

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

NER 24-32

Nabors 576

Post Job Summary
Cement Surface Casing

Date Prepared: 08/28/2014
Job Date: 08/19/2014

Submitted by: Kory Hugentobler – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721		Ship To #: 3123465		Quote #:		Sales Order #: 0901599119					
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS				Customer Rep: Rick Oaks							
Well Name: FEDERAL		Well #: NER 24-32		API/UWI #: 05-045-21797-00							
Field: RULISON		City (SAP): RIFLE		County/Parish: GARFIELD		State: COLORADO					
Legal Description: 5-7S-93W-120FNL-2573FWL											
Contractor: NABORS DRLG				Rig/Platform Name/Num: NABORS 576							
Job BOM: 7521											
Well Type: DIRECTIONAL GAS											
Sales Person: HALAMERICA/H110657				Srvc Supervisor: Kyle Bath							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		1130ft		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	H-40	0	1130	0	1088	
Open Hole Section			13.5				0	1145	0	1098	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	9.625			1130		Top Plug	9.625		HES		
Float Shoe	9.625					Bottom Plug	9.625		HES		
Float Collar	9.625					SSR plug set	9.625		HES		
Insert Float	9.625					Plug Container	9.625		HES		
Stage Tool	9.625					Centralizers	9.625		HES		
Miscellaneous Materials											
Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty	
Treatment Fld		Conc		Inhibitor		Conc		Sand Type		Size	
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				
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			130	sack	12.3	2.38		6	13.77
13.77 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	175	sack	12.8	2.11		6	11.77
0.25 lbm		POLY-E-FLAKE (101216940)							
11.77 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	bbl	8.34				
Cement Left In Pipe		Amount 44 ft		Reason			Shoe Joint		
Comment									

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WPX ENERGY ROCKY MOUNTAIN LLC-EBUS
901599119
Case 1

3.1 Job Event Log

Type	Seq No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Pass-Side Pump Pressure (psi)	Comment
Event	1	Call Out	8/19/2014	02:00:00	USER					
Event	2	Pre Convoy Safety Meeting	8/19/2014	03:30:00	USER					
Event	3	Crew Depart Yard	8/19/2014	04:00:00	USER					
Event	4	Crew Arrive On Location	8/19/2014	06:00:00	USER					RIG WAS RIGGING UP CASERS UPON HES ARRIVAL
Event	5	Site Assesment Safety Meeting	8/19/2014	06:15:00	USER					
Event	6	Pre Rig Up Safety Meeting	8/19/2014	08:30:00	USER					
Event	7	Rig Up Complete	8/19/2014	09:30:00	USER					
Event	8	Pre Job Safety Meeting	8/19/2014	09:40:05	USER					
Event	9	Start Job	8/19/2014	10:08:47	COM3					TD 1145, TP 1130, SJ 44, CSG 9 5/8 32.3 H-40, HOLE 13 1/2, MUD 9.4
Event	10	Prime Pumps	8/19/2014	10:09:16	COM3					2 BBLS FRESH WATER
Event	11	Prime Pumps	8/19/2014	10:21:16	COM3	8.33	2	2	112	REPLACE BAD 2 IN VALVE ON TRUCK AND RETEST LINES
Event	12	Test Lines	8/19/2014	10:22:09	COM3					PRESSURE TEST TO 4700 PSI
Event	13	Pump Spacer	8/19/2014	10:33:20	USER	8.33	4	20	120	PUMP 20 BBL FRESH WATER SPACER
Event	14	Pump Lead Cement	8/19/2014	10:44:47	COM3	12.3	7	55	343	MIX AND PUMP 130 SKS AT 12.3 PPG, 2.38 FT3/FT 13.77 GAL/SK
Event	15	Pump Tail Cement	8/19/2014	10:53:34	COM3	12.8	7	65.8	209	MIX AND PUMP 175 SKS AT 12.8 PPG, 2.11 FT3/FT, 11.77 GAL/SK
Event	16	Shutdown	8/19/2014	11:03:21	USER					
Event	17	Pump Displacement	8/19/2014	11:08:00	COM3	8.33	10	85	417	PUMP 85 BBLS FRESH WATER DISPLACEMENT
Event	18	Bump Plug	8/19/2014	11:23:31	COM3					BUMP AT 303 PSI TAKE TO 920 PSI
Event	19	Check Floats	8/19/2014	11:25:10	USER					FLOATS HELD TOOK .75 BBLS BACK TO TRUCK
Event	20	End Job	8/19/2014	11:28:21	COM3					GOOD CIRCULATION THROUGHOUT JOB, 30 BBLS CEMENT TO

HALLIBURTON

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS
901599119
Case 1

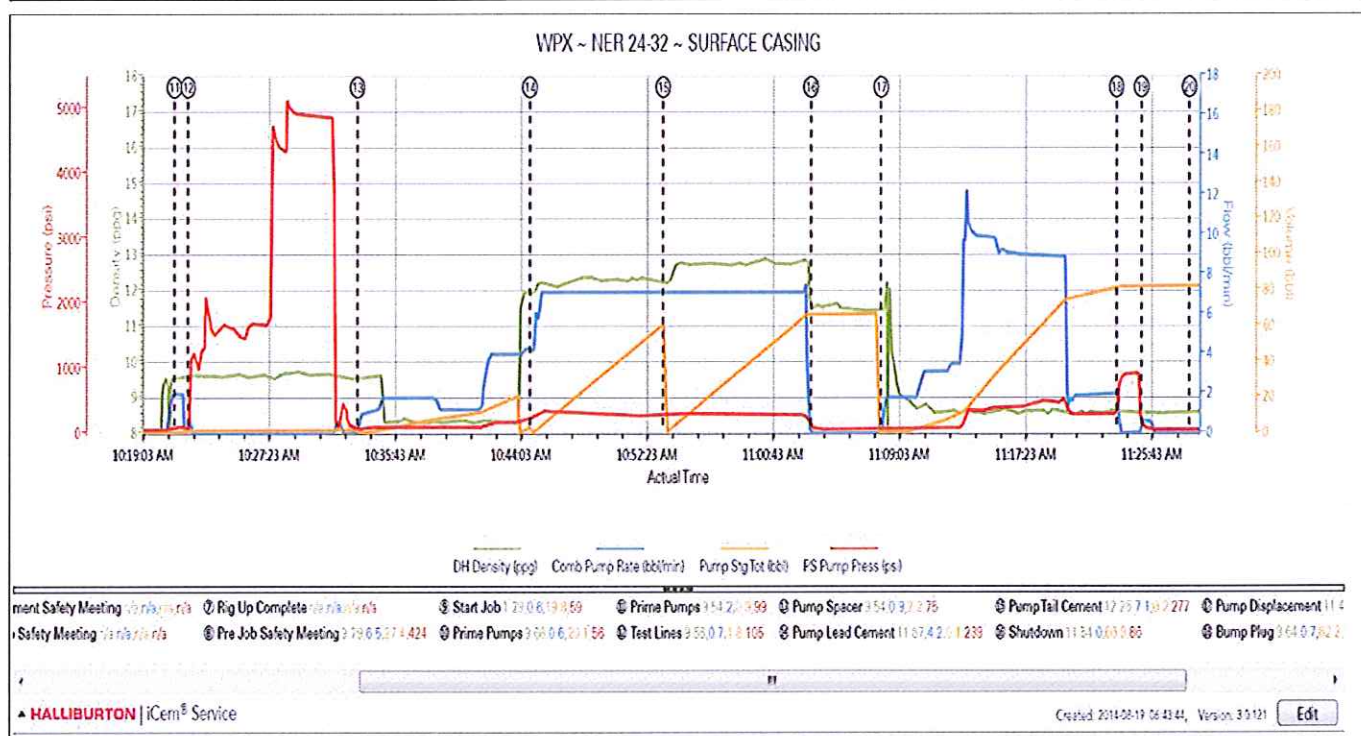
SURFACE

Event	21	Pre Rig Down Safety Meeting	8/19/2014	11:45:00	USER
Event	22	Rig Down Complete	8/19/2014	12:30:00	USER
Event	23	Pre Convoy Safety Meeting	8/19/2014	12:45:00	USER
Event	24	Crew Leave Location	8/19/2014	13:15:00	USER

THANK YOU FOR USING HALLIBURTON, KYLE BATH AND CREW!

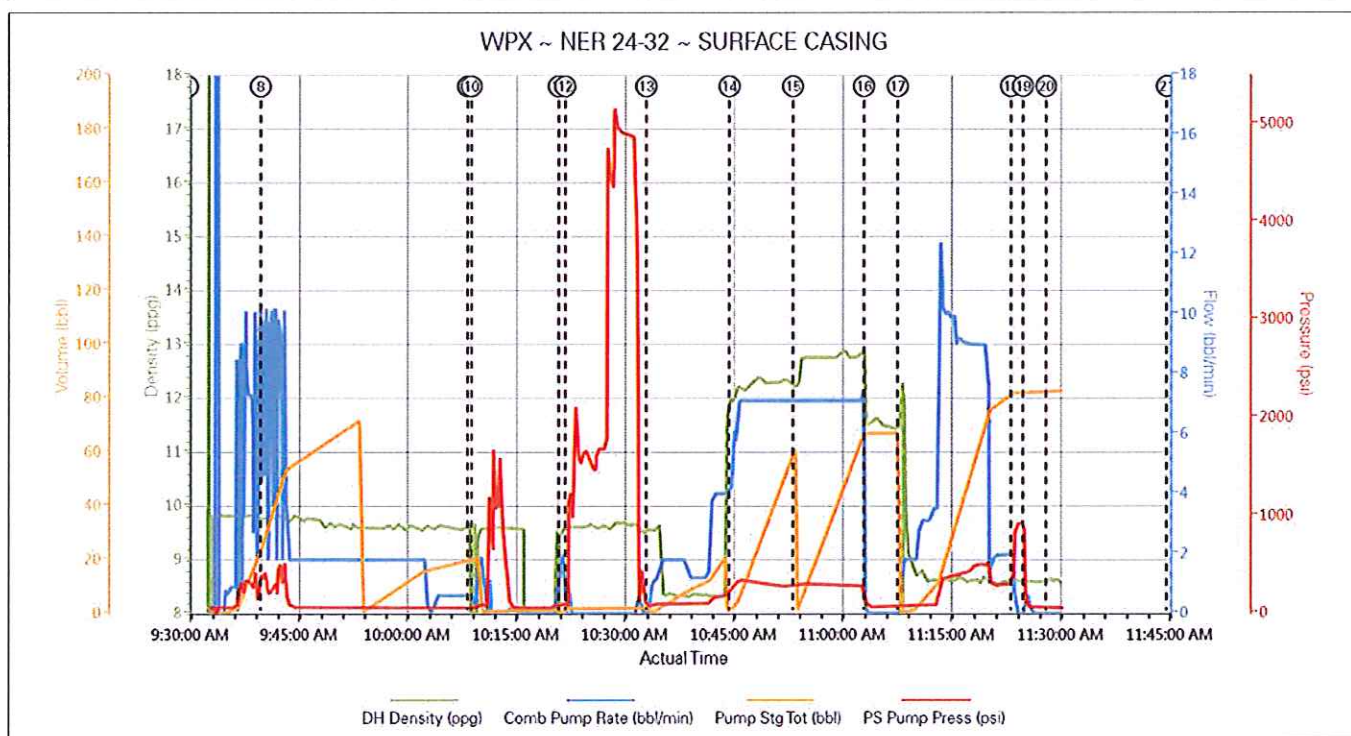
4.0 Attachments

4.1 Case 1-Custom Results.png



5.0 Custom Graphs

5.1 Custom Graph



JOB PROCEDURE

NABORS 576

Pre-Planned Job Procedure Single Stage

EVENT #	EVENT	VOLUME	SACKS	WEIGHT	YIELD	GAL/ SK
1	Start Job					
6	Test Lines	3000.0				
	H2O Spacer	20.0				
13	Lead Cement	55.1	130	12.3	2.38	13.75
15	Tail Cement	65.8	175	12.8	2.11	11.75
	SHUTDOWN					
	DROP PLUG					
22	Displacement	85.5		Mud Wt.	9.1	
1085	Slow Rate	75.5		Casing	9.625	32.3
26	Land Plug	241		Open Hole	13.5	
	Release Psi / Job Over	741				
	Check Floats					
22	END JOB					
				Disp Fluid	8.33	
			Do Not Overdisplace			
DISPLACEMENT	TOTAL PIPE	SHOE JOINT LENGTH		ANN FACTOR	BBL/FT	H2O REQ.
85.47	1130	44.00		0.0870	0.0787	197
PSI to Lift Pipe	431.9	*****Use Mud Scales on Each Tier*****				
Total Displacement	85.47					
CALCULATED DIFFERENTIAL PSI		241		TOTAL FLUID PUMPED		226
Collapse	1370	Burst		2950		S.O.# 901599119
HOT	716.1	TOT		413.9	Company Rep: RICK OAKS	
Bbls to Pit	19.1					

HALLIBURTON

Water Analysis Report

Company: WPX
Submitted by: KYLE BATH
Attention: DALLAS SCOTT
Lease: NER
Well #: 24-32

Date: 8/19/2014
Date Rec.: 8/19/2014
S.O.#: 901599119
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>220 Mg / L</i>
Hrdness	<i>500</i>	<i>0 Mg / L</i>
Iron (FE2)	<i>300</i>	<i>200 Mg / L</i>
Chlorides (Cl)	<i>3000</i>	<i>0 Mg / L</i>
Sulfates (SO ₄)	<i>1500</i>	<i><200 Mg / L</i>
Temp	<i>40-80</i>	<i>63 Deg</i>
Total Dissolved Solids		<i>380 Mg / L</i>

Respectfully: KYLE BATH

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 t

Sales Order #: 0901599119	Line Item: 10	Survey Conducted Date: 8/19/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative:		API / UWI: (leave blank if unknown) 05-045-21797-00
Well Name: FEDERAL		Well Number: 0080125512
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	8/19/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB49384
Customer Participation	Did the customer participate in this survey? (Y/N)	No
Customer Representative	Enter the Customer representative name	
HSE	Was our HSE performance satisfactory? Circle Y or N	
Equipment	Were you satisfied with our Equipment? Circle Y or N	
Personnel	Were you satisfied with our people? Circle Y or N	
Customer Comment	Customer's Comment	

CUSTOMER SIGNATURE

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KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	8/19/2014

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.	1.5
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 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?	Top
Did We Run Top And Bottom Casing Wiper Plugs?	
If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
If a top plug was run, was the plug bumped? (Yes/No/N/A)	
If applicable, was Halliburton float equipment used? (Yes/No/N/A)	NO
If applicable, was Halliburton float equipment used? (Yes/No/N/A)	
If applicable, did the floats hold? (Yes/No/N/A)	Yes
If applicable, did the floats hold? (Yes/No/N/A)	
Mixing Density of Job Stayed in Designed Density Range (0-100%)	98
Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	
Pump Rate (percent) of Job Stayed At Designed Pump Rate	98
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	
If applicable, were there returns throughout the job? (Yes/No/N/A)	YES
If applicable, were there returns throughout the job? (Yes/No/N/A)	
Nbr of Remedial Plug Jobs Rqd - HES	0
Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	
Nbr of Remedial Sqz Jobs Rqd - HES	0
Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	