

WPX Energy Rocky Mountain LLC - EBUS

PA 541-27

Nabors 576

Post Job Summary

Cement Surface Casing

Date Prepared: 11/15/2014
Job Date: 11/04/2014

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3207564	Quote #:	Sales Order #: 0901804470
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Customer Rep: AL HARTLE		
Well Name: FEDERAL	Well #: PA 541-27	API/UWI #: 05-045-22244-00	
Field: PARACHUTE	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: 27-6S-95W-2390FNL-649FEL			
Contractor: NABORS DRLG	Rig/Platform Name/Num: NABORS 576		
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180	Srv Supervisor: Andrew Brennecke		
Job			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	2936ft Job Depth TVD
Water Depth	Wk Ht Above Floor 3
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		9.625	9.001	32.3		H-40	0	2936		0
Open Hole Section			13.5				0	2950		0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	9.625	1		2936		Top Plug	9.625	1	HES
Float Shoe						Bottom Plug			
Float Collar	9.625	1		2891.94		SSR plug set			
Insert Float						Plug Container	9.625	1	HES
Stage Tool						Centralizers	9.625		

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			3	

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 GJ1	VARICEM (TM) CEMENT	400	sack	12.3	2.38		8	13.77

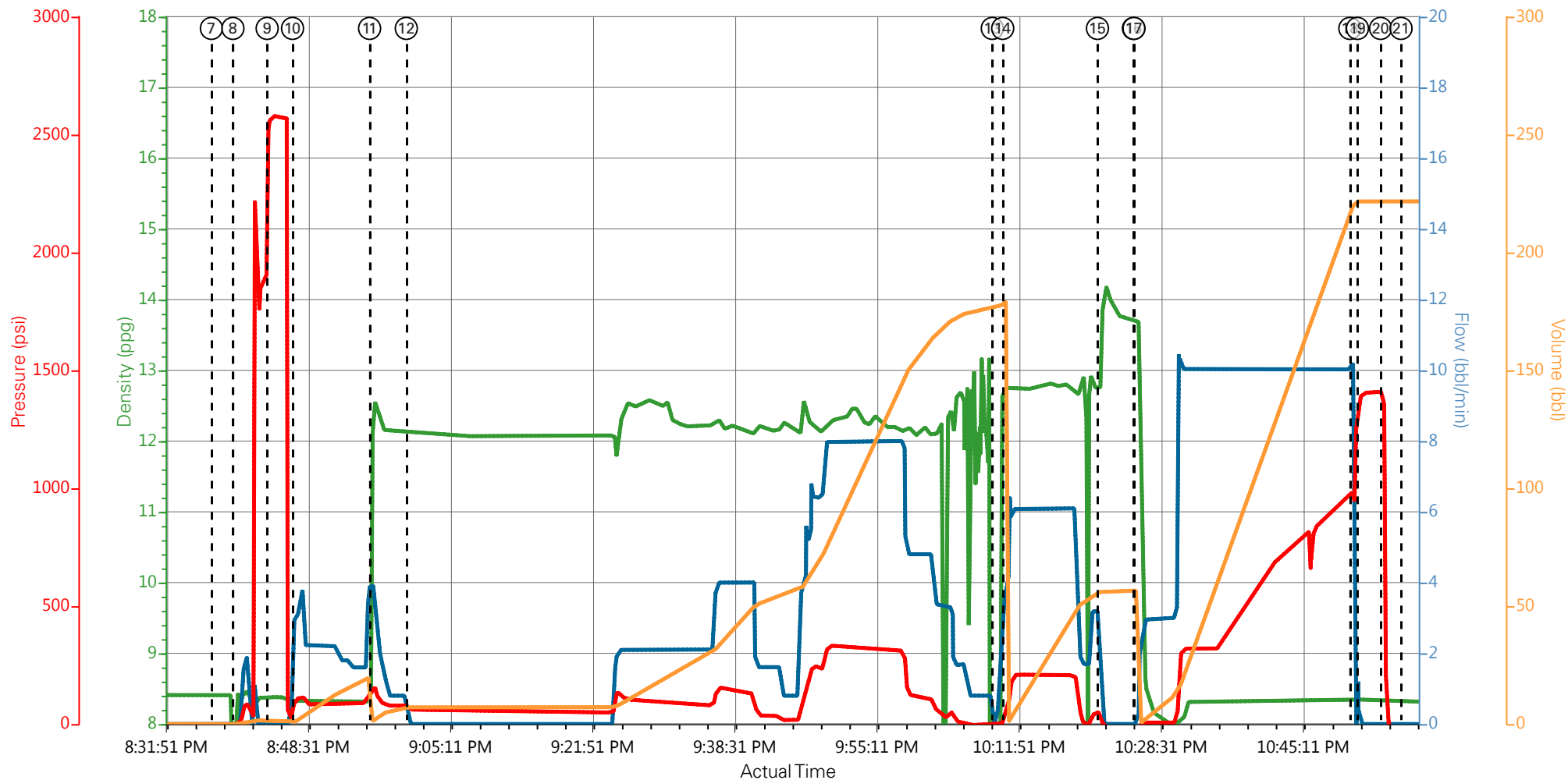
		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	VariCem GJ1	VARICEM (TM) CEMENT	155	sack	12.8	2.11		6	11.77
		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Fresh Water Displacement	Fresh Water Displacement	227.6	bbl	8.34			10	
Cement Left In Pipe		Amount	44 ft		Reason		Shoe Joint		
Comment									

1.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comment
Event	1	Call Out	11/4/2014	11:04:00	USER					CREW PUMPING AT OTHER JOB
Event	2	Pre-Convoy Safety Meeting	11/4/2014	13:45:00	USER					ALL HES PRESENT
Event	3	Crew Leave Location	11/4/2014	14:00:00	USER					
Event	4	Arrive at Location from Other Job or Site	11/4/2014	15:30:00	USER					RIG RUNNING CASING
Event	5	Rig-Up Completed	11/4/2014	19:30:00	USER					1-ELITE, 1-660 BULK TRAILER, 1-1700 SILO, 9.625" QUICK LATCH PLUG CONTAINER, 2" IRON
Event	6	Pre-Job Safety Meeting	11/4/2014	20:15:00	USER					ALL HES AND RIG CREW PRESENT
Event	7	Start Job	11/4/2014	20:37:30	COM5	8.34	0.00	5.00	0.0	
Event	8	Prime Pumps	11/4/2014	20:40:01	COM5	8.35	2.00	75.00	2.0	FRES WATER
Event	9	Test Lines	11/4/2014	20:44:02	COM5	8.38	0.30	2575.00	2.2	PRESSURE HELD AT 2575 PSI
Event	10	Pump Spacer 1	11/4/2014	20:47:00	COM5	8.33	3.00	143.00	20.0	FRESH WATER
Event	11	Pump Lead Cement	11/4/2014	20:56:02	COM5	12.33	8.00	306.00	169.6	
Event	12	Shutdown	11/4/2014	21:00:21	COM5					SHUT DOWN DUE TO PACKED OFF BULK HOSE
Event	13	Shutdown	11/4/2014	22:09:04	USER					SHUT DOWN TO SWAP BULK HOSE TO 660 BULK TRAILER
Event	14	Pump Tail Cement	11/4/2014	22:10:17	COM5	12.81	8.00	210.00	59.2	
Event	15	Shutdown	11/4/2014	22:21:24	USER					
Event	16	Drop Top Plug	11/4/2014	22:25:37	COM5					PLUG DROP VERIFIED BY COMPANY REP, WASHED PUMPS AND LINES ON TOP OF PLUG
Event	17	Pump Displacement	11/4/2014	22:25:41	COM5	8.45	10.00	994.00	216.0	FRESH WATER
Event	18	Slow Rate	11/4/2014	22:51:00	USER	8.34	2.00	916.00		

Event	19	Bump Plug	11/4/2014	22:51:53	COM5	8.35	2.00	945.00	226.0	PLUG BUMPED
Event	20	Check Floats	11/4/2014	22:54:36	USER	8.34	0.00	1407.00	226.0	FLOATS HELD 1.5 BBLS BACK TO DISPLACEMENT TANK
Event	21	End Job	11/4/2014	22:57:00	USER	8.31	0.00	-26.00	226.0	GOOD RETURNS THROUGH OUT JOB, 80 BBLS CEMENT TO SURFACE
Event	22	Crew Leave Location	11/5/2014	00:30:00	USER					THANK YOU FOR CHOOSING HALLIBURTON, ANDREW BRENNECKE AND CREW

WPX - PA 541-27 - 9.625" SURFACE



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

- | | | | |
|---|--------------------------------------|---------------------------------------|---------------------------------------|
| ① Call Out n/a;n/a;n/a;n/a | ⑦ Start Job 8.41;0;-5;0 | ⑬ Shutdown -0.1;0;-3;176.9 | ⑲ Bump Plug 8.35;0;1397;221.7 |
| ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a | ⑧ Prime Pumps 8.43;0;-1;0 | ⑭ Pump Tail Cement 12.77;3.8;74;179.3 | ⑳ Check Floats 8.34;0;1263;221.7 |
| ③ Crew Leave Location n/a;n/a;n/a;n/a | ⑨ Test Lines 8.38;0;2575;1.6 | ⑮ Shutdown 12.94;0;29;56.6 | ㉑ End Job 8.31;0;-26;221.7 |
| ④ Arrive at Location from Other Job or Site n/a;n/a;n/a;n/a | ⑩ Pump Spacer 1 8.33;3.1;107;1.3 | ⑯ Drop Top Plug 13.7;0;-22;56.6 | ㉒ Crew Leave Location n/a;n/a;n/a;n/a |
| ⑤ Rig-Up Completed n/a;n/a;n/a;n/a | ⑪ Pump Lead Cement 12.56;3.9;156;1.7 | ⑰ Pump Displacement 13.69;0;-22;0 | |
| ⑥ Pre-Job Safety Meeting 8.41;5.6;118;14.3 | ⑫ Shutdown 12.12;0;62;7.1 | ⑱ Slow Rate 8.34;10.2;994;220.7 | |

▼ **HALLIBURTON** | iCem® Service

Created: 2014-11-04 19:57:18, Version: 4.0.248

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 11/4/2014 7:57:54 PM

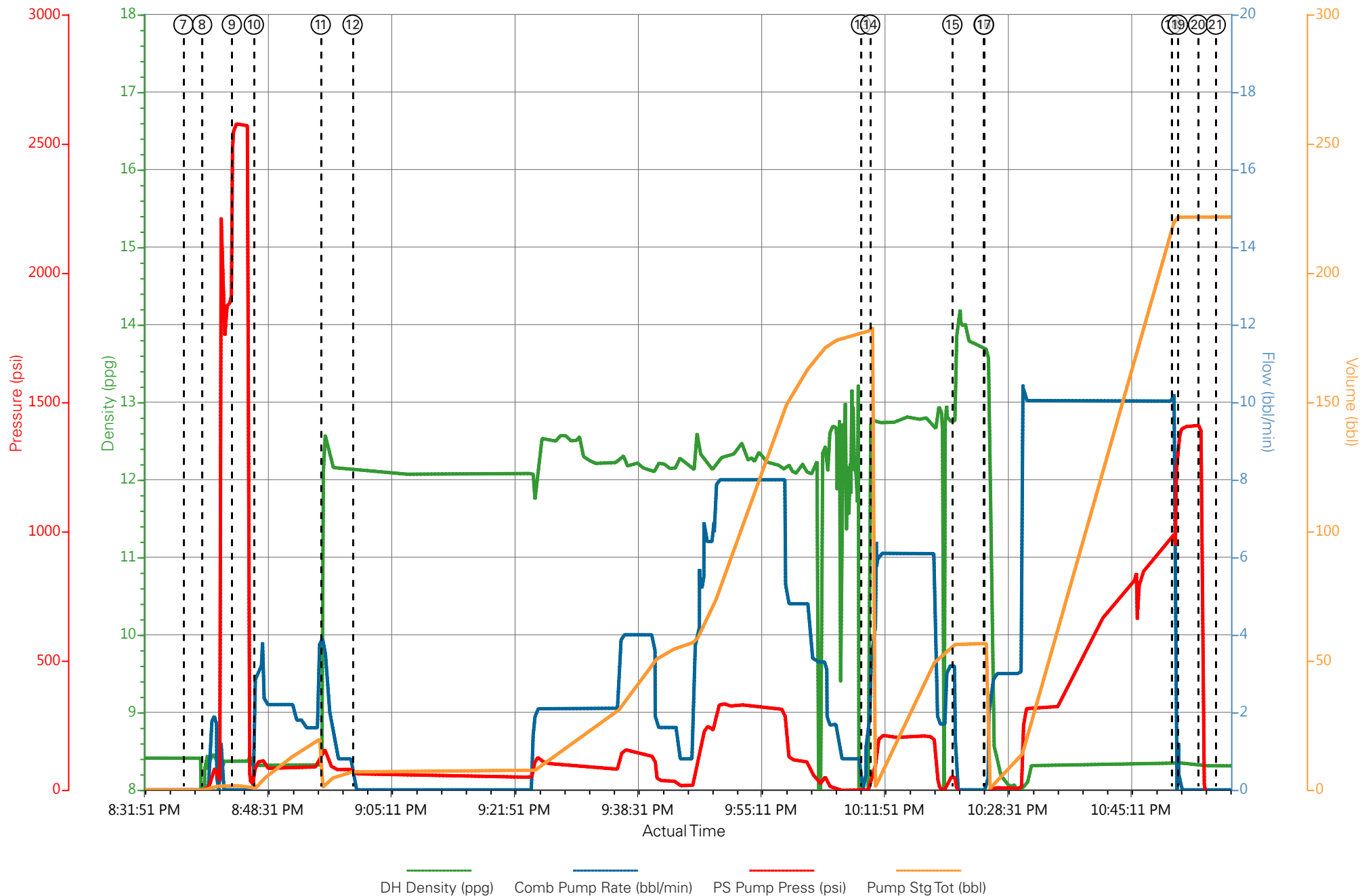
Well: PA 541-27

Representative: AL HARTLE

Sales Order #: 901804470

ELITE#7: A.BRENNECKE/B.ROSE

WPX - PA 541-27 - 9.625" SURFACE



HALLIBURTON

Water Analysis Report

Company: WPX
Submitted by: A.BRENNECKE
Attention: E.RUSSEL
Lease PA
Well # 541-27

Date: 11/2/2014
Date Rec.: 11/2/2014
S.O.# 901804470
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	200 Mg / L
Calcium (Ca)	<i>500</i>	120 Mg / L
Iron (FE2)	<i>300</i>	0 Mg / L
Chlorides (Cl)	<i>3000</i>	0 Mg / L
Sulfates (SO ₄)	<i>1500</i>	<200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-80</i>	50 Deg
Total Dissolved Solids		510 Mg / L

Respectfully: A.BRENNECKE

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

Sales Order #: 0901804470	Line Item: 10	Survey Conducted Date: 11/7/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: AL HARTLE		API / UWI: (leave blank if unknown) 05-045-22244-00
Well Name: FEDERAL		Well Number: 0080244822
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: 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	11/5/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB58348
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	AL HARTLE
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	
Survey Conducted Date The date the survey was conducted	11/7/2014

Cementing KPI Survey	
Type of Job Select the type of job. (Cementing or Non-Cementing)	0
Select the Maximum Deviation range for this Job What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
Total Operating Time (hours) Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	4
HSE Incident, Accident, Injury HSE Incident, Accident, Injury. This should be recordable incidents only.	No
Was the job purpose achieved? Was the job delivered correctly as per customer agreed design?	Yes
Pumping Hours Total number of hours pumping fluid on this job. Enter in decimal format.	2
Type of Rig Classification Job Was Performed Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
Number Of JSAs Performed Number Of Jsas Performed	5
Was this a Primary Cement Job (Yes / No) Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time.	1
Reason For Unplanned Shutdown	BULK DELIVERY

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Well Name: FEDERAL		Well Number: 0080244822
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

Reason For Unplanned Shutdowns (after Starting To Pump)	
Customer Non-Productive Rig Time (hrs) 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.	0.5
Reason For Non-Productive Rig Time Reason For Non-productive Rig Time (Cementing PSL Responsibility)	BULK DELIVERY
Did We Run Wiper Plugs? Did We Run Top And Bottom Casing Wiper Plugs?	Top
If a top plug was run, was the plug bumped? (Yes/No/N/A) If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
If applicable, was Halliburton float equipment used? (Yes/No/N/A) If applicable, was Halliburton float equipment used? (Yes/No/N/A)	NA
If applicable, did the floats hold? (Yes/No/N/A) If applicable, did the floats hold? (Yes/No/N/A)	Yes
Mixing Density of Job Stayed in Designed Density Range (0-100%) Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	95
Pump Rate (percent) of Job Stayed At Designed Pump Rate 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	6
If applicable, were there returns throughout the job? (Yes/No/N/A) If applicable, were there returns throughout the job? (Yes/No/N/A)	YES
Nbr of Remedial Plug Jobs Rqd - HES Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
Nbr of Remedial Sqz Jobs Rqd - HES Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0