

WPX Energy Rocky Mountain LLC- EBUS

RWF 444-25

Nabors 577

Post Job Summary

Cement Surface Casing

Date Prepared: 08/31/2014
Job Date: 08/27/2014

Submitted by: Evan Russell – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3123579	Quote #:	Sales Order #: 0901621317
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Customer Rep: LUKE HUBBARD		
Well Name: SAVAGE	Well #: RWF 444-25	API/UWI #: 05-045-21999-00	
Field: RULISON	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: SW SE-25-6S-94W-1125FSL-1381FEL			
Contractor: NABORS DRLG	Rig/Platform Name/Num: NABORS 577		
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180	Srvc Supervisor: Eric Carter		
Job			

Formation Name			
Formation Depth (MD)	Top	O FT.	Bottom
Form Type			BHST
Job depth MD	1133ft		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	1133	0	0
Open Hole Section			13.5				0	1133	0	0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe						Top Plug	9.625	1	HES
Float Shoe						Bottom Plug			
Float Collar						SSR plug set			
Insert Float						Plug Container	9.625	1	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 GJ1	VARICEM (TM) CEMENT	145	sack	12.3	2.38	13.75	8		
12.30 Gal			FRESH WATER							

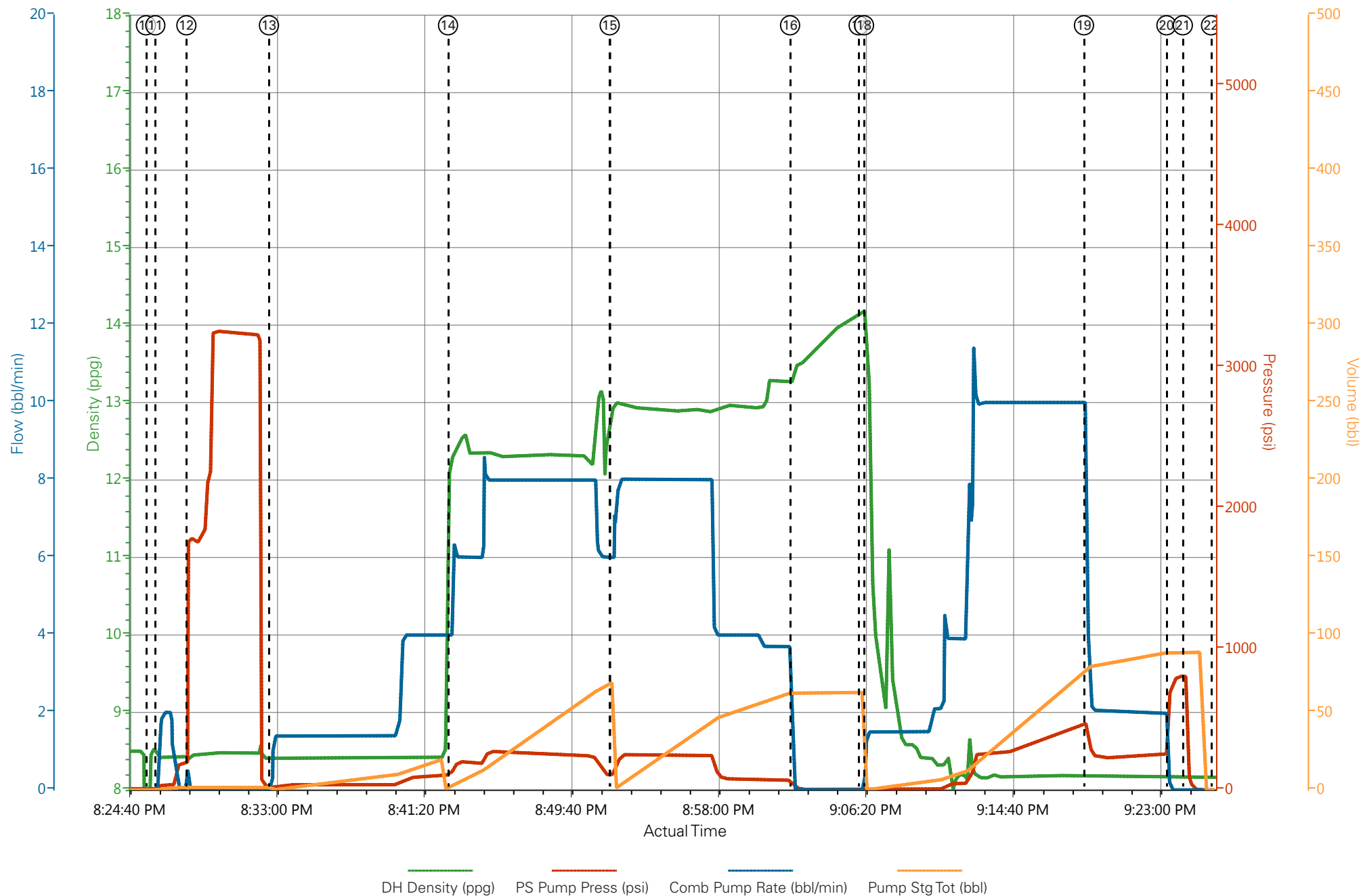
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	VariCem GJ1	VARICEM (TM) CEMENT	165	sack	12.8	2.11	11.77	8	
11.71 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Fresh Water Displacement	Fresh Water Displacement	85.6	bbl	8.34			10	
Cement Left In Pipe		Amount	45 ft		Reason		Shoe Joint		
Comment									

3.5 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	PS Pump Press (psi)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comment
Event	1	Call Out	8/27/2014	15:30	USER					
Event	2	Depart Yard Safety Meeting	8/27/2014	17:20	USER					ATTENDED BY ALL HES CREW
Event	3	Crew Leave Yard	8/27/2014	17:30	USER					
Event	4	Arrive At Loc	8/27/2014	19:00	USER					RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	8/27/2014	19:05	USER					ATTENDED BY ALL HES CREW
Event	6	Other	8/27/2014	19:15	USER					SPOT EQUIPMENT
Event	7	Pre-Rig Up Safety Meeting	8/27/2014	19:25	USER					ATTENDED BY ALL HES CREW
Event	8	Rig-Up Equipment	8/27/2014	19:30	USER					
Event	9	Pre-Job Safety Meeting	8/27/2014	20:10	USER					ATTENDED BY ALL HES CREW, RIG CREW AND COMPANY REP
Event	10	Start Job	8/27/2014	20:25:45	COM5					TP 1133', TD 1133', MW 9.8 PPG, CASING 9.625", 32.3#, J-55, SJ 45', HOLE 13.5"
Event	11	Other	8/27/2014	20:26:16	USER	8.34	40	2	2	FILL LINES
Event	12	Test Lines	8/27/2014	20:28:02	COM5					PRESSURED UP TO 2357 PSI, PRESSURE HELD
Event	13	Pump Spacer 1	8/27/2014	20:32:42	COM5	8.34	100	4	20	FRESH WATER
Event	14	Pump Lead Cement	8/27/2014	20:42:50	COM5	12.3	290	8	61.5	145 SKS VARICEM MIXED AT 12.3 PPG, 2.38 YIELD, 13.77 GL/SK
Event	15	Pump Tail Cement	8/27/2014	20:51:59	COM5	12.8	250	8	62	165 SKS VARICEM MIXED AT 12.8 PPG, 2.11 YIELD, 11.77 GL/SK
Event	16	Shutdown	8/27/2014	21:02:12	USER					
Event	17	Drop Top Plug	8/27/2014	21:06:05	USER					PLUG LAUNCHED

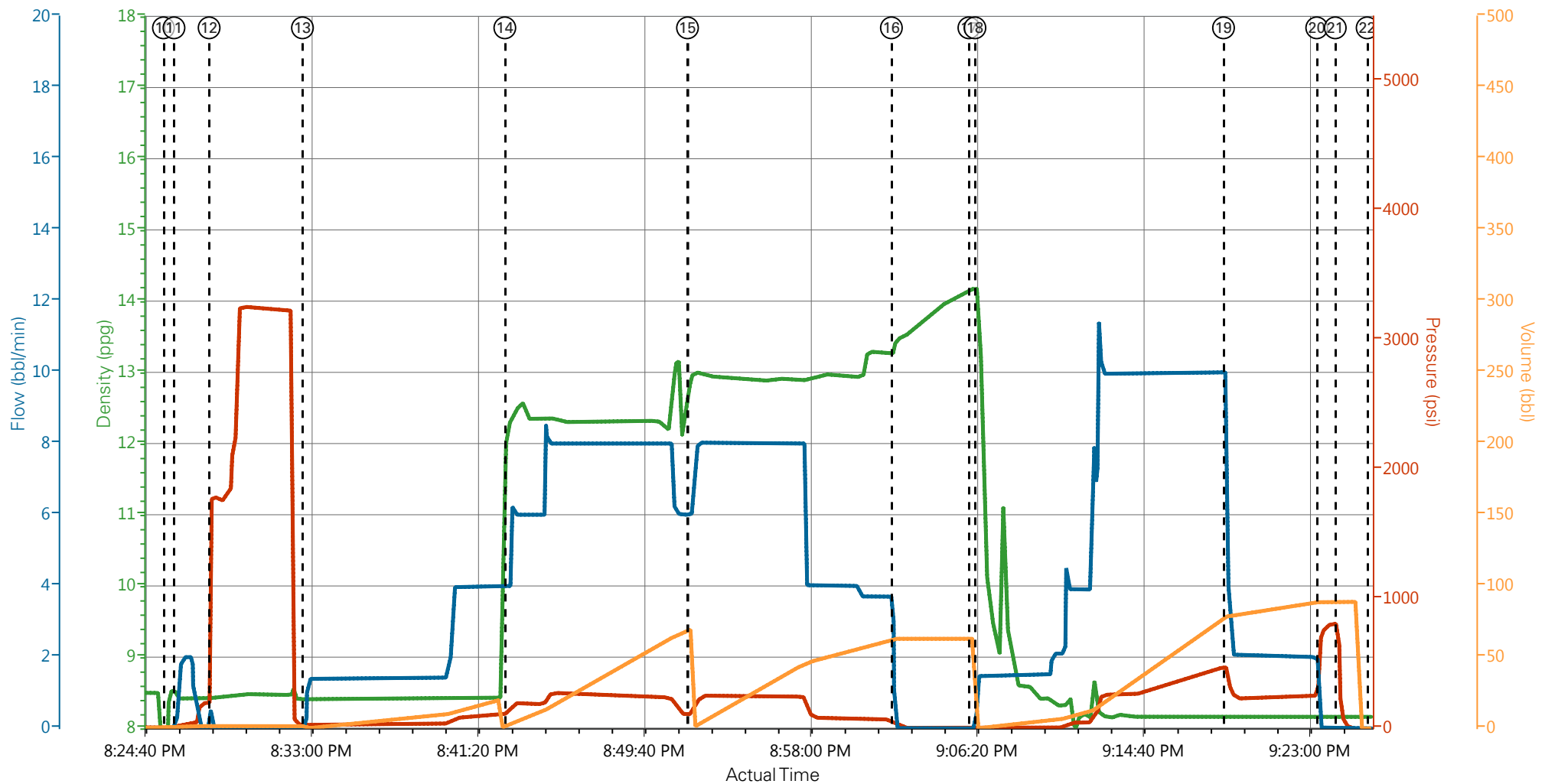
Event	18	Pump Displacement	8/27/2014	21:06:23	COM5	8.34	470	10	75.6	FRESH WATER
Event	19	Slow Rate	8/27/2014	21:18:50	USER	8.34	250	2	10	
Event	20	Bump Plug	8/27/2014	21:23:30	COM5		800			PLUG LANDED
Event	21	Check Floats	8/27/2014	21:24:26	USER					FLOATS HELD
Event	22	End Job	8/27/2014	21:26:02	COM5					GOOD CIRCULATION THROUGH OUT JOB, 15 BBLS CEMENT TO SURFACE, PIPE NOT MOVED DURING JOB
Event	23	Post-Job Safety Meeting (Pre Rig-Down)	8/27/2014	21:30	USER					ATTENDED BY ALL HES CREW
Event	24	Rig-Down Equipment	8/27/2014	21:35	USER					
Event	25	Depart Location Safety Meeting	8/27/2014	21:50	USER					ATTENDED BY ALL HES CREW
Event	26	Crew Leave Location	8/27/2014	22:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT, ERIC CARTER AND CREW

WPX - RWF 444-25 - SURFACE



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

WPX - RWF 444-25 - SURFACE



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

- | | | | | |
|---|---------------------------------------|---|-------------------------------------|------------------------------|
| ① Call Out 8.5;6;0;0 | ⑥ Other 8.5;6;0;0 | ⑪ Other 8.43;23;1;0 | ⑯ Shutdown 13.41;41;0;62.9 | 21 Check Floats 8.18;793;0;0 |
| ② Depart Yard Safety Meeting 8.49;6;0;0 | ⑦ Pre-Rig Up Safety Meeting 8.5;6;0;0 | ⑫ Test Lines 8.44;1796;0;1.6 | ⑰ Drop Top Plug 14.17;3;0;62.9 | 22 End Job 8.16;-7;0;0 |
| ③ Crew Leave Yard 8.5;6;0;0 | ⑧ Rig-Up Equipment 8.49;7;0;0 | ⑬ Pump Spacer 1 8.41;18;0;0 | ⑱ Pump Displacement 13.51;9;1.5;0.1 | 23 Post-Job Safety Meeting |
| ④ Arrive At Loc 8.5;6;0;0 | ⑨ Pre-Job Safety Meeting 8.5;6;0;0 | ⑭ Pump Lead Cement 12.27;126;4;2 | ⑲ Slow Rate 8.18;439;6.2;79 | 24 Rig-Down Equipment n/a |
| ⑤ Assessment Of Location Safety Meeting 8.5;6;0;0 | ⑩ Start Job 7.05;6;0;0 | ⑮ Pump Tail Cement 12.93;106.56;6;54.39 | 20 Bump Plug 8.18;682;0;88.8 | 25 Depart Location Safety |

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Created: 2014-08-27 19:24:30, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 8/27/2014 7:53:05 PM

Well: RWF 444-25

Representative: LUKE HUBBARD

Sales Order #: 901621317

ERIC CARTER: ANDREW SCHANZ/ELITE 8

HALLIBURTON

Water Analysis Report

Company: WPX

Submitted by: ERIC CARTER

Attention: J.Trout

Lease NABORS 577

Well # RWF 444-25

Date: 8/31/2014

Date Rec.: 8/31/2014

S.O.# 901621317

Job Type: SURFACE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	0 Mg / L
Hrdness	<i>500</i>	250 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
Temp	<i>40-80</i>	70 Deg
Total Dissolved Solids		450 Mg / L

Respectfully: ERIC CARTER

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 u

JOB PROCEDURE

NABORS 577

Pre-Planned Job Procedure Single Stage

EVENT #	EVENT	VOLUME	SACKS	WEIGHT	YIELD	GAL/ SK
1	Start Job		Rate 8 10 2			
6	Test Lines	3000.0				
9	WATER SPACER	20.0				
13	Lead Cement	61.5	145	12.3	2.38	13.75
15	Tail Cement	62.0	165	12.8	2.11	11.75
	SHUTDOWN					
22	DROP PLUG					
23	Displacement	85.6		Mud Wt.	9.9	
4	Slow Rate	75.6		Casing	9.625	32.3
26	Land Plug	237		Open Hole	13.5	
	Release Psi / Job Over	737				
4	Check Floats					
2	END JOB					
				Disp Fluid	8.4	
			Do Not Overdisplace			
DISPLACEMENT	TOTAL PIPE	SHOE JOINT LENGTH	ANN FACTOR	BBL/FT	H2O REQ.	
85.63	1133	45.00	0.0870	0.0787	199.3	
PSI to Lift Pipe	426.9	*****Use Mud Scales on Each Tier*****				
Total Displacement	85.63					
CALCULATED DIFFERENTIAL PSI		237	TOTAL FLUID PUMPED		229.1	
Collapse	7800	Burst	9950	S.O.#	901621317	
HOT	672.0	TOT	461.0	Company Rep: LUKE HUBBARD		
Bbls to Pit	21.5					

Sales Order #: 0901621317	Line Item: 10	Survey Conducted Date: 8/27/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: LUKE HUBBARD		API / UWI: (leave blank if unknown) 05-045-21999-00
Well Name: SAVAGE		Well Number: 0080125654
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	8/27/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX15491
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 The date the survey was conducted	8/27/2014

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.	3
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.	1
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.	0
Customer Non-Productive Rig Time (hrs)	0

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Well Name: SAVAGE		Well Number: 0080125654
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, was Halliburton float equipment used? (Yes/No/N/A) If applicable, was Halliburton float equipment used? (Yes/No/N/A)	Y
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	97
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	97
If applicable, were there returns throughout the job? (Yes/No/N/A) If applicable, were there returns throughout the job? (Yes/No/N/A)	Y
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