

WPX Energy Rocky Mountain LLC - EBUS

GM 433-28

**H&P 318**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 12/27/2014

Job Date: 12/15/2014

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

*The Road to Excellence Starts with Safety*

Sold To #: 300721	Ship To #: 3565584	Quote #:	Sales Order #: 0901935846
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Harry Samson	
Well Name: WPX GM	Well #: 433-28	API/UWI #: 05-045-22508-00	
Field: GRAND VALLEY	City (SAP): PARACHUTE	County/Parish: GARFIELD	State: COLORADO
Legal Description: NE SW-28-6S-96W-1503FSL-2346FWL			
Contractor: H & P DRLG		Rig/Platform Name/Num: H & P 318	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srcv Supervisor: Carlton Kukus	
<b>Job</b>			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1111-ε Job Depth TVD 1111 ft
Water Depth	Wk Ht Above Floor 5ft
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
Casing	0	9.625	9.001	32.3	8 RD	H-40	0	1486	0	1486
Open Hole Section			13.5				0	1500	0	1500

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make	
Guide Shoe	9.625	1		1486	Top Plug	9.625	1	HES	
Float Shoe	9.625	1			Bottom Plug	9.625		HES	
Float Collar	9.625	1		1441	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	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	210	sack	12.3	2.45		8	14.17	

FRESH WATER										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
3	VariCem GJ5	VARICEM (TM) CEMENT	170	sack	12.8	2.18		8	12.11	
FRESH WATER										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
4	Fresh Water Displacement	Fresh Water Displacement	113.7	bbl	8.34			10		
<b>Cement Left In Pipe</b>		<b>Amount</b> 45 ft	<b>Reason</b>				Shoe Joint			
<b>Comment</b> 35 BBLS OF CEMENT TO SURFACE, RIG USED 40 POUNDS OF SUGAR										

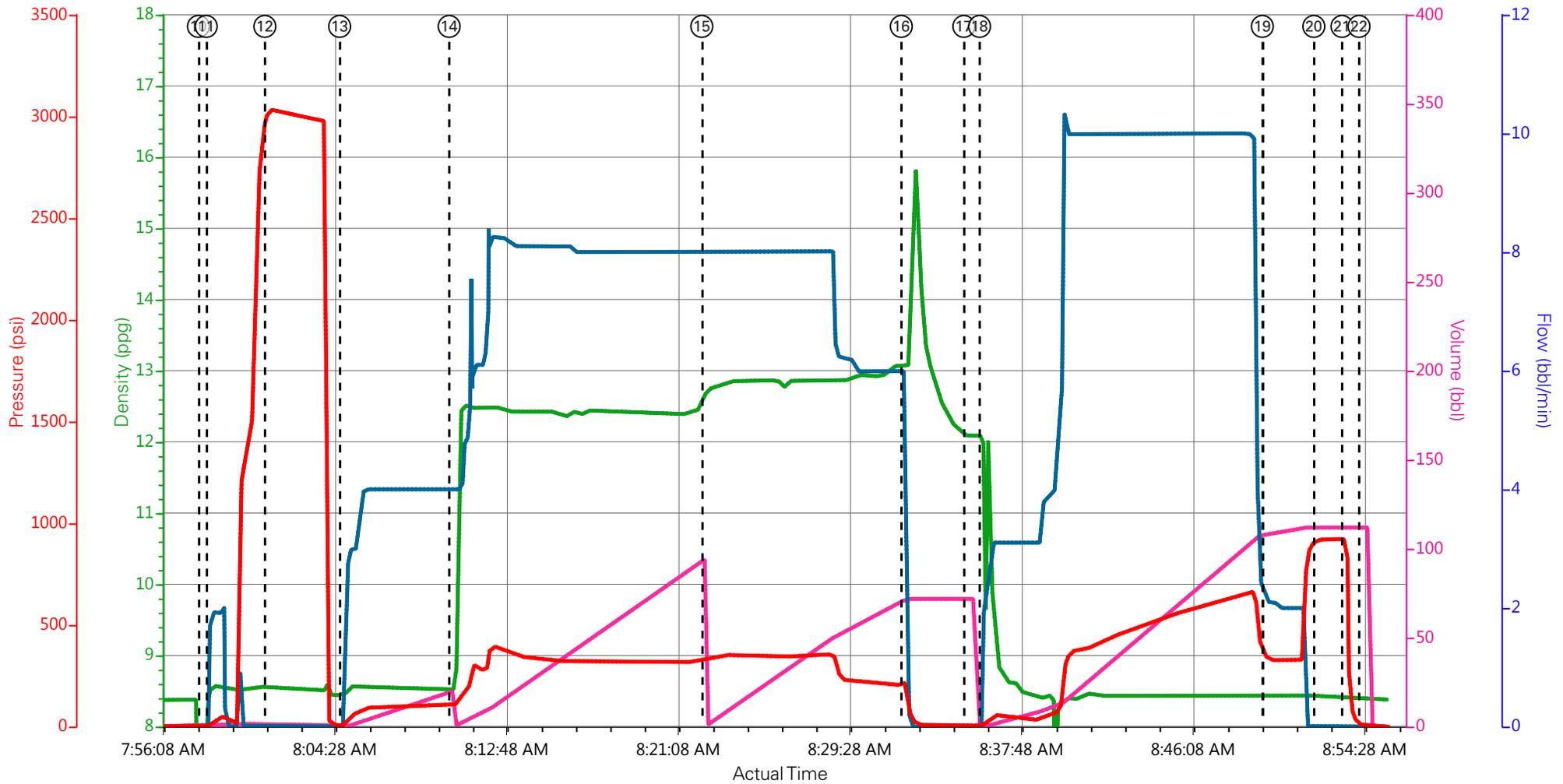
## 1.0 Real-Time Job Summary

### 1.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comb Pump Rate (bbl/min)	Comments
Event	1	Call Out	12/14/2014	22:00:00	USER					HES CREW WAS ROLLED FROM PREVIOUS JOB
Event	2	Pre-Convoy Safety Meeting	12/14/2014	22:45:00	USER					HES SUPERVISOR AND BULK OPERATORS, PUMP TRUCK STAYED IN PARACHUTE
Event	3	Crew Leave Yard	12/14/2014	23:00:00	USER					1-F-550 PICKUP, 2-660 BULK TRUCKS
Event	4	Arrive At Loc	12/15/2014	00:01:00	USER					HES ARRIVED 3 HOURS EARLY
Event	5	Assessment Of Location Safety Meeting	12/15/2014	00:15:00	USER					RIG WAS JUST STARTING TO PULL DRILL PIPE, HES WAITED TO SPOT EQUIPMENT
Event	6	Pre-Rig Up Safety Meeting	12/15/2014	06:30:00	USER					ALL HES CREW
Event	7	Rig-Up Equipment	12/15/2014	06:45:00	USER					RIG UP IRON TO THE STAND PIPE, WATER HOSES TO THE UPRIGHT AND BULK TRUCKS UP TO THE PUMP TRUCK
Event	8	Rig-Up Completed	12/15/2014	07:00:00	USER					COMPLETED
Event	9	Pre-Job Safety Meeting	12/15/2014	07:15:00	USER					ALL HES AND RIG CREW TO DISCUSS JOB PROCEDURES
Event	10	Start Job	12/15/2014	07:58:00	COM5					TD: 1500FT TP: 1486FT SJ: 45.08FT OH: 13.5 CSG: 9.625 32.3# H-40 MUD WT: 9.5 VISC: 70
Event	11	Prime Pumps	12/15/2014	07:58:22	USER	8.34	40	2	2	FILL LINES TO PRESSURE TEST
Event	12	Test Lines	12/15/2014	08:01:13	COM5	8.34	3036	2		PRESSURE TEST LINES TO 3000 PSI, PRESSURE TEST OK
Event	13	Pump Spacer 1	12/15/2014	08:04:51	COM5	8.34	120	20	4	20 BBL FRESH WATER SPACER
Event	14	Pump Lead Cement	12/15/2014	08:10:10	COM5	12.3	325	91.6	8	210 SKS OF VARICEM GJ5 CEMENT 12.3 PPG 2.45 YIELD 14.17 GAL/SK WEIGHT OF CEMENT VERIFIED VIA MUD SCALES THROUGHOUT LEAD CEMENT
Event	15	Pump Tail Cement	12/15/2014	08:22:26	COM5	12.8	350	66	8	170 SKS OF VARICEM GJ5 CEMENT 12.8 PPG 2.18

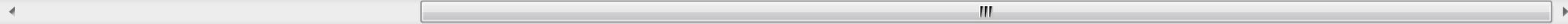
Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comb Pump Rate (bbl/min)	Comments
										YIELD 12.11 GAL/SK WEIGHT OF CEMENT VERIFIED VIA MUD SCALES THROUGHOUT TAIL CEMENT
Event	16	Shutdown	12/15/2014	08:32:07	USER					SHUTDOWN END OF CEMENT, HES WASHED UP ON TOP OF PLUG
Event	17	Drop Top Plug	12/15/2014	08:35:09	COM5					PLUG AWAY NO PROBLEMS
Event	18	Pump Displacement	12/15/2014	08:35:55	COM5	8.34	630	103	10	FRESH WATER DISPLACEMENT
Event	19	Other	12/15/2014	08:49:39	COM5	8.34	660	10.7	2	SLOW RATE TO BUMP THE PLUG
Event	20	Bump Plug	12/15/2014	08:52:09	COM5	8.34	325	113.7		BUMPED PLUG AT 325 PSI, TOOK TO 922 PSI
Event	21	Other	12/15/2014	08:53:31	COM5	8.34	922			FLOATS HELD .5 BBL BACK TO TANKS, 35 BBLS OF CEMENT TO SURFACE RIG USED 40 POUNDS OF SUGAR
Event	22	End Job	12/15/2014	08:54:20	COM5					THANK YOU FOR CHOOSING HALLIBURTON CEMENT CARL KUKUS AND CREW
Event	23	Pre-Rig Down Safety Meeting	12/15/2014	09:02:36	USER					ALL HES CREW
Event	24	Rig-Down Equipment	12/15/2014	09:03:01	USER					RIG DOWN ALL LINES RACK UP ALL LINES, HES BACKED PUMP UP TO PIT AND BLEW PUMP DOWN
Event	25	Rig-Down Completed	12/15/2014	09:03:51	USER					COMPLETED
Event	26	Pre-Convoy Safety Meeting	12/15/2014	09:04:00	USER					ALL HES EMPLOYEES
Event	27	Crew Leave Location	12/15/2014	09:04:11	USER					1-F-550 PICKUP, 1-ELITE PUMP TRUCK, 2-660 BULK TRUCKS

# WPX/WPX GM 433-28/SURFACE



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

Pre-Safety Meeting n/a;n/a;n/a;n/a	⑪ Fill Lines 8.51;0;6;1.7	⑯ Shutdown 13.06;71.3;218;6	21 Check Floats 8.43;111.9;922;0	26 Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a
Equipment 0;0.9;5;0	⑫ Test Lines 8.55;1.5;3023;0	⑰ Drop Top Plug 12.08;71.8;5;0	22 End Job 8.39;111.9;6;0	27 Crew Leave Location n/a;n/a;n/a;n/a
Completed 0;0.9;5;0	⑬ Fresh Water Spacer 8.46;0;6;0	⑱ Pump Displacement 11.98;0.1;9;2	23 Pre-Rig Down Safety Meeting n/a;n/a;n/a;n/a	
Safety Meeting 8.4;0;-18;0	⑭ Pump Lead Cement 8.52;0.1;104;4	⑲ Slow Rate 8.42;108;344;2.1	24 Rig-Down Equipment n/a;n/a;n/a;n/a	
1.78;0;0;0	⑮ Pump Tail Cement 12.68;0.2;333;8	20 Bump Plug 8.43;111.9;917;0	25 Rig-Down Completed n/a;n/a;n/a;n/a	



**HALLIBURTON** | iCem® Service

Created: 2014-12-15 01:57:56, Version: 4.0.248

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 12/15/2014 6:40:52 AM

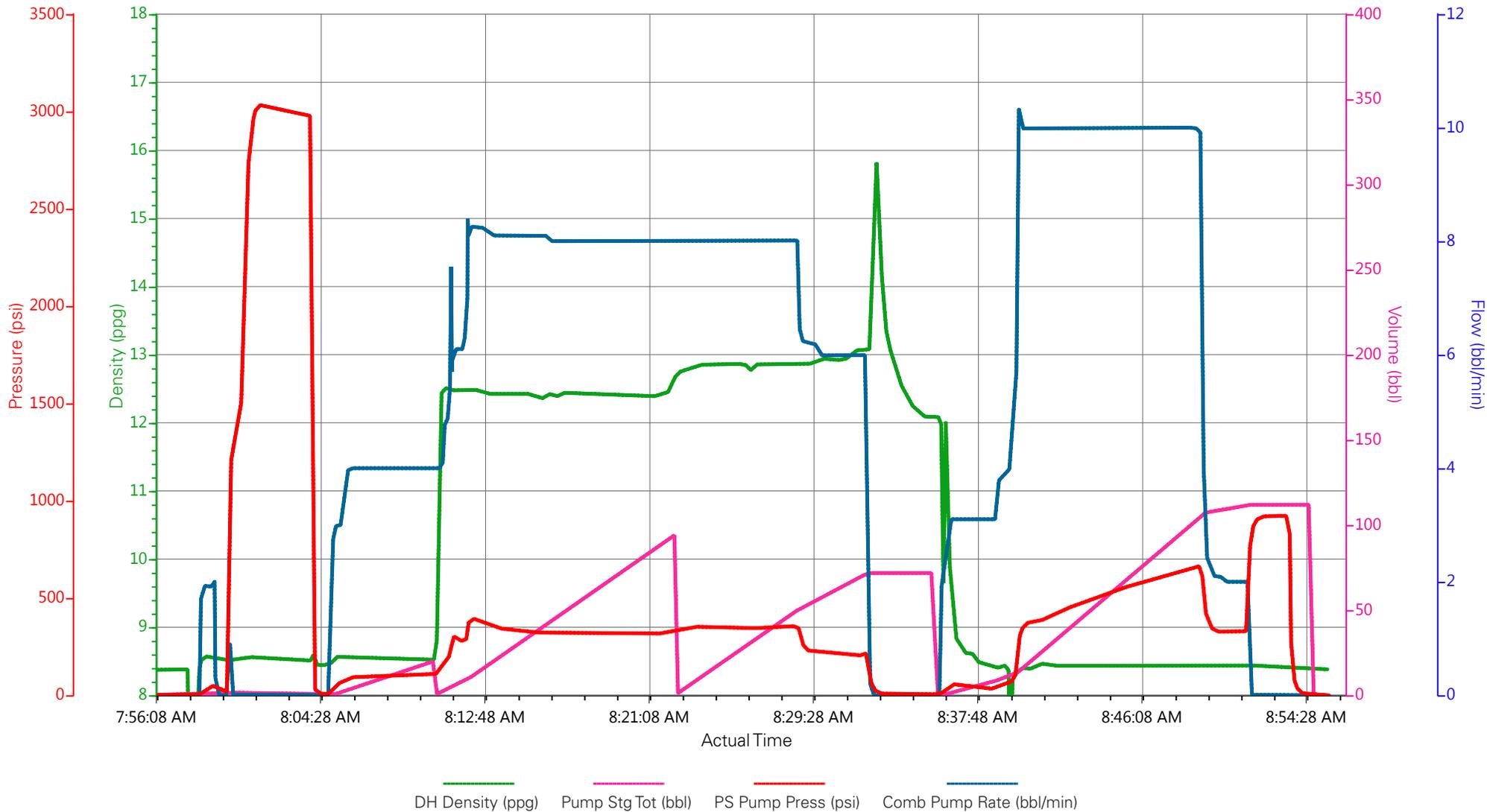
Well: WPX GM 433-28

Representative: Harry Samson

Sales Order #: 901935846

Supervisor/Operator: Carlton Kukus/Cliff Sparks E-4

WPX/WPX GM 433-28/SURFACE



# HALLIBURTON

## Water Analysis Report

Company: WPX

Submitted by: Carl Kukus

Attention: J.Trout

Lease WPX GM

Well # 433-28

Date: 12/15/2014

Date Rec.: 12/15/2014

S.O.# 901935846

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 Mg / L</b>
Calcium (Ca)	<i>500</i>	<b>120 Mg / L</b>
Iron (FE2)	<i>300</i>	<b>3 Mg / L</b>
Chlorides (Cl)	<i>3000</i>	<b>0 Mg / L</b>
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>200 Mg / L</b>
Chlorine (Cl <sub>2</sub> )		<b>0 Mg / L</b>
Temp	<i>40-80</i>	<b>70 Deg</b>
Total Dissolved Solids		<b>250 Mg / L</b>

Respectfully: Carl Kukus

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 i

<b>Sales Order #:</b> 0901935846	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 12/15/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> HARRY SAMSON		<b>API / UWI: (leave blank if unknown)</b> 05-045-22508-00
<b>Well Name:</b> WPX GM		<b>Well Number:</b> 0080644795
<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	12/15/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB44726
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	HARRY SAMSON
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	CREW DID A GOOD FAST AND SAFE RIG UP AND CEMENTING WENT VERY GOOD

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

General	
<b>Survey Conducted Date</b>	12/15/2014
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>Pumping Hours</b>	1
Total number of hours pumping fluid on this job. Enter in decimal format.	
<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>	6
Number Of Jsas Performed	
<b>Was this a Primary Cement Job (Yes / No)</b>	Yes
Primary Cement Job= Casing job, Liner job, or Tie-back job.	
<b>Number of Unplanned Shutdowns</b>	0
Unplanned shutdown is when injection stops for any period of time.	
<b>Customer Non-Productive Rig Time (hrs)</b>	0

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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>Did We Run Wiper Plugs?</b> Did We Run Top And Bottom Casing Wiper Plugs?	Top
<b>If a top plug was run, was the plug bumped? (Yes/No/N/A)</b> If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
<b>If applicable, was Halliburton float equipment used? (Yes/No/N/A)</b> If applicable, was Halliburton float equipment used? (Yes/No/N/A)	N/A
<b>If applicable, did the floats hold? (Yes/No/N/A)</b> If applicable, did the floats hold? (Yes/No/N/A)	Yes
<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	90
<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	8
<b>If applicable, were there returns throughout the job? (Yes/No/N/A)</b> If applicable, were there returns throughout the job? (Yes/No/N/A)	YES
<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