/2014

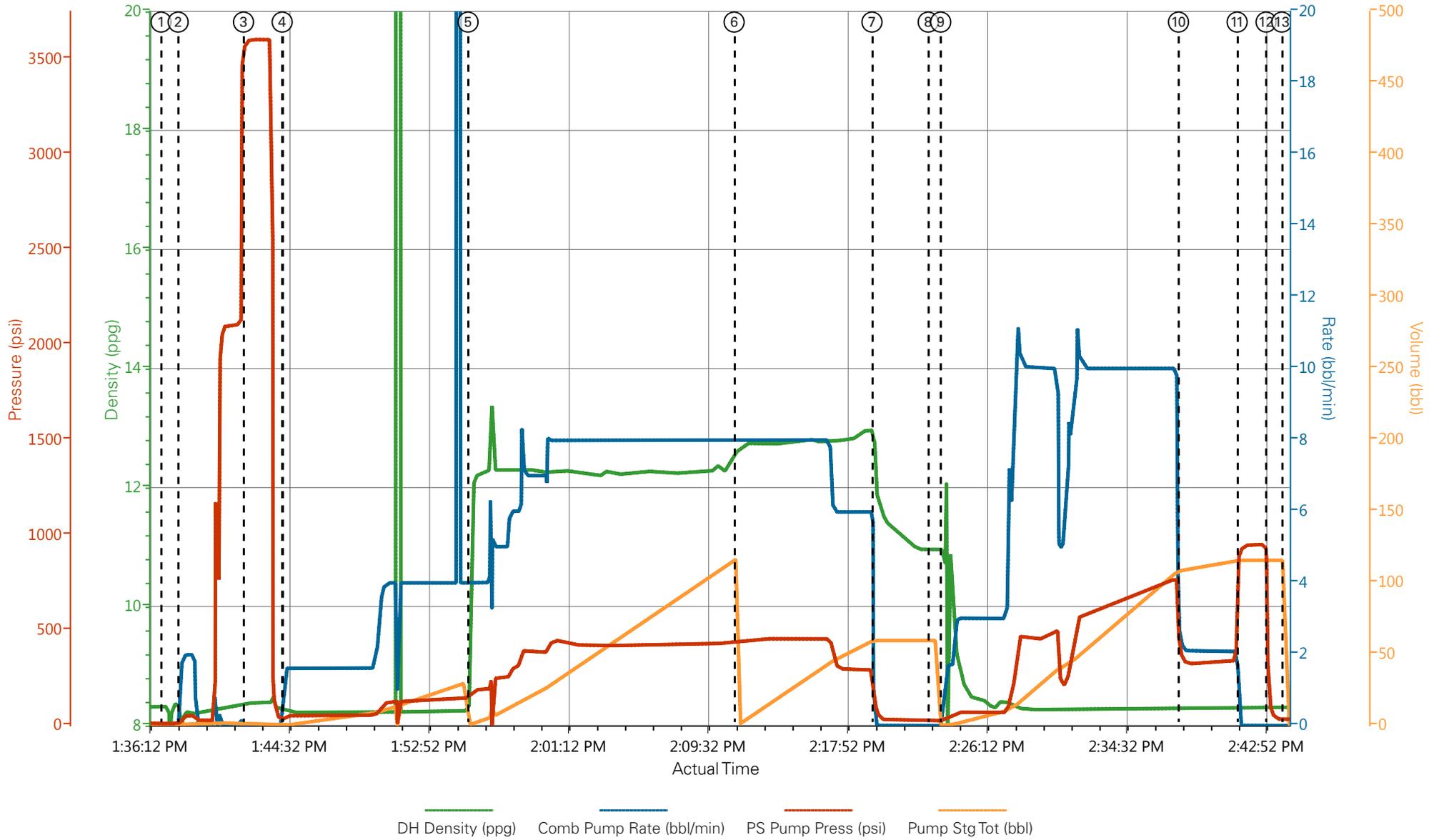
<b>Customer:</b>	WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	<b>Field:</b>	GRAND VALLEY	<b>Job Type:</b>	CMT SURFACE CASING BOM
<b>UWI / API Number:</b>	05-045-22270-00	<b>County/Parish:</b>	GARFIELD	<b>Service Supervisor:</b>	Dustin Hyde
<b>Well Name:</b>	C&C ENERGY	<b>State:</b>	COLORADO		
<b>Well No:</b>	GM 322-13	<b>Latitude:</b>	39.445603	<b>Cust Rep Name:</b>	W. C. Wilson
		<b>Longitude:</b>	-108.064519	<b>Cust Rep Phone #:</b>	
		<b>Sect / Twn / Rng:</b>	12/7/96		

Remarks:		
<i>The Information Stated Herein Is Correct</i>	Customer Representative Signature	Date
	Customer Representative Printed Name	

3.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Pass-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pump Stage Total (bbl)	Comment
Event	1	Start Job	Start Job	5/5/2014	13:37:03	COM6					O/L time 1000 - TP 1542.16', SJ 43.95', 13 1/2" OH, 9 5/8" 32.3# csg, Mud 9.2 ppg
Event	2	Prime Pumps	Prime Lines	5/5/2014	13:38:04	USER	44	8.38	2.0	2.0	
Event	3	Test Lines	Test Lines	5/5/2014	13:41:58	COM6	3604				Pressure held well
Event	4	Pump Spacer 1	Pump H2O Spacer	5/5/2014	13:44:16	COM6	54	8.27	4.0	30.0	Fresh Water
Event	5	Pump Lead Cement	Pump Lead Cement	5/5/2014	13:55:23	COM6	404	12.3	8.0	110.2	260 sks, 12.3 ppg, 2.38 yield, 13.77 gal/sk
Event	6	Pump Tail Cement	Pump Tail Cement	5/5/2014	14:11:16	COM6	444	12.8	8.0	60.1	160 sks, 12.8 ppg, 2.11 yield, 11.77 gal/sk
Event	7	Shutdown	Shutdown/Wash Up	5/5/2014	14:19:30	COM6					Wash up on top of plug
Event	8	Drop Top Plug	Drop Top Plug	5/5/2014	14:22:51	COM6					
Event	9	Pump Displacement	Pump Displacement	5/5/2014	14:23:36	COM6	770	8.35	10.0	117.9	Fresh Water
Event	10	Other	Slow Rate	5/5/2014	14:37:48	COM6	326	8.29	2.0	10.0	
Event	11	Bump Plug	Bump Plug	5/5/2014	14:41:18	COM6	345				40 bbls cement to surface
Event	12	Other	Check Floats	5/5/2014	14:43:02	COM6	913				Floats held - 1 bbl flowback
Event	13	End Job	End Job	5/5/2014	14:43:59	COM6					80 lbs sugar used

# WPX - GM - 322-13 - 9 5/8 SURFACE



- |                               |                                    |                                    |                                |
|-------------------------------|------------------------------------|------------------------------------|--------------------------------|
| ① Start Job 8.32;0;13;0       | ④ Pump H2O Spacer 8.27;1.6;44;0.2  | ⑦ Shutdown/Wash Up 12.2;0;109;59.6 | ⑩ Slow Rate 8.29;2.4;365;108.7 |
| ② Prime Lines 7.84;1.7;23;0.1 | ⑤ Pump Lead Cement 10.63;4;160;1.2 | ⑧ Drop Top Plug 10.98;0;27;59.6    | ⑪ Bump Plug 8.31;0;922;115.7   |
| ③ Test Lines 8.38;0;3592;1.8  | ⑥ Pump Tail Cement 12.62;8;443;0.1 | ⑨ Pump Displacement 10.93;0.8;28;0 | ⑫ Check Floats 8.3;0;136;115.7 |

▼ **HALLIBURTON** | iCem® Service

Created: 2014-05-05 13:04:41, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 5/5/2014 1:07:27 PM

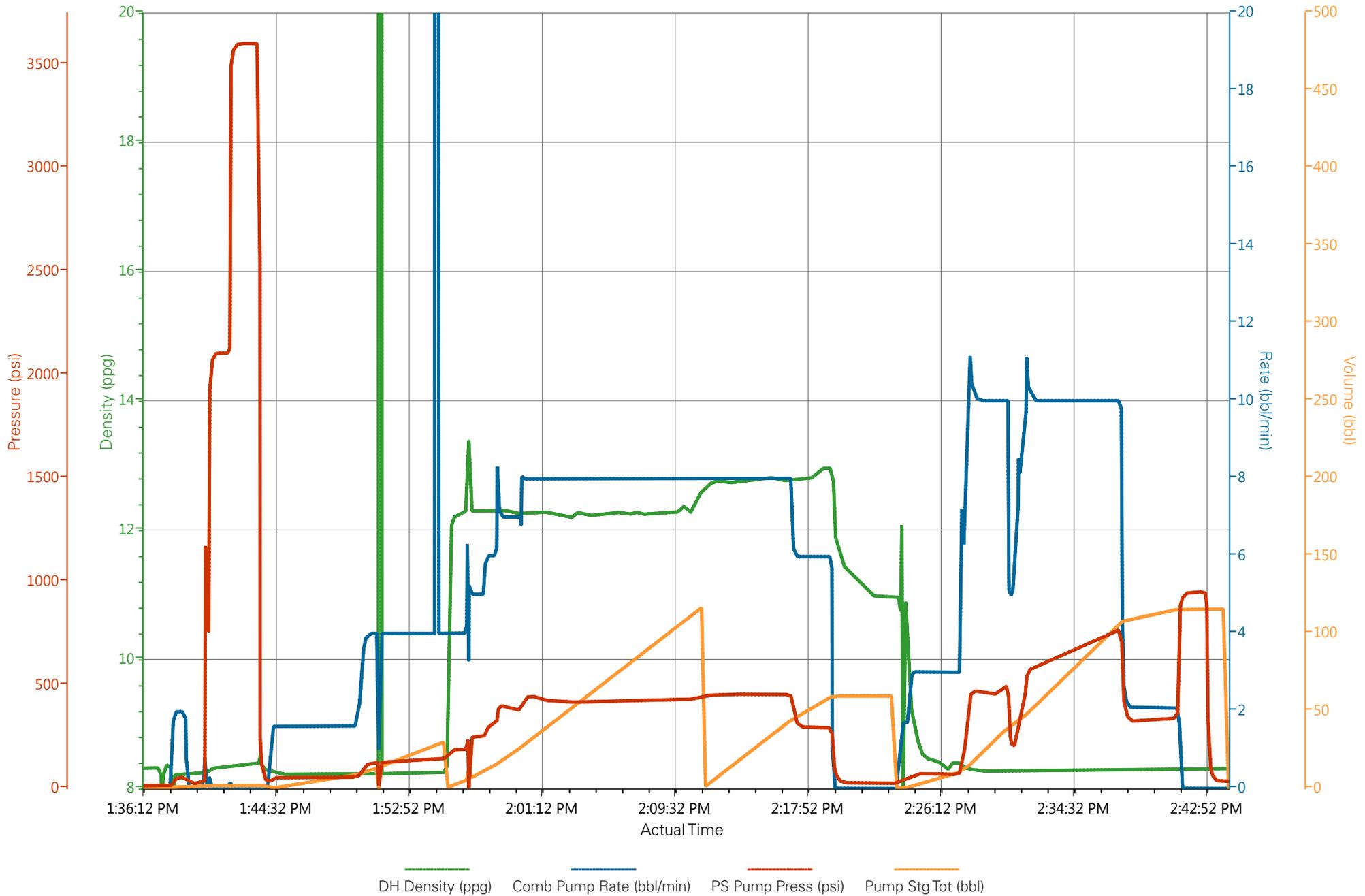
Well: GM 322-13

Representative: W. C. WILSON

Sales Order #: 901325418

ELITE #7 : D. HYDE / R. EICKOFF

WPX - GM - 322-13 - 9 5/8 SURFACE



DH Density (ppg) Comb Pump Rate (bbl/min) PS Pump Press (psi) Pump Stg Tot (bbl)

# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: D. HYDE  
Attention: J.TROUT  
Lease: GM  
Well #: 322-13

Date: 5/5/2014  
Date Rec.: 5/5/2014  
S.O.#: 901325418  
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>6.5</b>
Potassium (K)	<i>5000</i>	<b>200</b> Mg / L
Calcium (Ca)	<i>500</i>	<b>250</b> Mg / L
Iron (FE2)	<i>300</i>	<b>0</b> Mg / L
Chlorides (Cl)	<i>3000</i>	<b>0</b> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>&lt;200</b> Mg / L
Temp	<i>40-80</i>	<b>86</b> Deg
Total Dissolved Solids		<b>280</b> Mg / L

Respectfully: ED DEUSSEN

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

<b>Sales Order #:</b> 0901325418	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 5/5/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b>		<b>API / UWI: (leave blank if unknown)</b> 05-045-22270-00
<b>Well Name:</b> C&C ENERGY		<b>Well Number:</b> 0080358184
<b>Well Type:</b> DIRECTIONAL GAS	<b>Well Country:</b> USA	
<b>H2S Present:</b> No	<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	5/5/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB43597
Customer Participation	Did the customer participate in this survey? (Y/N)	No
Customer Representative	Enter the Customer representative name	
HSE	Was our HSE performance satisfactory? Circle Y or N	
Equipment	Were you satisfied with our Equipment? Circle Y or N	
Personnel	Were you satisfied with our people? Circle Y or N	
Customer Comment	Customer's Comment	

<b>CUSTOMER SIGNATURE</b>
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### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b>	5/5/2014
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>	2
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> No	<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	98
<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