

WPX Energy Rocky Mountain LLC- EBUS

GM 542-28

**H&P 318**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 12/28/2014  
Job Date: 12/23/2014

Submitted by: Evan Russell – Grand Junction Cement Engineer

## The Road to Excellence Starts with Safety

Sold To #: 300721		Ship To #: 3565529		Quote #: 0021957629		Sales Order #: 0901963279	
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS				Customer Rep: W.C. WILSON			
Well Name: WPX GM			Well #: 542-28			API/UWI #: 05-045-22504-00	
Field: GRAND VALLEY		City (SAP): PARACHUTE		County/Parish: GARFIELD		State: COLORADO	
Legal Description: NE SW-28-6S-96W-1511FSL-2353FWL							
Contractor: H & P DRLG				Rig/Platform Name/Num: H & P 318			
Job BOM: 7521							
Well Type: DIRECTIONAL GAS							
Sales Person: HALAMERICA\HB50180				Srvc Supervisor: Javier Castillo			

### Job

Formation Name				
Formation Depth (MD)	Top	Surface	Bottom	1437ft
Form Type			BHST	
Job depth MD	1437ft			Job Depth TVD
Water Depth			Wk Ht Above Floor	3ft
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	1437		0
Casing	New	9.625	8.921	32.3			0	1437		0

### Tools and Accessories

Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	9.625	1	WTF	1437		Top Plug	9.625	1	HES
Float Shoe						Bottom Plug			
Float Collar	9.625	1	WTF	1393		SSR plug set			
Insert Float						Plug Container	9.625	1	HES
Stage Tool						Centralizers	9.625	9	WTF

### 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	20	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	VariCem GJ5	VARICEM (TM) CEMENT	185	sack	12.3	2.45		8	14.17

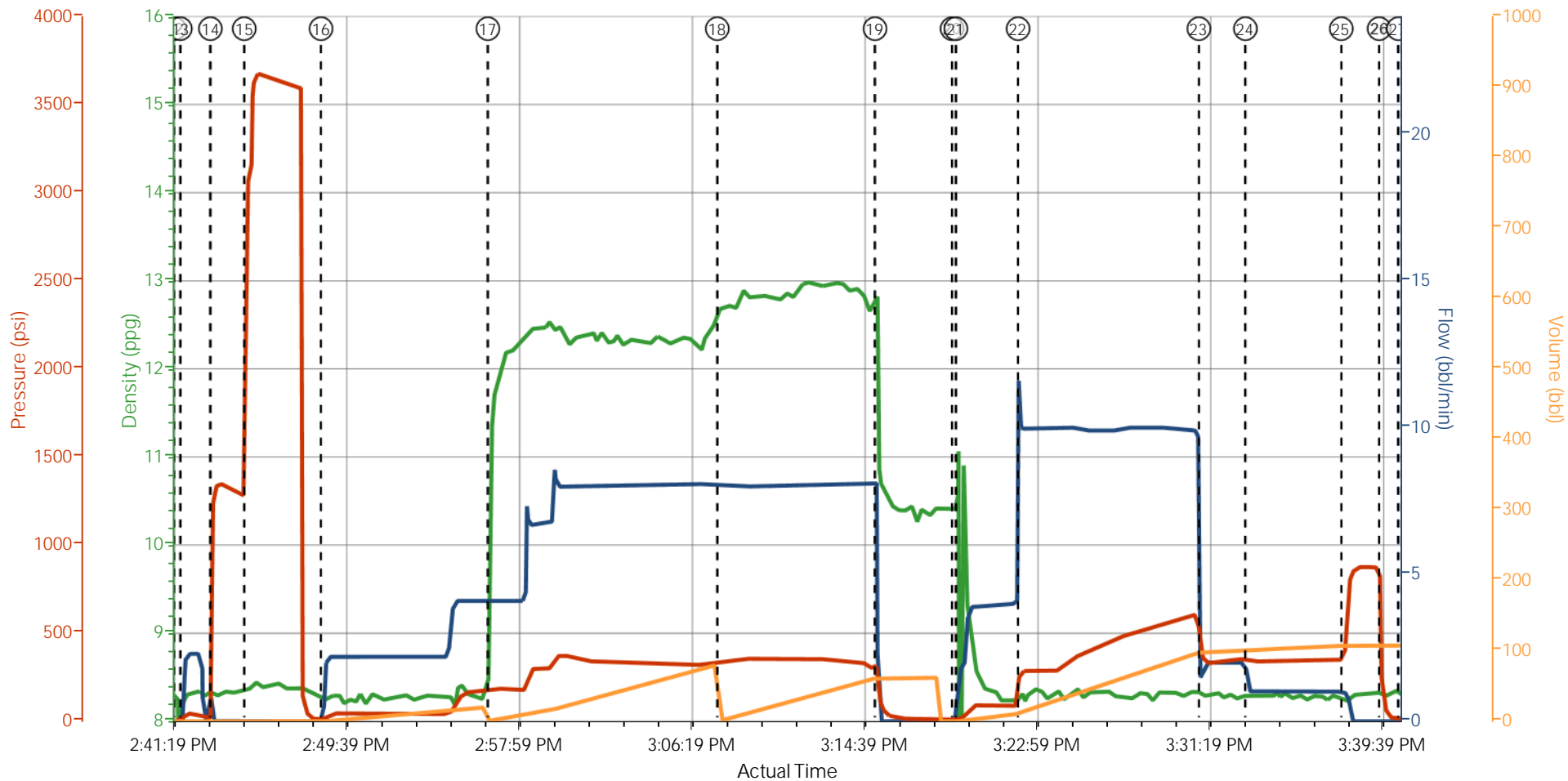
14.10 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	VariCem GJ5	VARICEM (TM) CEMENT	170	sack	12.8	2.18		8	12.11
12.05 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Fresh Water Displacement	Fresh Water Displacement	109.6	bbl	8.34			10	
Cement Left In Pipe		Amount	44 ft		Reason		Shoe Joint		
Comment									

## 1.1 Job Event Log

Graph Label	Date	Time	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comment
CALL OUT	12/23/2014	02:00:00					ON LOCATION AT 07:30 HRS
LEAVE YARD SAFETY MEETING	12/23/2014	04:50:00					
CREW LEAVE YARD	12/23/2014	05:00:00					
ARRIVE ON LOCATION	12/23/2014	06:00:00					RIG WAS PULLING OUT DRILL PIPE / UNABLE TO STAGE TRUCKS DUE TO SMALL LOCATION AND CASING CREW BLOCKING THE WAY. PARKED TRUCKS AT THE ENTRANCE OF LOCATION.
RUN CASING	12/23/2014	09:15:00					RIG BEGAN TO RUN CASING IN THE HOLE
RIG LANDED CASING	12/23/2014	12:30:00					
STAGE TRUCKS	12/23/2014	13:00:00					STAGED CEMENT TRUCKS AFTER THE CASING CREW CLEARED LOCATION
RIG UP SAFETY MEETING	12/23/2014	13:30:00					
RIG UP	12/23/2014	13:35:00					1-ELITE, 2-660s, 2" IRON, BALE BASKET, PLUG CONTAINER, AND QUICK CONNECT
RIG UP COMPLETE	12/23/2014	14:15:00					
PRE-JOB SAFETY MEETING	12/23/2014	14:20:00					ALL HES PERSONEL AND RIG CREW
START JOB	12/23/2014	14:41:32					SET AT 1437', OH-13.5", SJ- 44', FC-1393', CSG-9.625", 32.3#, H-40, MUD-9.6 PPG, FV-100, PV-19, YP-31, pH- 8.3, TEMP-85
FILL LINES	12/23/2014	14:41:49	8.33 PPG	2 BPM	55 PSI	2 BBLS	FRESH WATER

STALL OUT	12/23/2014	14:43:16						TESTED AT 1340 PSI
TEST LINES	12/23/2014	14:44:54						TESTED AT 3680 PSI
WATER SPACER	12/23/2014	14:48:36	8.33 PPG	4 BPM	118 PSI	20 BBLS		FRESH WATER
LEAD CEMENT	12/23/2014	14:56:39	12.3 PPG	8 BPM	340 PSI	80 BBLS		185 SKS, 12.3 PPG, 2.45 FT3/SK, 14.17 GAL/SK
TAIL CEMENT	12/23/2014	15:07:43	12.8 PPG	8 BPM	330 PSI	66 BBLS		170 SKS, 12.8 PPG, 2.18 FT3/SK, 12.11 GAL/SK
SHUTDOWN	12/23/2014	15:15:19						GOOD CIRCULATION THROUGH OUT THE JOB
DROP TOP PLUG	12/23/2014	15:19:02						PLUG DROP VERIFIED BY COMPANY-MAN AND DRILLER
DISPLACEMENT	12/23/2014	15:19:13	8.33 PPG	10 BPM	609 PSI	99 BBLS		FRESH WATER / 1ST 10 BBLS PUMPED AT 4 BPM WITH 430 PSI
SLOW RATE	12/23/2014	15:30:57	8.33 PPG	2 BPM	355 PSI	5 BBLS		GOT CEMENT TO SURFACE WITH 70 BBLS INTO DISPLACEMENT
SLOW RATE	12/23/2014	15:33:11	8.33 PPG	1 BPM	345 PSI	5.6 BBLS		
BUMP PLUG	12/23/2014	15:37:49			874 PSI	TOTAL DISP. 109.6 BBLS		CIRCULATED 25 BBLS / 58 SKS OF CEMENT TO SURFACE
CHECK FLOATS	12/23/2014	15:39:38						FLOATS HELD WITH 0.5 BBL FOW BACK
END JOB	12/23/2014	15:40:34						USED 20 LBS OF SUGAR
RIG DOWN SAFETY MEETING	12/23/2014	15:50:00						
RIG DOWN	12/23/2014	15:55:00						
RIG DOWN COMPLETE	12/23/2014	17:00:01						
DEPART LOCATION SAFETY MEETING	12/23/2014	17:15:01						NO INJURIES TO REPORT AFTER THE JOB
CREW LEAVE LOCATION	12/23/2014	17:30:01						
THANK YOU	12/23/2014	17:31:00						THANK YOU FOR YOUR BUSINESS FROM JAVIER CASTILLO AND CREW

# WPX GM 542-28 SURFACE CASING



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

- |  |  |   |   |   |
|--|--|---|---|---|
| • CALL OUT <span style="color: green;">n/a;n/a;n/a;n/a</span>                  | • RUN CASING <span style="color: green;">n/a;n/a;n/a;n/a</span>            | • RIG UP <span style="color: green;">n/a;n/a;n/a;n/a</span>             | • FILL LINES <span style="color: green;">8.27;1.7;23;0.1</span>   | • LEAD CEMENT <span style="color: green;">11.3</span> |
| • LEAVE YARD SAFETY MEETING <span style="color: green;">n/a;n/a;n/a;n/a</span> | • RIG LANDED CASING <span style="color: green;">n/a;n/a;n/a;n/a</span>     | • RIG UP COMPLETE <span style="color: green;">8.35;0;20;15.8</span>     | • STALL OUT <span style="color: green;">8.29;0;1260;2.1</span>    | • TAIL CEMENT <span style="color: green;">12.6</span> |
| • CREW LEAVE YARD <span style="color: green;">n/a;n/a;n/a;n/a</span>           | • STAGE HESTRUCKS <span style="color: green;">n/a;n/a;n/a;n/a</span>       | • PRE-JOB SAFETY MEETING <span style="color: green;">8.26;0;-2;0</span> | • TEST LINES <span style="color: green;">8.4;0;3070;2.1</span>    | • SHUTDOWN <span style="color: green;">11.3;0</span>  |
| • ARRIVE ON LOCATION <span style="color: green;">n/a;n/a;n/a;n/a</span>        | • RIG UP SAFETY MEETING <span style="color: green;">n/a;n/a;n/a;n/a</span> | • START JOB <span style="color: green;">8.07;0;-1;0</span>              | • WATER SPACER <span style="color: green;">8.29;1.7;15;0.1</span> | • 20 DROP TOP PLUG 1                                  |

▼ HALLIBURTON | iCem® Service

Created: 2014-12-23 13:49:16, Version: 3.0.121

Edit

Customer : WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date : 12/23/2014 1:50:46 PM

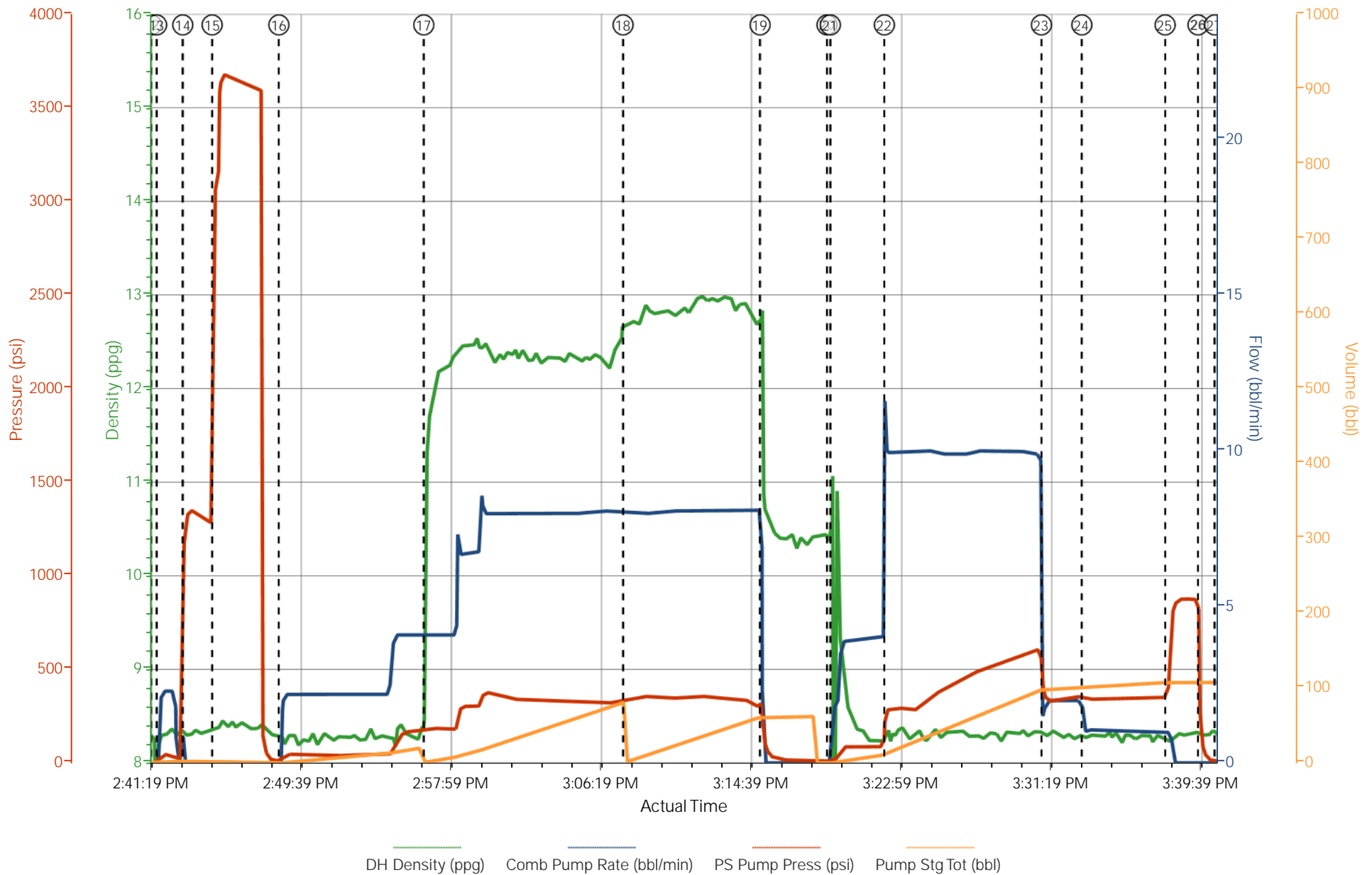
Well : GM 542-28

Representative: W.C. WILSON

Sales Order #: 901963279

ELITE #2: J. CASTILLO / PAUL SALAZAR

# WPX GM 542-28 SURFACE CASING



# HALLIBURTON

## Water Analysis Report

Company: WPX

Submitted by: JAVIER CASTILLO

Attention: Chuck Ross

Lease: GM

Well #: 542-28

Date: 12/23/2014

Date Rec.: 12/23/2014

S.O.#: 901963279

Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>200</b> Mg / L
Calcium (Ca)	<i>500</i>	<b>120</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>200</b> Mg / L
Chlorine (Cl <sub>2</sub> )		<b>0</b> Mg / L
Temp	<i>40-80</i>	<b>80</b> Deg
Total Dissolved Solids		<b>510</b> Mg / L

Respectfully: JAVIER CASTILLO

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> 0901963279	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 12/23/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> W.C. WILSON		<b>API / UWI: (leave blank if unknown)</b> 05-045-22504-00
<b>Well Name:</b> WPX GM		<b>Well Number:</b> 0080644738
<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	12/23/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB85312
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	W.C. 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	

CUSTOMER SIGNATURE

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### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b> The date the survey was conducted	12/23/2014

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.	11
<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.	11
<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> 0901963279	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 12/23/2014
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<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

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	95
<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	95
<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