

WPX Energy Rocky Mountain LLC- EBUS

RWF 32-23

Nabors 577

Post Job Summary

Cement Surface Casing

Date Prepared: 11/23/2014
Job Date: 11/14/2014

Submitted by: Evan Russell – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3122895	Quote #:	Sales Order #: 0901825456
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: LUKE HUBBARD	
Well Name: MEAD -RWF-	Well #: 32-23	API/UWI #: 05-045-20039-00	
Field: RULISON	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: NE SE-23-6S-94W-2303FSL-256FEL			
Contractor:		Rig/Platform Name/Num: NABORS 577	
Job BOM:			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srvc Supervisor: Dustin Smith	

Job

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1267ft Job Depth TVD
Water Depth	Wk Ht Above Floor 5 FT
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	8 RD	H-40	0	1267	0	0
Open Hole Section			13.5				0	1276	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625	1		1267	Top Plug	9.625	1	HES
Float Shoe	9.625	1						
Float Collar	9.625	1		1219				
Insert Float	9.625	1			Plug Container	9.625	1	HES
Stage Tool	9.625	1			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	8.33			4.0		

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	170	sack	12.3	2.38		8.0	13.7

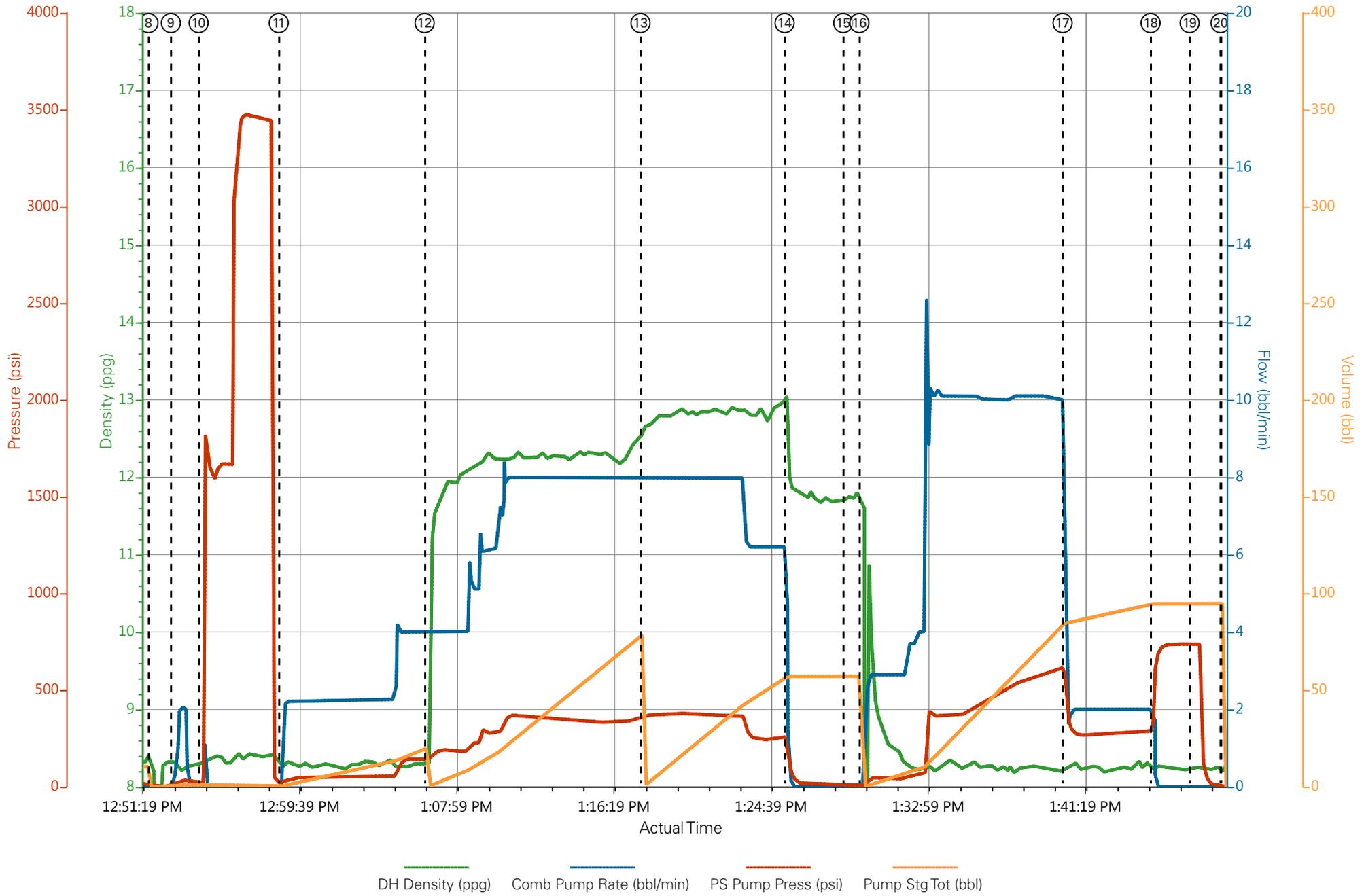
13.70 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft³/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	VariCem GJ1	VARICEM (TM) CEMENT	165	sack	12.8	2.11		8.0	11.77
11.71 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft³/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
4	Fresh Water Displacement	Fresh Water Displacement	95.9	bbl	8.34			10.0	
Cement Left In Pipe	Amount	48 ft			Reason	Shoe Joint			
Comment									

3.5 Job Event Log

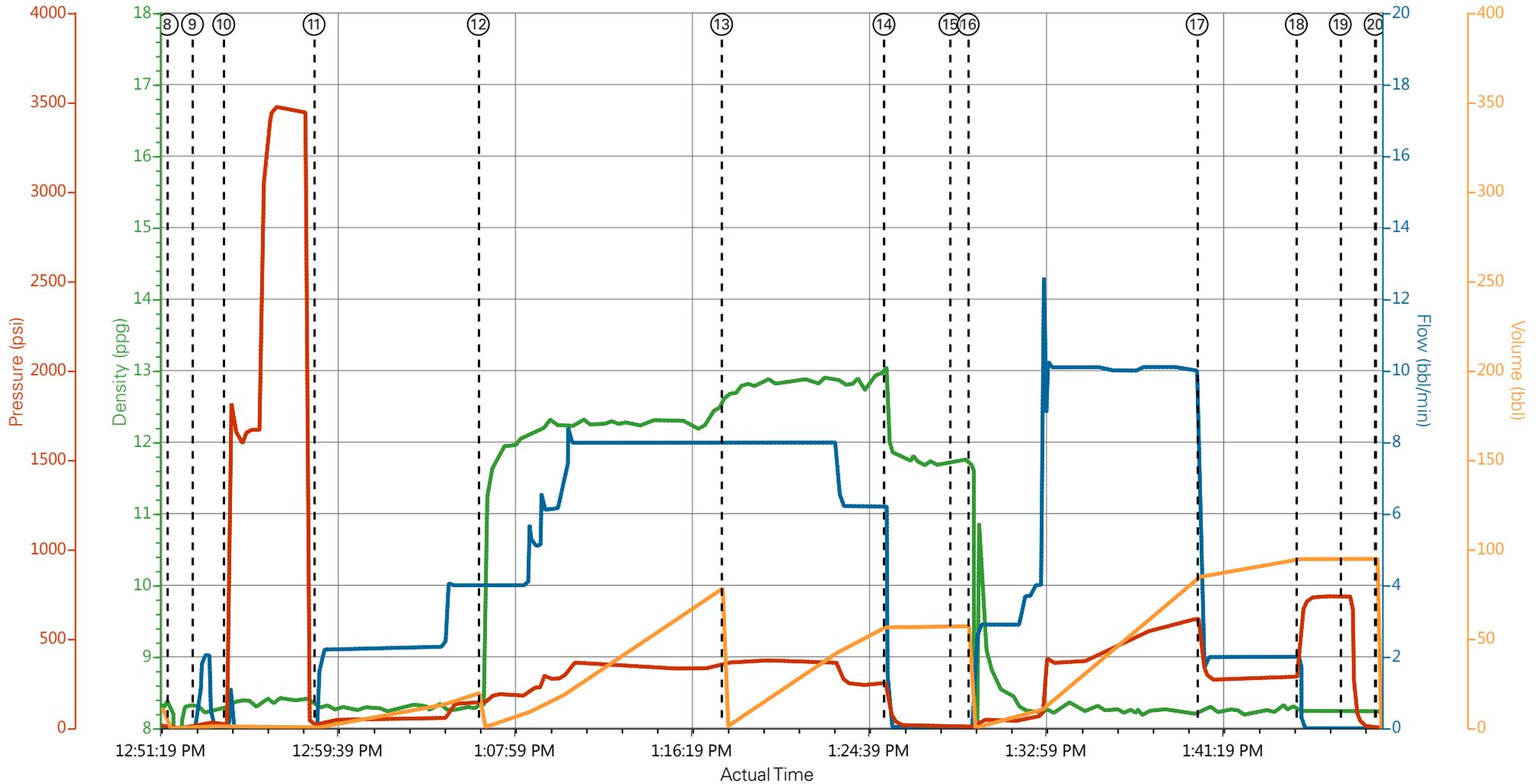
Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	11/14/2014	03:00:00	USER					ELITE # 2
Event	2	Pre-Convoy Safety Meeting	11/14/2014	06:30:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	11/14/2014	08:00:00	USER					ARRIVED ON LOCATION AT REQUESTED TIME RIG RUNNING CASING UPON HES ARRIVAL
Event	4	Assessment Of Location Safety Meeting	11/14/2014	09:20:00	USER					ALL HES EMPLOYEES
Event	5	Pre-Rig Up Safety Meeting	11/14/2014	09:25:00	USER					ALL HES EMPLOYEES
Event	6	Rig-Up Equipment	11/14/2014	09:30:00	USER					1 HT-400 PUMP TRUCK (ELITE #2) 1 660 BULK TRUCK 1 F-550 PICKUP
Event	7	Pre-Job Safety Meeting	11/14/2014	11:00:00	USER					ALL HES EMPLOYEES AND RIG CREW
Event	8	Start Job	11/14/2014	12:51:47	COM5					TD: 1276 TP: 1267 SJ: 48 CSG: 9 5/8 32.3# H-40 OH: 13 1/2 MUD WT: 9.6 PPG
Event	9	Prime Pumps	11/14/2014	12:52:58	COM5	8.33	2.0	39	2.0	PRIME LINES WITH 2 BBLS FRESH WATER
Event	10	Test Lines	11/14/2014	12:54:27	COM5	8.33	0.0	3480	2.0	PRESSURE TEST OK
Event	11	Pump Spacer 1	11/14/2014	12:58:42	COM5	8.33	4.0	143	20	PUMP 20 BBLS FRESH WATER SPACER
Event	12	Pump Lead Cement	11/14/2014	13:06:26	COM5	12.3	8.0	360	72.1	170 SKS 12.3 PPG 2.38 YIELD 13.77 GAL/SK LEAD CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	13	Pump Tail Cement	11/14/2014	13:17:53	COM5	12.8	8.0	374	62	165 SKS 12.8 PPG 2.11 YIELD 11.77 GAL/SK

Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
										TAIL CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	14	Shutdown	11/14/2014	13:25:31	COM5					
Event	15	Drop Top Plug	11/14/2014	13:28:37	COM5					PLUG AWAY NO PROBLEMS WASHED UP ON TOP OF THE PLUG AS PER COMPANY REP
Event	16	Pump Displacement	11/14/2014	13:29:29	COM5	8.33	10.0	620	95.9	FRESH WATER DISPLACEMENT
Event	17	Slow Rate	11/14/2014	13:40:15	USER	8.33	2.0	287	85	SLOW RATE TO BUMP PLUG
Event	18	Bump Plug	11/14/2014	13:44:55	COM5	8.33	2.0	738	95.9	PSI BEFORE BUMPING PLUG @ 287 BUMPED PLUG UP TO 738 PSI
Event	19	Check Floats	11/14/2014	13:47:00	USER					FLOATS HELD 1/2 BBL BACK TO DISPLACEMENT TANKS
Event	20	End Job	11/14/2014	13:48:38	COM5					GOOD RETURNS THROUGHOUT JOB RETURNED 30 BBLS OF CEMENT TO SURFACE PIPE STATIC THROUGHOUT JOB
Event	21	Pre-Rig Down Safety Meeting	11/14/2014	23:00:00	USER					ALL HES EMPLOYEES
Event	22	Rig-Down Equipment	11/14/2014	23:10:00	USER					
Event	23	Pre-Convoy Safety Meeting	11/14/2014	23:20:00	USER					ALL HES EMPLOYEES
Event	24	Crew Leave Location	11/14/2014	23:33:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT DUSTIN SMITH AND CREW

WPX - RWF 32-23 - 9 5/8 SURFACE



WPX - RWF 32-23 - 9 5/8 SURFACE



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

- | | | | | |
|---|--------------------------|---------------------------|---------------------|--------------------------------|
| ① Call Out | ⑥ Rig-Up Equipment | ⑪ Pump Fresh Water Spacer | ⑯ Pump Displacement | 21 Pre-Rig Down Safety Meeting |
| ② Pre-Convoy Safety Meeting | ⑦ Pre-Job Safety Meeting | ⑫ Pump Lead Cement | ⑰ Slow Rate | 22 Rig-Down Equipment |
| ③ Arrive At Loc | ⑧ Start Job | ⑬ Pump Tail Cement | ⑱ Bump Plug | 23 Pre-Convoy Safety Meeting |
| ④ Assessment Of Location Safety Meeting | ⑨ Prime Lines | ⑭ Shutdown | ⑲ Check Floats | 24 Crew Leave Location |
| ⑤ Pre-Rig Up Safety Meeting | ⑩ Test Lines | ⑮ Drop Top Plug | 20 End Job | |

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Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 11/14/2014 10:16:22 AM

Well: RWF 32-23

Representative: LUKE HUBBARD

Sales Order #: 0901825456

ELITE #2: DUSTIN SMITH / BEN ROSE

HALLIBURTON

Water Analysis Report

Company: WPX

Date: 11/14/2014

Submitted by: DUSTIN SMITH

Date Rec.: _____

Attention: _____

S.O.# 901825456

Lease RWF

Job Type: SURFACE

Well # 32-23

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>	UNDER 200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-90</i>	48 Deg
Total Dissolved Solids		740 Mg / L

Respectfully: DUSTIN SMITH

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

Sales Order #: 0901825456	Line Item: 10	Survey Conducted Date: 11/14/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: LUKE HUBBARD		API / UWI: (leave blank if unknown) 05-045-20039-00
Well Name: MEAD -RWF-		Well Number: 80124692
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	11/14/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX37079
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	LUKE HUBBARD
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	11/14/2014
The date the survey was conducted	

Cementing KPI Survey	
Type of Job	0
Select the type of job. (Cementing or Non-Cementing)	
Select the Maximum Deviation range for this Job	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
Total Operating Time (hours)	2
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
HSE Incident, Accident, Injury	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
Was the job purpose achieved?	Yes
Was the job delivered correctly as per customer agreed design?	
Pumping Hours	1
Total number of hours pumping fluid on this job. Enter in decimal format.	
Type of Rig Classification Job Was Performed	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
Number Of JSAs Performed	6
Number Of Jsas Performed	
Was this a Primary Cement Job (Yes / No)	Yes
Primary Cement Job= Casing job, Liner job, or Tie-back job.	
Number of Unplanned Shutdowns	0
Unplanned shutdown is when injection stops for any period of time.	
Customer Non-Productive Rig Time (hrs)	0

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Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

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.	
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, 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	90
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	90
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