

WPX Energy Rocky Mountain LLC- EBUS

Federal RGU 343-26-198

H&P 318

Post Job Summary

Cement Production Casing

Date Prepared: 04/30/2015
Job Date: 04/19/2015

Submitted by: Evan Russell – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721		Ship To #: 3124442		Quote #:		Sales Order #: 0902245598				
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS				Customer Rep:						
Well Name: FEDERAL		Well #: RGU 343-26-198		API/UWI #: 05-103-11967-00						
Field: SULPHUR CREEK		City (SAP): MEEKER		County/Parish: RIO BLANCO		State: COLORADO				
Legal Description: 26-1S-98W-2460FNL-905FEL										
Contractor: H & P DRLG				Rig/Platform Name/Num: H & P 318						
Job BOM: 7523										
Well Type: DIRECTIONAL GAS										
Sales Person: HALAMERICA\HB50180				Srv Supervisor: Cliff Sparks						
Job										
Calculated TOT 6499', TOL 4415', Scav to surface. Good returns during cement. No returns during displacement										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		12499ft		Job Depth TVD		12499ft				
Water Depth				Wk Ht Above Floor		3'				
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	8.921	36			0	3913	0	3913
Casing		4.5	4	11.6			0	12499	0	12499
Open Hole Section			8.75				3913	10100	3913	10100
Open Hole Section			7.875				10100	12499	10100	12499
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	4.5	1		12499		Top Plug	4.5	1		
Float Shoe	4.5					Bottom Plug	4.5			
Float Collar	4.5	1		12472.5		SSR plug set	4.5			
Insert Float	4.5					Plug Container	4.5			
Stage Tool	4.5					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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Fresh Water	Fresh Water		100	bbl	8.3				

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	ExtendaCem	EXTENDACEM (TM) SYSTEM	615	sack	11	2.75			16.07	
16.07 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	EconoCem GJ1	ECONOCCEM (TM) SYSTEM	335	sack	12.7	1.91			10.09	
10.09 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	ThermaCem GJ1	THERMACEM (TM) SYSTEM	945	sack	13.5	1.75		6	8.25	
8.32 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	
5	Displacement	Displacement	193.3	bbl	8.33					
0.03 lbm/bbl		BE-6, 48 LB FIBER DRUM (100003800)								
0.01 gal/bbl		MICRO MATRIX CEMENT RETARDER, 1 GAL PAIL (100003780)								
Cement Left In Pipe		Amount	27 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: ## °F °C					
Plug Bumped? Yes/No		Bump Pressure: ##### psi MPa			Floats Held? Yes/No					
Cement Returns: ## bbl m3		Returns Density: ## lb/gal kg/m3			Returns Temperature: ## °F °C					
Comment										

2.0 Real-Time Job Summary

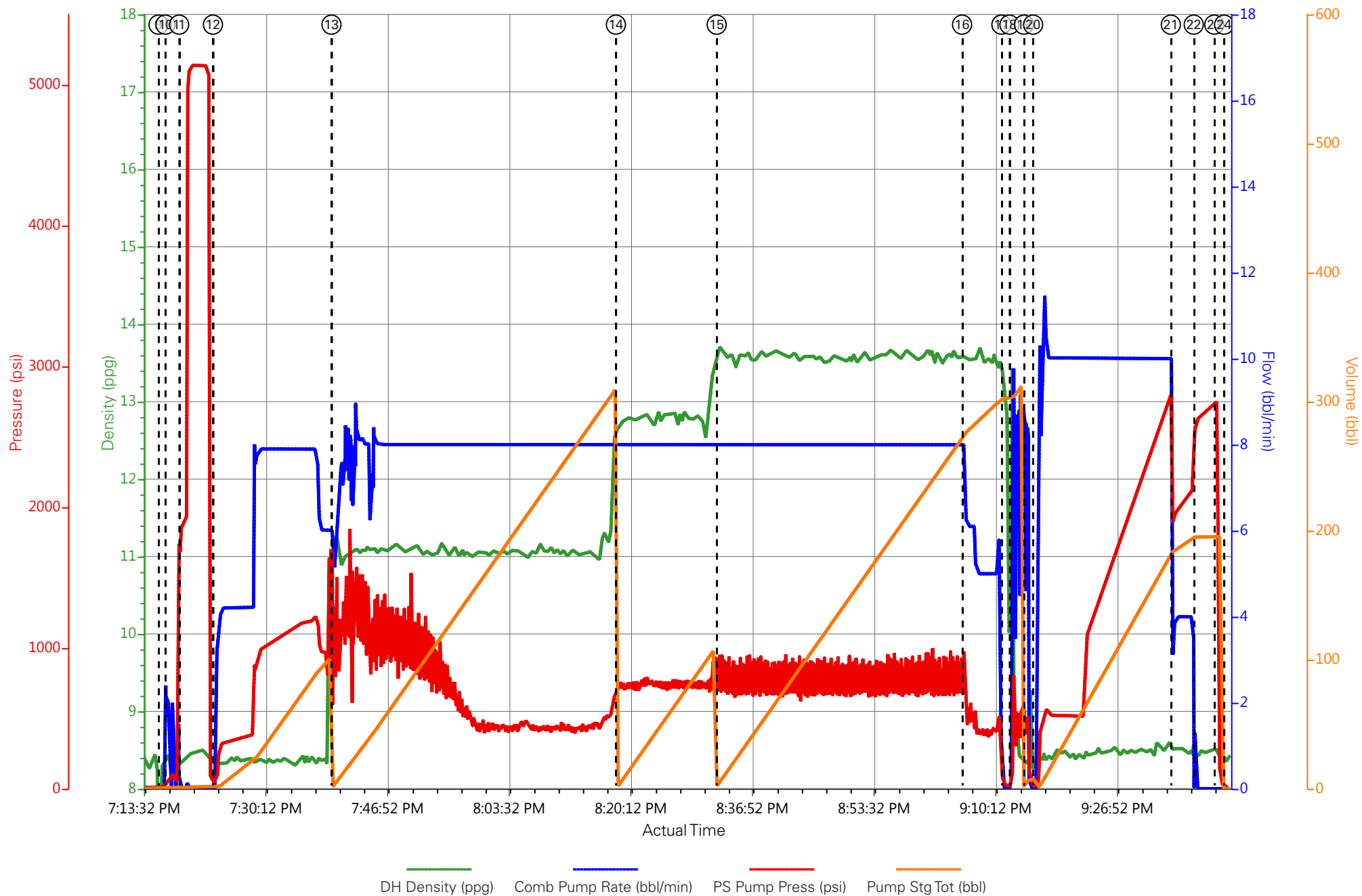
2.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	4/19/2015	08:00:00	USER					CREW CALLED, ON LOCATION TIME 1600
Event	2	Pre-Convoy Safety Meeting	4/19/2015	11:45:00	USER					ALL HES
Event	3	Crew Leave Yard	4/19/2015	12:00:00	USER					CREW LEFT YARD TOGETHER. 1 PICKUP, 1 ELITE PUMP, 1 660, AND 1 BODY LOAD
Event	4	Arrive At Loc	4/19/2015	15:00:00	USER					ARRIVED AN HOUR EARLY. CASING CREW WAS STILL RUNNING CASING.
Event	5	Assessment Of Location Safety Meeting	4/19/2015	15:15:00	USER					ALL HES
Event	6	Pre-Rig Up Safety Meeting	4/19/2015	15:45:00	USER					ALL HES
Event	7	Rig-up Lines	4/19/2015	16:00:00	USER					BLEW BODY LOAD INTO SILO AND RIGGED UP TO BUFFER ZONE UNTIL CASING CREW WAS OUT OF THE WAY.
Event	8	Pre-Job Safety Meeting	4/19/2015	19:00:00	USER					ALL HES AND RIG CREW
Event	9	Start Job	4/19/2015	19:15:51	COM2					9.625" SURFACE CASING @ 3913', 8.75" HOLE TO 10100', AND 7.875" TO 12499'. CASING 4.5" 11.6# TO 12499', 26.9' SHOE. MUD 9.9#.
Event	10	Prime Pumps	4/19/2015	19:16:48	COM2	8.34	2.00	145	2	2 BBLS H2O 2/MIN

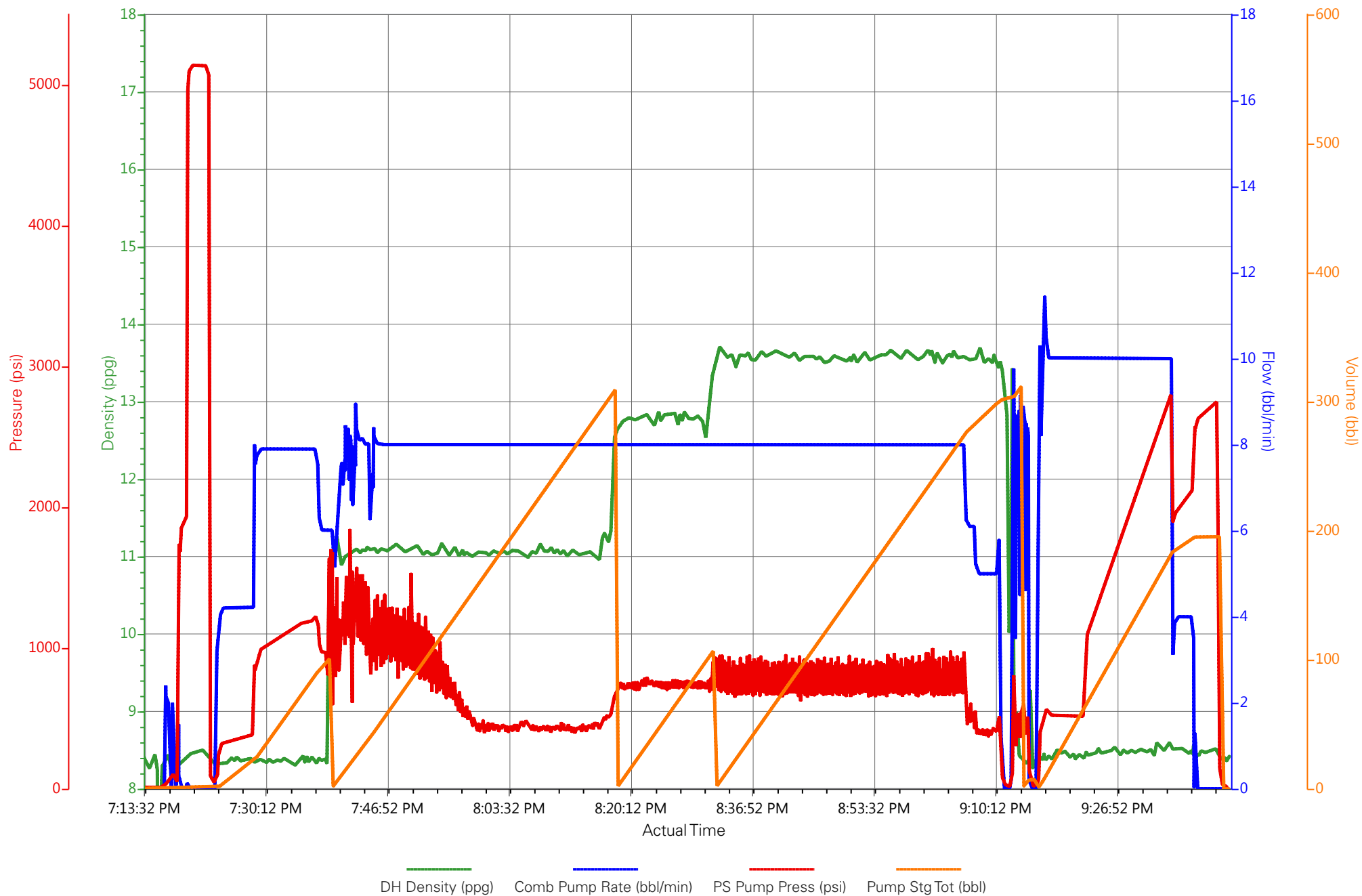
Event	11	Test Lines	4/19/2015	19:18:41	COM2	8.34	0.00	5143	2	TESTED TO 5143 PSI TRUCK AND LINES HELD PRESSURE GOOD.
Event	12	Pump Spacer 1	4/19/2015	19:23:19	COM2	8.34	8	1233	100	100 BBLS H2O
Event	13	Pump Spacer 2	4/19/2015	19:39:33	COM2	11.0	8	1350	301.2	615 SKS (301BBLS) 11 PPG, 2.75 FT3/SK, 16.07 GALSK
Event	14	Pump Lead Cement	4/19/2015	20:18:32	COM2	12.7	8	770	114	335 SKS (114 BBLS) 12.7 PPG 1.91 FT3/SK, 10.09 GAL/SK
Event	15	Pump Tail Cement	4/19/2015	20:32:20	COM2	13.5	8	900	294.5	945 SKS (294.5BBLS) 13.5 PPG, 1.75 FT3/SK, 8.25 GAL/SK
Event	16	Slow Rate	4/19/2015	21:05:58	USER	13.5	5	350	275	SLOWED TO FINISH OFF SILO
Event	17	Shutdown	4/19/2015	21:11:21	USER	13.5	0.00	0	294.5	GOOD RETURNS WHILE PUMPING CEMENT
Event	18	Clean Lines	4/19/2015	21:12:28	USER	8.34	6	300	10	WASHED LINES TO THE PIT
Event	19	Drop Top Plug	4/19/2015	21:14:27	COM2					DROPPED LATCH DOWN PLUG SUPPLIED BY WPX. PLUG WENT.
Event	20	Pump Displacement	4/19/2015	21:15:42	COM2	8.34	10	2800	193.3	193.3 BBLS FRESH WATER. NO RETURNS DURING DISPLACEMENT
Event	21	Slow Rate	4/19/2015	21:34:35	USER	8.34	4	1950	184	SLOWED TO 4 BBLS/MIN AT 183
Event	22	Bump Plug	4/19/2015	21:37:43	COM2	8.34	4	2745	193.3	PLUG BUMPED. PRESSURED UP TO 2745 PSI FROM 2000 PSI
Event	23	Check Floats	4/19/2015	21:40:31	USER					FLOATS HELD 2 BBLS BACK
Event	24	End Job	4/19/2015	21:41:52	COM2					
Event	25	Pre-Rig Down Safety Meeting	4/19/2015	21:45:00	USER					ALL HES

Event	26	Rig Down Lines	4/19/2015	22:00:00	USER	
Event	27	Pre-Convoy Safety Meeting	4/19/2015	23:00:00	USER	ALL HES
Event	28	Crew Leave Location	4/19/2015	23:15:00	USER	THANK YOU FOR CHOOSING HALLIBURTON. CLIFF SPARKS AND CREW.

WPX FEDERAL, RGU 343-26-198, 4.5" PRODUCTION CASING



WPX FEDERAL, RGU 343-26-198, 4.5" PRODUCTION CASING



EVENT #	EVENT	VOLUME	SACKS	WEIGHT	YIELD	GAL/ SK
1	Start Job		6048 <u>Max Psi</u>			
6	Test Lines	5000.0				
	H2O Spacer	100.0				
9	Scavenger	301.2	615	11	2.75	16.07
13	Lead Cement	114.0	335	12.7	1.91	10.09
15	Tail Cement	294.5	945	13.5	1.75	8.25
	Shut Down Wash Pumps & Lines					
22	Drop Plug	0.0				
	Slow Rate	183.0	4bbl	Min		
23	Displace with H2O KCL	193.3				
26	Land Plug	2691.0	PSI	500 Over		
2	Release Psi / Job Over	0.0				
			Do Not Overdisplace			
DISPLACEMENT	TOTAL PIPE	SHOE JOINT LENGTH		FLOAT COLLAR	BBL/FT	H2O REQ.
193.32	12499.4	26.90		12472.50	0.0155	800
PSI to Lift Pipe		*****<u>Use Mud Scales on Each Tier</u>*****				
Total Displacement	193.32					
CALCULATED DIFFERENTIAL PSI		2691		TOTAL FLUID PUMPED		1003
Collapse	7560	Burst	10690		SO#	902245598

HALLIBURTON

Water Analysis Report

Company: WPX
Submitted by: CLIFF SPARKS
Attention: DALLAS SCOTT
Lease: FEDERAL
Well #: RGU 343-26-198

Date: 4/19/2015
Date Rec.: 4/19/2015
S.O.#: 902245598
Job Type: PRODUCTION

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>250</i> Mg / L
Calcium (Ca)	<i>500</i>	<i>250</i> Mg / L
Iron (FE2)	<i>300</i>	<i>0</i> Mg / L
Chlorides (Cl)	<i>3000</i>	<i>0</i> Mg / L
Sulfates (SO ₄)	<i>1500</i>	<i><200</i> Mg / L
Chlorine (Cl ₂)		<i>0</i> Mg / L
Temp	<i>40-80</i>	<i>46</i> Deg
Total Dissolved Solids		<i>450</i> Mg / L

Respectfully: CLIFF SPARKS

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

Sales Order #: 0902245598	Line Item: 10	Survey Conducted Date: 4/19/2015
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT PRODUCTION CASING BOM
Customer Representative:		API / UWI: (leave blank if unknown) 05-103-11967-00
Well Name: FEDERAL		Well Number: 0080129270
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	4/20/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HAL9235
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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H2S Present: No	Well State: COLORADO	Well County: RIO BLANCO

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date	4/19/2015
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	2.5
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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Customer Representative:		API / UWI: (leave blank if unknown) 05-103-11967-00
Well Name: FEDERAL		Well Number: 0080129270
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.	
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	98
If applicable, were there returns throughout the job? (Yes/No/N/A) If applicable, were there returns throughout the job? (Yes/No/N/A)	No
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