

WPX Energy Rocky Mountain LLC- EBUS

RWF 331-23

Nabors 577

Post Job Summary

Cement Surface Casing

Date Prepared: 12/28/14
Job Date: 12/21/14

Submitted by: Evan Russell – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3122909	Quote #:	Sales Order #: 0901959302
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: LUKE HUBBARD	
Well Name: MEAD -RWF-	Well #: 331-23	API/UWI #: 05-045-20053-00	
Field: RULISON	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: NE SE-23-6S-94W-2303FSL-234FEL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS 577	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srvc Supervisor: Craig Kukus	

Job

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1218ft 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
Casing	0	9.625	9.001	32.3	8 RD	J-55	0	1218	0	0
Open Hole Section			13.5				0	1228	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625	1		1218	Top Plug	9.625	1	HES
Float Shoe	9.625				Bottom Plug	9.625		HES
Float Collar	9.625	1		1168	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 ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water	Fresh Water	20	bbl	8.34			1 / 4		
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	VariCem GJ1	VARICEM (TM) CEMENT	165	sack	12.3	2.38		8	13.77	

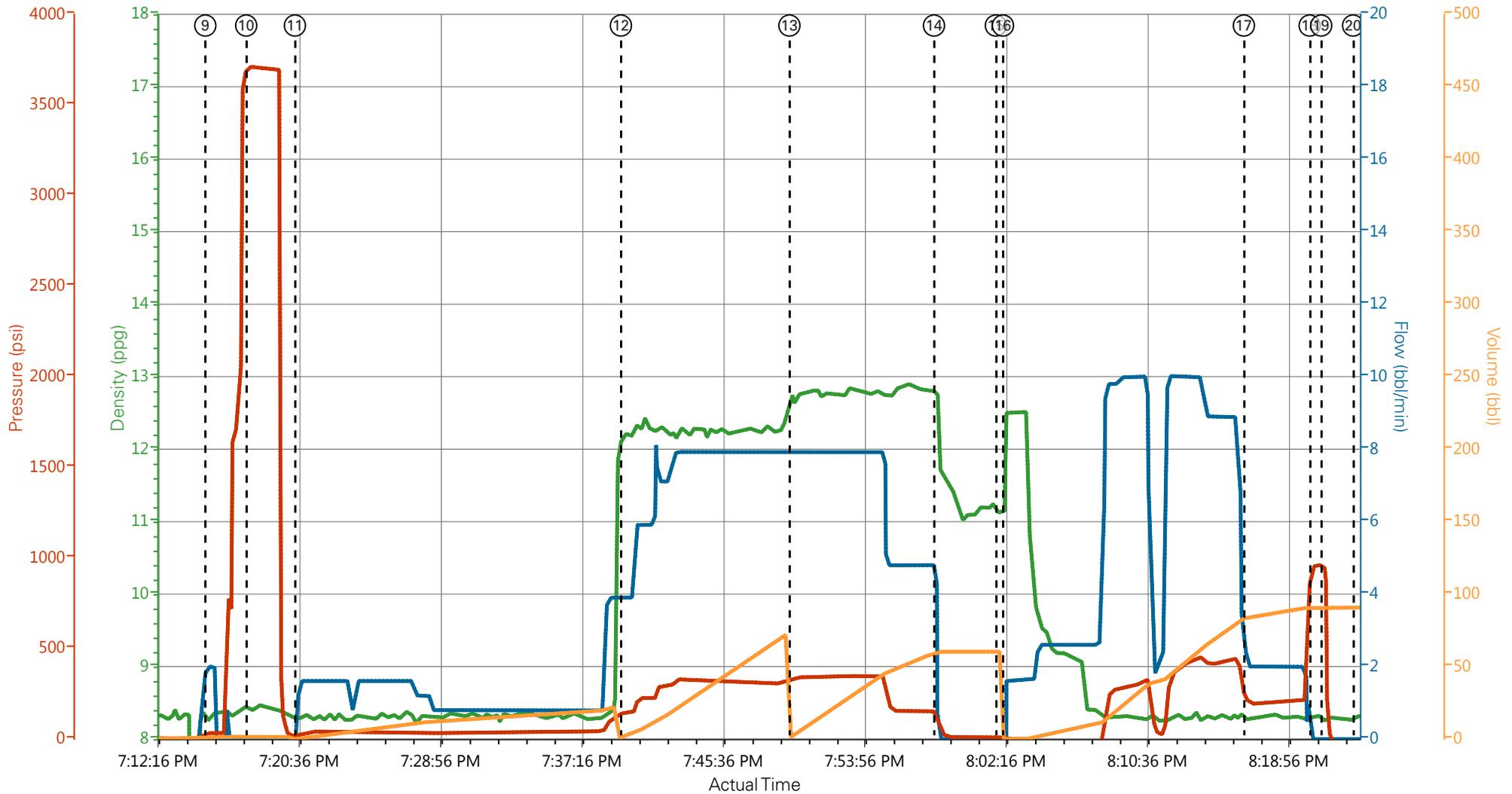
13.70 Gal		FRESH WATER							
0.25 lbm		POLY-E-FLAKE (101216940)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft³/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	VariCem GJ1	VARICEM (TM) CEMENT	165	sack	12.8	2.11		8	11.77
0.25 lbm		POLY-E-FLAKE (101216940)							
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	92	bbl	8.34			10 / 2	
Cement Left In Pipe	Amount	50 ft			Reason			Shoe Joint	
Mix Water:	pH ##	Mix Water Chloride: ## ppm			Mix Water Temperature: ## °F °C				
Cement Temperature:	## °F °C	Plug Displaced by: ## lb/gal kg/m3 XXXX			Disp. Temperature: 44 °F °C				
Plug Bumped?	Yes	Bump Pressure: 1000 psi MPa			Floats Held? Yes				
Cement Returns:	30 bbl m3	Returns Density: ## lb/gal kg/m3			Returns Temperature: ## °F °C				
Comment									

3.1 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	12/21/2014	08:30:00	USER					CREW CALL
Event	2	Depart from Service Center or Other Site	12/21/2014	11:30:00	USER					DEPART SERVICE CENTER SAFETY MEETING ALL HES CREW PRESENT
Event	3	Arrive at Location from Service Center	12/21/2014	14:00:00	USER					ARRIVE ON LOC RIG SETTING UP TO RUN CSG / HES EQUIPMENT ON LOC 1 EA CEMENT PUMP UNIT 1 EA 660 BULK UNIT 1 EA SERVICE PICK UP UNIT
Event	4	Assessment Of Location Safety Meeting	12/21/2014	14:30:00	USER					ASSESSMENT OF LOC WALK THRU
Event	5	Pre-Rig Up Safety Meeting	12/21/2014	16:21:52	USER					PRE- RIG UP SAFETY MEETING ALL HES CREW PRESENT / RIG CIRCULATE 17:45
Event	6	Rig-Up Equipment	12/21/2014	16:22:11	USER					RIG UP IRON TO RED ZONE AND WATER SUCTION HOSES TO UP RT
Event	7	Pre-Job Safety Meeting	12/21/2014	18:45:00	USER	-0.02	0.00	0.00	0.0	PRE-JOB SAFETY MEETING ALL RIG PERSONEL AND HES CREW PRESENT
Event	8	Start Job	12/21/2014	19:04:00	COM6	-0.01	0.00	2.00	0.0	TD 1228 FT TP 1218 FT SJT 50 FT OH 13.5 IN WF/WT 9.8# CSG 9 5/8 IN 32.3# H-40
Event	9	Prime Pumps	12/21/2014	19:15:14	COM6	8.24	2.00	32.00	2.0	PRIME LINES WITH FRESH WATER
Event	10	Test Lines	12/21/2014	19:17:39	COM6	8.40	0.00	3710.00	.4	PRESSURE TEST LINES 5 TH GEAR STALL OUT 1790 PSI TEST TO 3700 PSI TEST GOOD
Event	11	Pump Spacer 1	12/21/2014	19:20:31	COM6	8.27	1.60	18.00	20	PUMP 20 BBLS H2O SPACER AHEAD / HAVE RETURNS /

										PUMP SPACER AT 1 BBL MIN HAD TO CHANGE AIR SUPPLY FROM 660 UNIT TO PUMP TRACTOR UNIT
Event	12	Pump Lead Cement	12/21/2014	19:39:44	COM6	12.20	3.90	146.00	70	PUMP 165 SKS LEAD CEMENT AT 12.3 PPG 2.38 Y 13.77 GAL/SKS HAVE RETURNS AND CEMENT DIP GOOD
Event	13	Pump Tail Cement	12/21/2014	19:49:40	COM6	12.68	7.90	338.00	62	PUMP 165 SKS TAIL CEMENT AT 12.8 PPG 2.11 Y 11.77 GAL/SKS HAVE RETURNS AND CEMENT DIP GOOD
Event	14	Shutdown	12/21/2014	19:58:12	COM6	12.82	0.70	127.00	154.4	SHUT DOWN END CEMENT READY TUB TO WASH UP ON TOP
Event	15	Other	12/21/2014	20:01:51	COM6	11.15	0.00	10.00	0	DROP TOP PLUG / PLUG AWAY
Event	16	Pump Displacement	12/21/2014	20:02:16	COM6				83.	PUMP H2O DISPLACEMENT
Event	17	Slow Rate	12/21/2014	20:16:28	USER	8.31	2.00	213.00	83.7	SLOW RATE TO 2 BBL MIN
Event	18	Bump Plug	12/21/2014	20:20:21	USER	8.31	0.00	948.00	92	PLUG LANDED AT 250 PSI BUMP TO 1000 PSI
Event	19	Check Floats	12/21/2014	20:21:01	USER	8.26	0.00	947.00	92	CHECK FLOATS / FLOATS HELD GOT BACK .5 BBL TO TANKS / 30 BBLs CEMENT TO SURFACE
Event	20	End Job	12/21/2014	20:22:54	USER	8.30	0.00	-45.00	246.4	END JOB
Event	21	Pre-Rig Down Safety Meeting	12/21/2014	20:25:00	USER	8.27	0.00	-45.00	0	PRE-RIG DOWN SAFETY MEETING ALL HES CREW PRESENT
Event	22	Rig-Down Equipment	12/21/2014	20:32:42	USER	8.32	0.00	-45.00	0	RIG FLOOR DOWN / WASH UP PUMP / RIG DOWN GROUND IRON
Event	23	Depart Location Safety Meeting	12/21/2014	21:25:00	USER					SAFETY MEETING DEPARTING LOC ALL HES CREW PRESENT
Event	24	Comment	12/21/2014	21:30:00	USER					THANK YOU FOR USING

WPX ENERGY ROCKY MOUNTAIN NABORS 577 CEMENT 9 5/8 SURFACE CSG JOB



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

- | | | | | | |
|--|-----------------------------|--------------------|---------------------|----------------|----------------------------------|
| ① Call Out | ⑤ Pre-Rig Up Safety Meeting | ⑨ Prime Pumps | ⑬ Pump Tail Cement | ⑰ Slow Rate | ⑳ Pre-Rig Down Safety Meeting |
| ② Depart from Service Center or Other Site | ⑥ Rig-Up Equipment | ⑩ Test Lines | ⑭ Shutdown | ⑱ Bump Plug | ㉑ Rig-Down Equipment |
| ③ Arrive at Location from Service Center | ⑦ Pre-Job Safety Meeting | ⑪ Pump Spacer 1 | ⑮ Drop Plug | ㉒ Check Floats | ㉓ Depart Location Safety Meeting |
| ④ Assessment Of Location Safety Meeting | ⑧ Start Job | ⑫ Pump Lead Cement | ⑯ Pump Displacement | ㉔ End Job | ㉕ Comment |

▼ **HALLIBURTON** | iCem® Service

Created: 2014-12-21 16:11:11, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 12/21/2014 6:39:22 PM

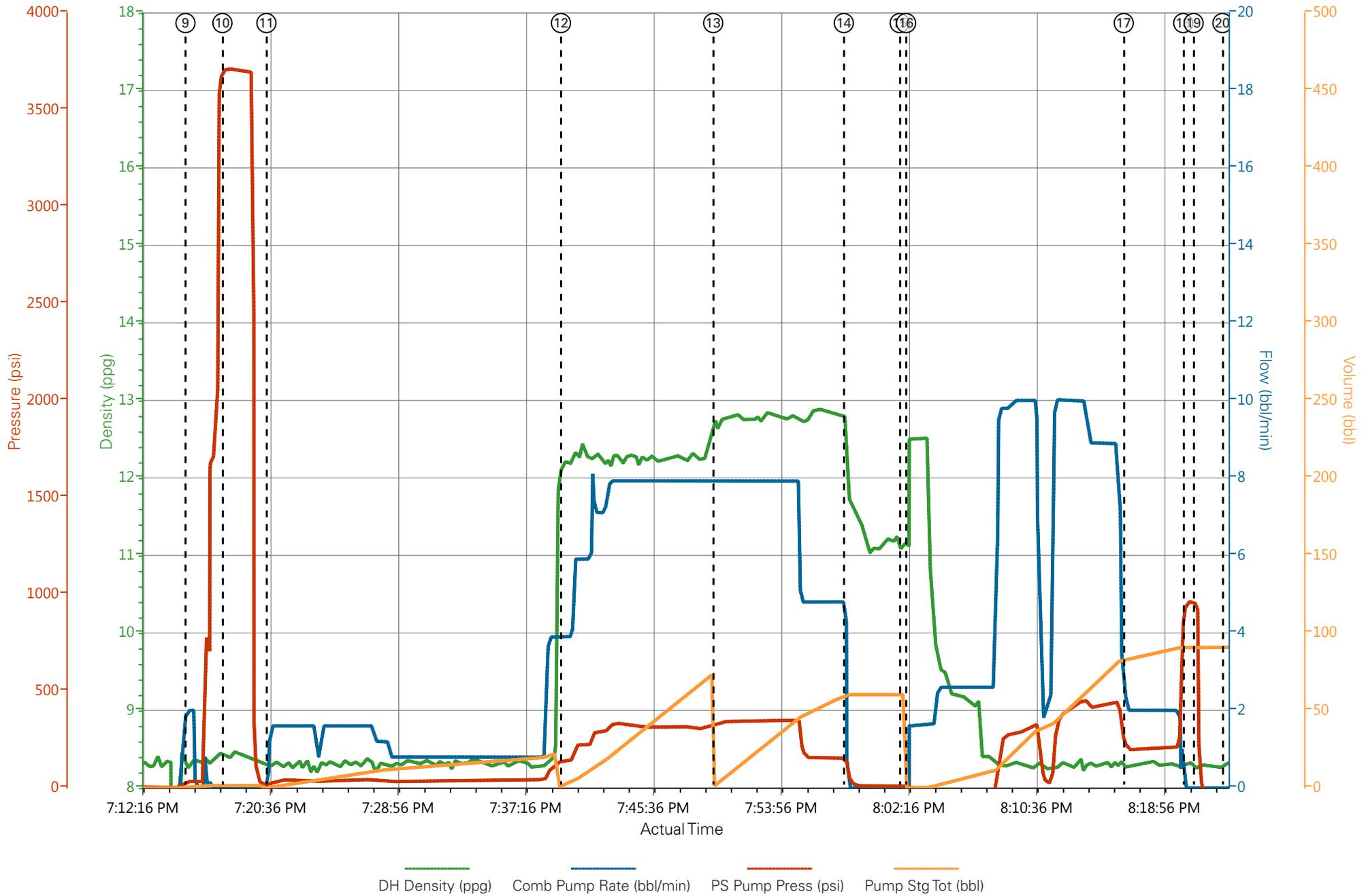
Well: 331-23

Representative: CRAIG KUKUS

Sales Order #: 0901959302

ELITE 6 / OPERATOR: DUSTIN HYDE

WPX ENERGY ROCKY MOUNTAIN NABORS 577 CEMENT 9 5/8 SURFACE CSG JOB



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

HALLIBURTON

Water Analysis Report

Company: WPX ENERGY
Submitted by: CRAIG KUKUS
Attention: _____
Lease MEAD RWF
Well # 331-23

Date: 12/21/2014
Date Rec.: 12/21/2014
S.O.# 901959302
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	0
pH	8	7
Potassium (K)	<i>5000</i>	200 Mg / L
HARDNESS	<i>500</i>	425 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>	45 Deg
Total Dissolved Solids		380 Mg / L

Respectfully: CRAIG 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 its

Sales Order #: 0901959302	Line Item: 10	Survey Conducted Date: 12/21/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: LUKE HUBBARD		API / UWI: (leave blank if unknown) 05-045-20053-00
Well Name: MEAD -RWF-		Well Number: 0080124706
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	12/21/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX19742
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

Sales Order #: 0901959302	Line Item: 10	Survey Conducted Date: 12/21/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: LUKE HUBBARD		API / UWI: (leave blank if unknown) 05-045-20053-00
Well Name: MEAD -RWF-		Well Number: 0080124706
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date	12/21/2014
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)	3
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?	
Operating Hours (Pumping Hours)	1.5
Total number of hours pumping fluid on this job. Enter in decimal format.	
Customer Non-Productive Rig Time (hrs)	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.	
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	
Number of Unplanned Shutdowns	0
Unplanned shutdown is when injection stops for any period of time.	
Was this a Primary Cement Job (Yes / No)	Yes

Sales Order #: 0901959302	Line Item: 10	Survey Conducted Date: 12/21/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: LUKE HUBBARD		API / UWI: (leave blank if unknown) 05-045-20053-00
Well Name: MEAD -RWF-		Well Number: 0080124706
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

Primary Cement Job= Casing job, Liner job, or Tie-back job.	
Did We Run Wiper Plugs? Did We Run Top And Bottom Casing Wiper Plugs?	Top
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	99
Was Automated Density Control Used? Was Automated Density Control (ADC) Used ?	Yes
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	99
Nbr of Remedial Sqz Jobs Rqd - Competition Number Of Remedial Squeeze Jobs Required After Primary Job Performed By Competition	0
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