

WPX Energy Rocky Mountain LLC- EBUS

PA 341-27

Nabors 576

Post Job Summary

Cement Production Casing

Date Prepared: 12/16/14
Job Date: 12/04/14

Submitted by: Evan Russell – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3207559	Quote #:	Sales Order #: 0901899870
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Rick Oaks	
Well Name: FEDERAL	Well #: PA 341-27	API/UWI #: 05-045-22238-00	
Field: PARACHUTE	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: 27-6S-95W-2352FNL-647FEL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS 576	
Job BOM: 7523			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srvc Supervisor: Dustin Hyde	

Job

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	8842ft 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		9.625	9.001	32.3			0	2942		2942
Casing		4.5	4	11.6			0	8842		8842
Open Hole Section			8.75				2790	8851	0	8851

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	4.5	1		8842	Top Plug	4.5	1	HES
Float Shoe	4.5	1			Bottom Plug			
Float Collar	4.5	1		8812	SSR plug set			
Insert Float	4.5	1			Plug Container	4.5	1	HES
Stage Tool	4.5	1			Centralizers	4.5		

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			4	

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
2	EconoCem GJ2	ECONOCEM (TM) SYSTEM	395	sack	12.7	1.66		8	8.51	
8.51 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
3	ThermaCem GJ2	THERMACEM (TM) SYSTEM	670	sack	13.5	1.74		8	7.61	
7.61 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
4	Fresh Water Displacement	Fresh Water Displacement	136.6	bbl	8.34			10		
Cement Left In Pipe		Amount	30 ft		Reason			Shoe Joint		
Comment										

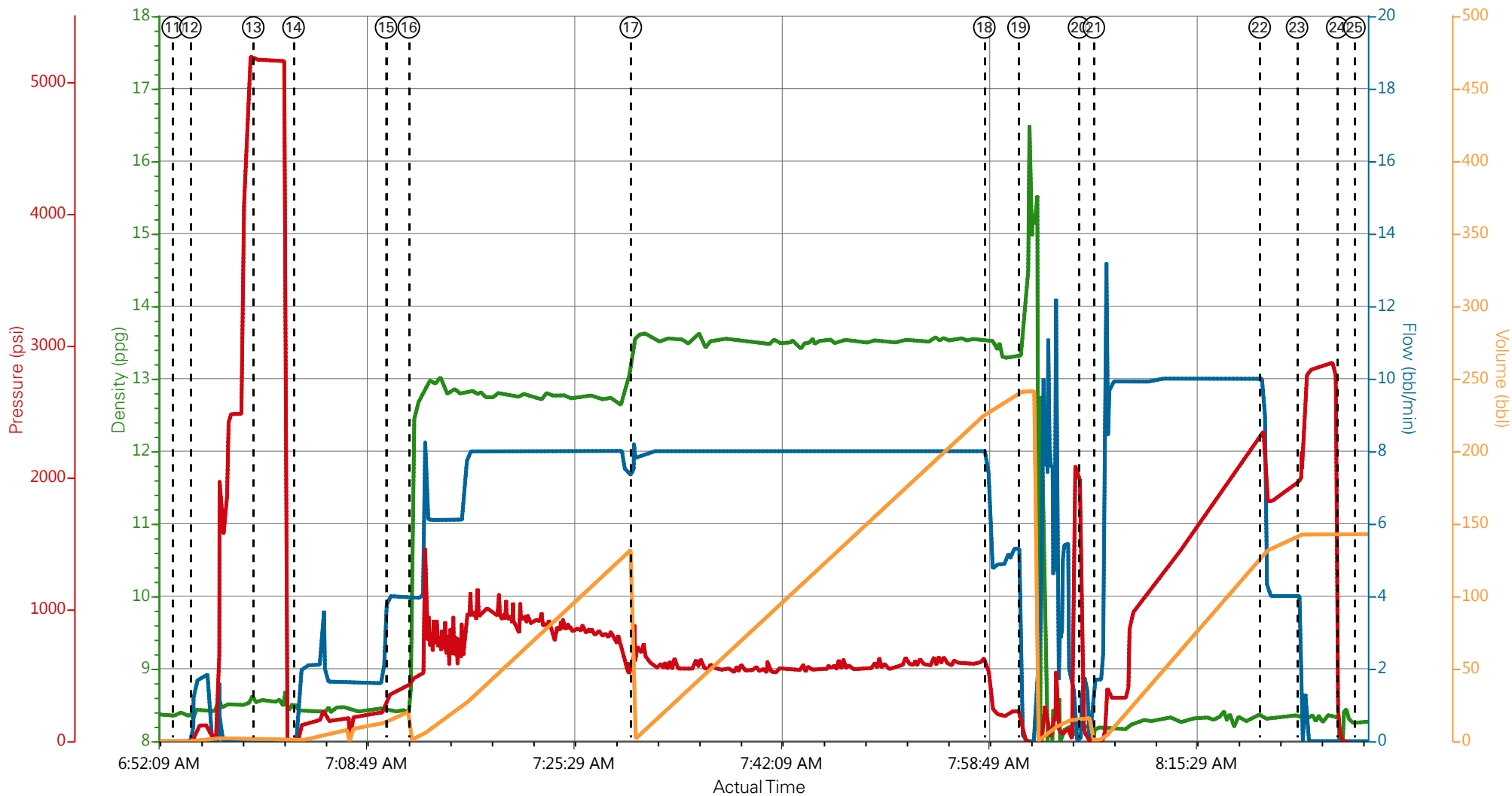
3.5 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	12/3/2014	16:00:00	USER					ON LOCATION 2200
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	12/3/2014	18:45:00	USER					ALL HES PERSONNEL ATTENDED
Event	3	Crew Leave Yard	Crew Leave Yard	12/3/2014	19:00:00	USER					1 HT 400 PUMP TRUCK E #8, 1 660 BULK TRUCK, 1 550 PICKUP
Event	4	Arrive At Loc	Arrive At Loc	12/3/2014	21:00:00	USER					RIG RUNNING CASING UPON HES ARRIVAL
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	12/3/2014	21:30:00	USER					PERFORMED JSA AND WATER TEST
Event	6	Other	Spot Equipment	12/4/2014	03:00:00	USER					1 HT 400 PUMP TRUCK E #8, 1 660 BULK TRUCK, 1 550 PICKUP
Event	7	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	12/4/2014	03:45:00	USER					ALL HES PERSONNEL ATTENDED
Event	8	Rig-Up Equipment	Rig-Up Equipment	12/4/2014	04:00:00	USER					1 HT 400 PUMP TRUCK E #8, 1 660 BULK TRUCK, 1 1200 CUFT SILO, 1 550 PICKUP
Event	9	Rig-Up Completed	Rig-Up Completed	12/4/2014	05:30:00	USER					
Event	10	Pre-Job Safety Meeting	Pre-Job Safety Meeting	12/4/2014	06:30:00	USER					ALL HES PERSONNEL ATTENDED AND RIG CREW

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	11	Start Job	Start Job	12/4/2014	06:53:30	COM8					TD 8851', TP 8841.71', SJ 29.44', OH 8 3/4", SURFACE CSG 9 5/8" 36# SET @ 2942', PRODUCTION CSG 4 1/2", 11.6#
Event	12	Prime Pumps	Prime Lines	12/4/2014	06:54:54	COM8	8.33	2.0	126	2	FRESH WATER
Event	13	Test Lines	Test Lines	12/4/2014	06:59:58	COM8			5176		PRESSURE HELD @ 5176 PSI
Event	14	Pump Spacer 1	Pump H2O Spacer	12/4/2014	07:03:12	COM8	8.33	4.0	425	20	FRESH WATER
Event	15	Check Weight	Check weight	12/4/2014	07:10:38	COM8					
Event	16	Pump Lead Cement	Pump Lead Cement	12/4/2014	07:12:28	COM8	12.7	8.0	1000	116.8	395 SKS OF ECONOCEM, 12.7 PPG, 1.66 YIELD, 8.51 GAL/SK
Event	17	Pump Tail Cement	Pump Tail Cement	12/4/2014	07:30:17	COM8	13.5	8.0	614	207.6	670 SKS OF THERMACEM, 13.5 PPG, 1.74 YIELD, 7.61 GAL/SK
Event	18	Slow Rate	Slow Rate	12/4/2014	07:58:41	USER					ENDING SILO SLOWED TO KEEP DENSITY
Event	19	Shutdown	Shutdown / Clean Lines	12/4/2014	08:01:26	USER					WASHED UP TO CUTTINGS PIT USED ABOUT 12 BBLS
Event	20	Drop Top Plug	Drop Top Plug	12/4/2014	08:06:18	COM8					VERIFIED BY CO. REP
Event	21	Pump Displacement	Pump Displacement	12/4/2014	08:07:29	COM8	8.4	10	2324	126.6	1 GAL MMCR IN FIRST 10 BBL, 1 BAG BE-6 IN FIRST 30 BBLS, 1 BAG KCL IN EVERY 10 BBLS

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	22	Slow Rate	Slow Rate	12/4/2014	08:20:49	USER	8.4	2.0	1920	10	
Event	23	Bump Plug	Bump Plug	12/4/2014	08:23:48	COM8	8.4	2.0	1998	136.6	PLUG BUMPED
Event	24	Check Floats	Check Floats	12/4/2014	08:27:02	USER			2804		FLOATS HELD
Event	25	End Job	End Job	12/4/2014	08:28:25	USER					1.5 BBL FLOW BACK GOOD RETURNS THROUGHOUT JOB
Event	26	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	12/4/2014	08:45:00	USER					ALL HES PERSONNEL ATTENDED
Event	27	Rig-Down Equipment	Rig-Down Equipment	12/4/2014	09:00:00	USER					1 HT 400 PUMP TRUCK E #8, 1 660 BULK TRUCK, 1 1200 CUFT SILO, 1 550 PICKUP
Event	28	Rig-Down Completed	Rig-Down Completed	12/4/2014	11:00:00	USER					NO INJURIES TO REPORT
Event	29	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	12/4/2014	11:15:00	USER					CHAINED UP TRUCKS TO GET OFF OF HILL DUE TO RAIN
Event	30	Crew Leave Location	Crew Leave Location	12/4/2014	20:00:04	USER					THANK YOU FOR USING HALLIBURTON CEMENT

WPX PA 341-27 4 1/2" PRODUCTION



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

- | | | | | | |
|---|-----------------------------|-------------------|--------------------------|----------------------|---|
| ① Call Out | ⑥ Spot Equipment | ⑪ Start Job | ⑯ Pump Lead Cement | 21 Pump Displacement | 26 Post-Job Safety Meeting (Pre Rig-Down) |
| ② Pre-Convoy Safety Meeting | ⑦ Pre-Rig Up Safety Meeting | ⑫ Prime Lines | ⑰ Pump Tail Cement | 22 Slow Rate | 27 Rig-Down Equipment |
| ③ Crew Leave Yard | ⑧ Rig-Up Equipment | ⑬ Test Lines | ⑱ Slow Rate | 23 Bump Plug | 28 Rig-Down Completed |
| ④ Arrive At Loc | ⑨ Rig-Up Completed | ⑭ Pump H2O Spacer | ⑲ Shutdown / Clean Lines | 24 Check Floats | 29 Pre-Convoy Safety Meeting |
| ⑤ Assessment Of Location Safety Meeting | ⑩ Pre-Job Safety Meeting | ⑮ Check weight | 20 Drop Top Plug | 25 End Job | 30 Crew Leave Location |

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[Edit](#)

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 12/4/2014

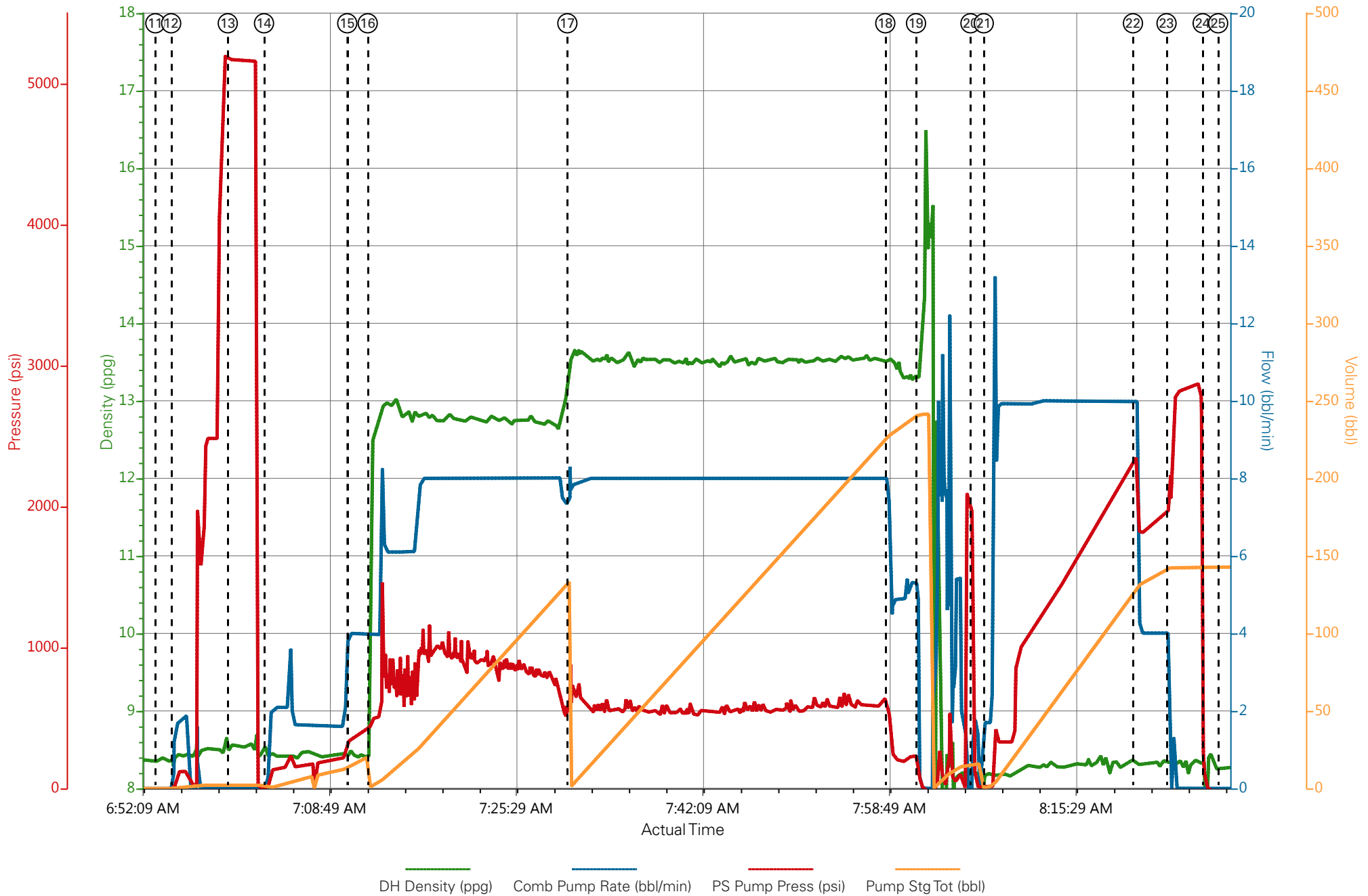
Well: PA 341-27

Representative: Rick Oaks

Sales Order #: 901899870

Elite #8: Dustin Hyde / Max Lobato

WPX PA 341-27 4 1/2" PRODUCTION



HALLIBURTON

Water Analysis Report

Company: WPX

Submitted by: Dustin Hyde

Attention: J.TROUT

Lease PA

Well # 341-27

Date: 12/3/2014

Date Rec.: 12/3/2014

S.O.# 901899870

Job Type: PRODUCTION

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	700 Mg / L
Calcium (Ca)	<i>500</i>	250 Mg / L
Iron (FE2)	<i>300</i>	0 Mg / L
Chlorides (Cl)	<i>3000</i>	500 Mg / L
Sulfates (SO ₄)	<i>1500</i>	<200 Mg / L
Temp	<i>40-80</i>	40 Deg
Total Dissolved Solids		460 Mg / L

Respectfully: Dustin Hyde

Title: Cement 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 #: 0901899870	Line Item: 10	Survey Conducted Date: 12/4/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT PRODUCTION CASING BOM
Customer Representative: RICK OAKS		API / UWI: (leave blank if unknown) 05-045-22238-00
Well Name: FEDERAL		Well Number: 0080244817
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	12/4/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB43597
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	RICK OAKS
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	12/4/2014
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	Deviated
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
Total Operating Time (hours)	5
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	2
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	5
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 Name: FEDERAL		Well Number: 0080244817
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.	
Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment? Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?	No
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)	Not Available
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	98
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)	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