

HALLIBURTON

Cementing

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

BCU 542-30-198

Cyclone 29

Post Job Summary
Cement Surface Casing

Date Prepared: 9/10/2014
Job Date: 9/1/2014

Submitted by: Tony Eschete - Cement Engineer

HALLIBURTON

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3207154	Quote #:	Sales Order #: 0901633782
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Tom Bowen	
Well Name: FEDERAL		Well #: BCU 542-30-198	API/UWI #: 05-103-11996-00
Field: SULPHUR CREEK	City (SAP): MEEKER	County/Parish: RIO BLANCO	State: COLORADO
Legal Description: NW SE-30-1N-98W-2063FSL-2135FEL			
Contractor:		Rig/Platform Name/Num: Cyclone 29	
Job BOM: 392189			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HX23209		Srcv Supervisor: Edward Deussen	

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	3334ft		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
Open Hole Section			14.75				0	1350	0	0
Casing		9.625	8.921	36	8 RD	H-40	0	3334	0	0
Open Hole Section			13.5				1350	3344	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625	1		3334	Top Plug			
Float Shoe					Bottom Plug			
Float Collar					SSR plug set			
Insert Float					Plug Container	9.625	1	HES
Stage Tool					Centralizers			

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	Top Out	HALCEM (TM) SYSTEM	30	sack	15.6	1.19		1.0	5.23	
		5.23 Gal FRESH WATER								

Fluid Data

Stage/Plug #: 2										
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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	
1	Fresh Water	Fresh Water	20	bbl	8.34			4.0		
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	
2	VersaCem (TM) System	VERSACEM (TM) SYSTEM	465	sack	12.8	1.77		8.0	9.31	
9.31 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	VersaCem (TM) System	VARICEM (TM) CEMENT	210	sack	12.8	1.96		8.0	10.93	
10.91 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	Displacement	Displacement	255.7	bbl	8.34			10.0		
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	
5	Fresh Water Spacer	Fresh Water Spacer	20	bbl	9.34			4.0		
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	
6	VersaCem (TM) System	VERSACEM (TM) SYSTEM	775	sack	12.8	1.96		8.0	10.93	
10.91 Gal		FRESH WATER								
Cement Left In Pipe		Amount	26 ft		Reason			Shoe Joint		
Comment										

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WPX ENERGY ROCKY MOUNTAIN LLC-EBUS
901633782
Case 1

3.1 Job Event Log

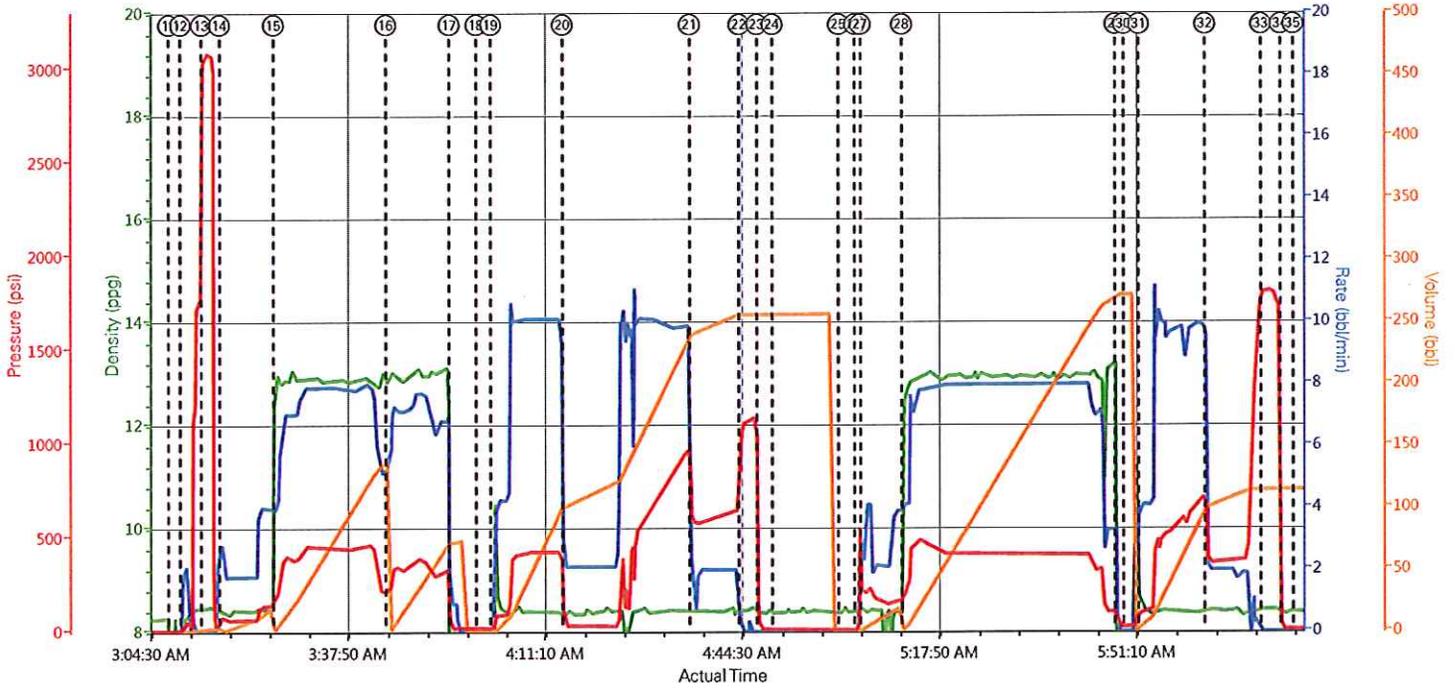
Type	Seq. No.	Graph Label	Date	Time	Source	Pass-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bb/min)	Pump Stage Total (bb)	Comment
Event	1	Call Out	9/1/2014	08:00:00	USER					O/L time 1600
Event	2	Pre-Convoy Safety Meeting	9/1/2014	11:15:00	USER					
Event	3	Crew Leave Yard	9/1/2014	11:30:00	USER					1 Elite, 2 660s, 1 Iron truck
Event	4	Arrive At Loc	9/1/2014	15:00:00	USER					Rig still pulling drill pipe
Event	5	Assessment Of Location Safety Meeting	9/1/2014	15:15:00	USER					JSA performed
Event	6	Spot Equipment	9/1/2014	18:15:00	USER					
Event	7	Pre-Rig Up Safety Meeting	9/1/2014	18:45:00	USER					
Event	8	Rig-Up Equipment	9/1/2014	19:00:00	USER					1 Hard line to standpipe, Bulk hoses to silos and 660s, Water lines to day tank and upright, manifold on cement head for rig to tie in
Event	9	Rig-Up Completed	9/1/2014	20:30:00	USER					
Event	10	Pre-Job Safety Meeting	9/2/2014	02:50:00	USER					Mud 8.9 ppg, PV 7, YP 14
Event	11	Start Job	9/2/2014	03:08:00	USER					TD 3344', TP 3334', SJ 26', 14 3/4" OH to 1350', 13 1/2" OH to TD, MSC Tool @ 1433', 9 5/8" 36# csg
Event	12	Prime Lines	9/2/2014	03:10:00	COM5	75	8.33	2.0	2.0	Fresh Water
Event	13	Test Lines	9/2/2014	03:13:35	COM5	3091				Pressure held at 3091 psi
Event	14	Pump H2O Spacer	9/2/2014	03:16:40	COM5	138	8.33	4.0	20.0	Fresh Water
Event	15	Pump Lead Cement	9/2/2014	03:25:48	COM5	468	12.8	8.0	146.6	465 sks, 12.8 ppg, 1.77 yield, 9.31 gal/sk
Event	16	Pump Tail Cement	9/2/2014	03:44:44	COM5	384	12.8	8.0	73.3	210 sks, 12.8 ppg, 1.96 yield, 10.93 gal/sk
Event	17	Shutdown	9/2/2014	03:55:25	USER					
Event	18	Drop Plug	9/2/2014	03:59:57	USER					Rig supplied dart
Event	19	Pump Displacement	9/2/2014	04:02:26	COM5	967	8.33	10.0	255.7	Fresh Water
Event	20	Slow Rate Thru Tool	9/2/2014	04:14:37	COM5	60	8.33	2.0	20.0	
Event	21	Slow Rate	9/2/2014	04:36:11	USER	585	8.33	2.0	15.0	Good returns throughout job

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WPX ENERGY ROCKY MOUNTAIN LLC-EBUS
901633782
Case 1

Event	22	Bump Plug	9/2/2014	04:44:30	COM5	645					
Event	23	Check Floats	9/2/2014	04:47:31	USER	1125					Floats held - 1 1/4 bbl flowback
Event	24	Drop MSC Opening Device	9/2/2014	04:50:05	COM5						Rig supplied - 10 minutes for free fall
Event	25	2nd Stage	9/2/2014	05:01:18	COM5						
Event	26	Pump Spacer	9/2/2014	05:04:02	USER	156	8.33	4.0	20.0		Fresh Water
Event	27	Open Multiple Stage Cementer	9/2/2014	05:05:00	USER	700					
Event	28	Pump Cement	9/2/2014	05:11:59	COM5	422	12.8	8.0	270.5		775 sks, 12.8 ppg, 1.95 yield, 10.93 gal/sk
Event	29	Shutdown	9/2/2014	05:48:02	USER						Wash up on top of plug
Event	30	Drop Closing Device	9/2/2014	05:49:29	COM5						Rig supplied plug
Event	31	Pump Displacement	9/2/2014	05:52:02	COM5	712	8.33	10.0	110.8		Fresh Water - saw 51 bbls 1st stage cement to surface
Event	32	Slow Rate	9/2/2014	06:03:12	USER	390	8.33	2.0	10.0		Got 100 bbls 2nd stage cement to surface
Event	33	Close Multiple Stage Cementer	9/2/2014	06:12:38	USER	1807					
Event	34	Release Casing Pressure	9/2/2014	06:15:56	USER						Tool closed
Event	35	End Job	9/2/2014	06:18:05	COM5						Wait on location for topout
Event	36	Start Topout Job	9/2/2014	08:25:11	COM5						Cement fell approx 28 ft = 3.4 bbls cement
Event	37	Pump Cap Cement	9/2/2014	08:32:43	COM5	44	15.6	1.0	6.3		Approx 30 sks, 15.6 ppg, 1.19 yield, 5.23 gal/sk
Event	38	Shutdown	9/2/2014	08:36:35	USER						Water behind to clear lines
Event	39	End Job	9/2/2014	08:38:00	USER						Cement to surface
Event	40	Pre-Rig Down Safety Meeting	9/2/2014	08:45:00	USER						9 add hours
Event	41	Rig-Down Equipment	9/2/2014	09:00:00	USER						
Event	42	Rig-Down Completed	9/2/2014	10:30:00	USER						
Event	43	Pre-Convoy Safety Meeting	9/2/2014	10:45:00	USER						
Event	44	Crew Leave Location	9/2/2014	11:00:00	USER						Thank you for using Halliburton

WPX - BCU 542-30-198 - 2 STAGE 9 5/8" SURFACE



DH Density (ppg) 8.35 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 7 Pump Stg Tot (bbl) 114.9

① Call Out n/a;n/a;n/a;n/a	⑧ Rig-Up Equipment n/a;n/a;n/a;n/a	⑮ Pump Lead Cement 12.93;3.9;197;3.1	22 Bump Plug 8.42;0;1092;266.4	29 Shutdown
② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a	⑨ Rig-Up Completed n/a;n/a;n/a;n/a	⑯ Pump Tail Cement 13.5;6;235;141.3	23 Check Floats 8.34;0;28;266.4	30 Drop Clos
③ Crew Leave Yard n/a;n/a;n/a;n/a	⑩ Pre-Job Safety Meeting 8.25;0;5;0	⑰ Shutdown 0.08;0.9;21;72.6	24 Drop MSC Opening Device 8.36;0;10;266.4	31 Pump Dis
④ Arrive At Loc n/a;n/a;n/a;n/a	⑪ Start Job 0.18;0;5;0	⑱ Drop Plug -0.07;0;18;0	25 2nd Stage 8.35;0;8;0	32 Slow Rate
⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a	⑫ Prime Lines 8.22;1.8;24;0.5	⑳ Pump Displacement 0.01;1.8;22;0.2	26 Pump Spacer 8.43;0;8;0	33 Close Mul
⑥ Spot Equipment n/a;n/a;n/a;n/a	⑬ Test Lines 8.42;0;3090;2.3	20 Slow Rate Thru Tool 8.37;2.1;41;102.1	27 Open Multiple Stage Cementer 8.42;2.3;191;2.3	34 Release C
⑦ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a	⑭ Pump H2O Spacer 8.41;2.8;88;4.8	21 Slow Rate 8.33;2;591;241.3	28 Pump Cement 12.64;4.1;203;3.1	35 End Job 8

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Created: 2014-09-01 15:14:37, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 9/2/2014 12:32:22 AM

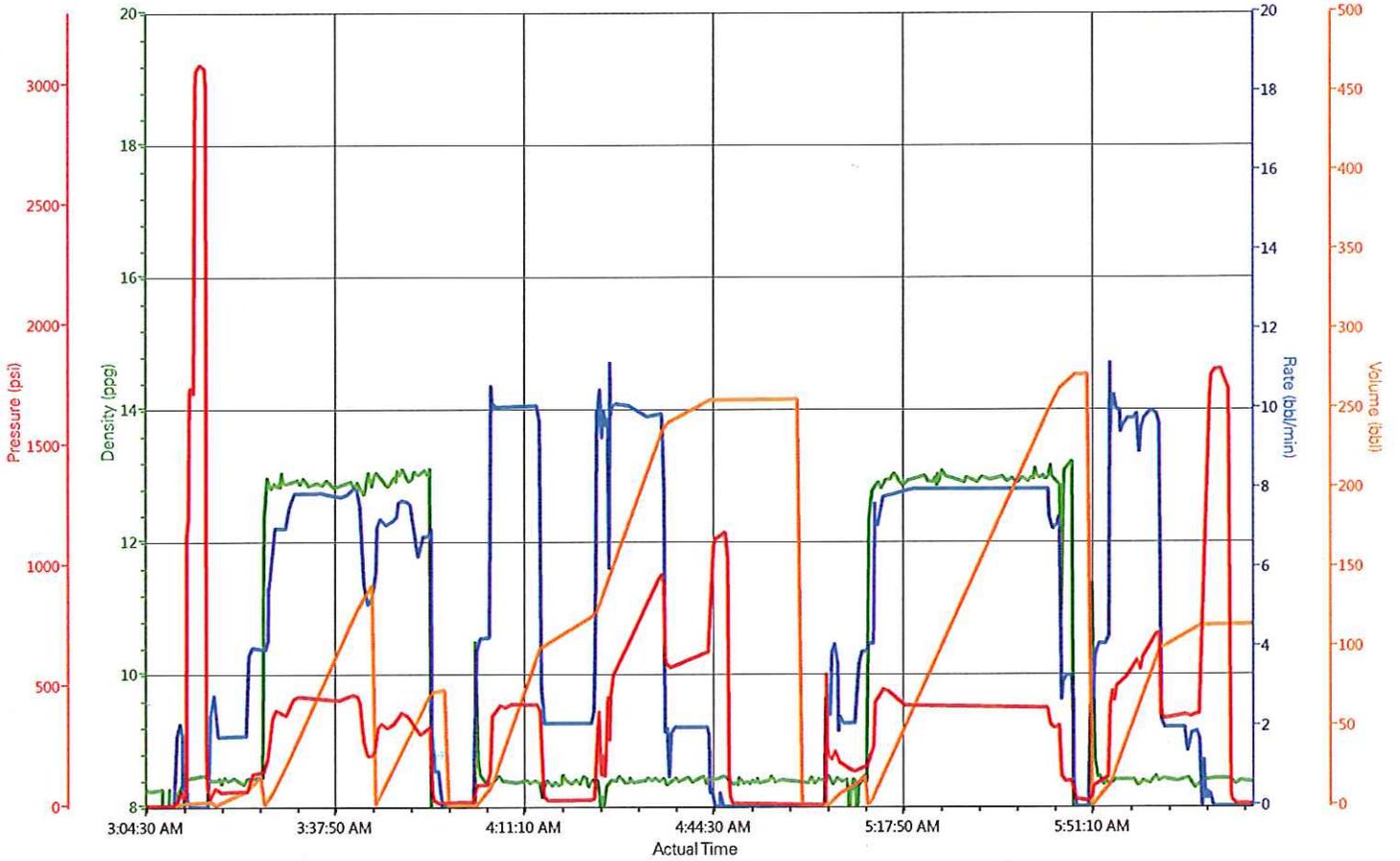
Well: BCU 542-30-198

Representative: Tom Bowen

Sales Order #: 901633782

Elite #3: Ed Duessen / Brent Banks

WPX - BCU 542-30-198 - 2 STAGE 9 5/8" SURFACE



DH Density (ppg) 8.43 Comb Pump Rate (bbbl/min) 0 PS Pump Press (psi) 7 Pump Stg Tot (bbbl) 114.9

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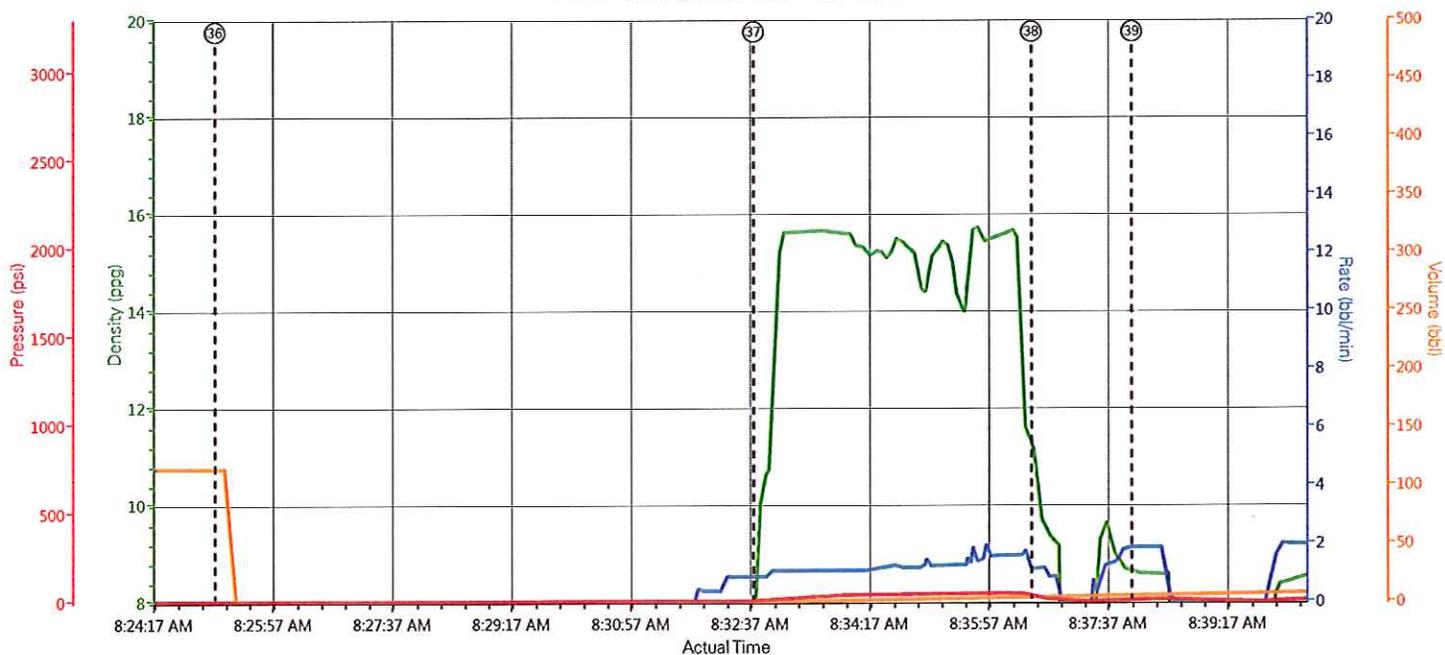
Well: BCU 542-30-198

Representative: Tom Bowen

Sales Order #: 901633782

Elite #3: Ed Deussen / Brent Banks

WPX - BCU 542-30-198 - TOPOUT



DH Density (ppg) -0.03 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 11 Pump Stg Tot (bbl) 9.6

① Call Out n/a;n/a;n/a;n/a	⑨ Rig-Up Completed n/a;n/a;n/a;n/a	⑰ Shutdown 0.08;0.9;21;72.6	25 2nd Stage 8.35;0;8;0	33 Ci
② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a	⑩ Pre-Job Safety Meeting 8.25;0;5;0	⑱ Drop Plug -0.07;0;18;0	26 Pump Spacer 8.43;0;8;0	34 Ri
③ Crew Leave Yard n/a;n/a;n/a;n/a	⑪ Start Job 0.18;0;5;0	⑲ Pump Displacement 0.01;1.8;22;0.2	27 Open Multiple Stage Cementer 8.42;2.3;191;2.3	35 Ei
④ Arrive At Locn n/a;n/a;n/a;n/a	⑫ Prime Lines 8.22;1.8;24;0.5	20 Slow Rate Thru Tool 8.37;2.1;41;102.1	28 Pump Cement 12.64;4.1;203;3.1	36 Si
⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a	⑬ Test Lines 8.42;0;3090;2.3	21 Slow Rate 8.33;2;591;241.3	29 Shutdown 0.21;0;43;272	37 Pi
⑥ Spot Equipment n/a;n/a;n/a;n/a	⑭ Pump H2O Spacer 8.41;2.8;88;4.8	22 Bump Plug 8.42;0;1092;256.4	30 Drop Closing Device 0.06;0;24;272	38 Si
⑦ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a	⑮ Pump Lead Cement 12.99;3.9;197;3.1	23 Check Floats 8.34;0;28;256.4	31 Pump Displacement 8.44;4.1;105;4.3	39 Ei
⑧ Rig-Up Equipment n/a;n/a;n/a;n/a	⑯ Pump Tail Cement 13.5;6;235;141.3	24 Drop MSC Opening Device 8.36;0;10;256.4	32 Slow Rate 8.43;2.2;400;100.9	40 Pi

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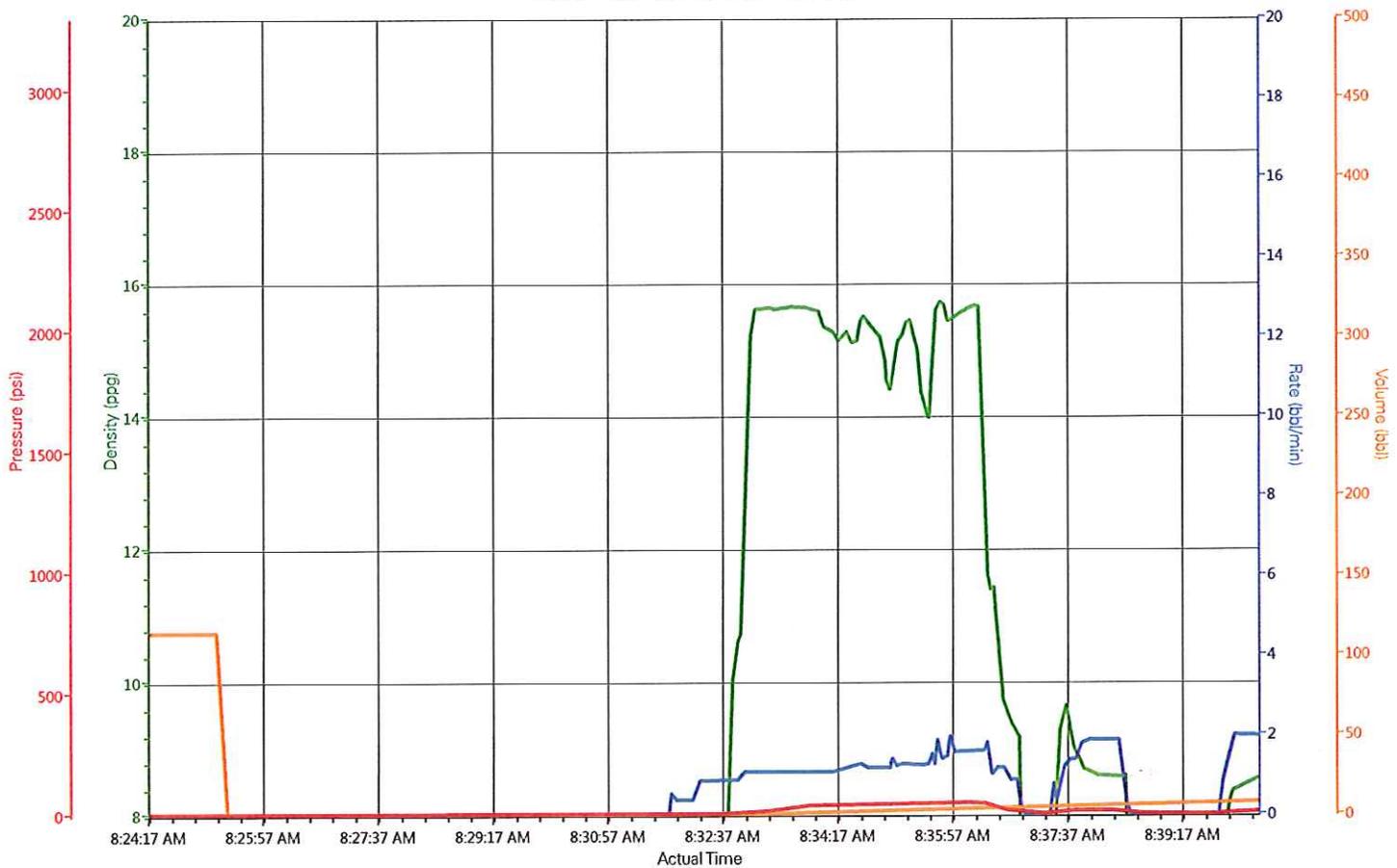
Well: BCU 542-30-198

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Elite #3: Ed Deussen / Brent Banks

WPX - BCU 542-30-198 - TOPOUT



DH Density (ppg) -0.03 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 11 Pump Stg Tot (bbl) 9.6

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Job Date: 9/2/2014 12:32:22 AM

Well: BCU 542-30-198

Representative: Tom Bowen

Sales Order #: 901633782

Elite #3: Ed Deussen / Brent Banks

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Water Analysis Report

Company: WPX
Submitted by: ED DEUSSEN
Attention: J.TROUT
Lease: BCU
Well #: 542-30-198

Date: 9/1/2014
Date Rec.: 9/1/2014
S.O.#: 901633782
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	0 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
Temp	<i>40-80</i>	64 Deg
Total Dissolved Solids		260 Mg / L

Respectfully: ED DEUSSEN

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 it

Sales Order #: 0901633782	Line Item: 10	Survey Conducted Date: 9/2/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT MULTIPLE STAGES BOM
Customer Representative: TOM BOWEN		API / UWI: (leave blank if unknown) 05-103-11996-00
Well Name: FEDERAL		Well Number: 0080244346
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: RIO BLANCO

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	9/3/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB57194
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	TOM BOWEN
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	GOOD JOB! ED + CREW

CUSTOMER SIGNATURE

Sales Order #: 0901633782	Line Item: 10	Survey Conducted Date: 9/2/2014
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Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: RIO BLANCO

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	9/2/2014

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.	6
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.	3
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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Customer Representative: TOM BOWEN		API / UWI: (leave blank if unknown) 05-103-11996-00
Well Name: FEDERAL		Well Number: 0080244346
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: RIO BLANCO

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)	NO
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	99
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
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