

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

GM 702-4-HN1

Workover

Post Job Summary

Cement Perforation Squeeze

Date Prepared: 6/6/2014

Job Date: 6/5/2014

Submitted by: Tony Eschete - Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3009612	Quote #:	Sales Order #: 0901407526
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep:	
Well Name: FEDERAL	Well #: GM 702-4-HN1	API/UWI #: 05-045-22051-00	
Field: GRAND VALLEY	City (SAP): PARACHUTE	County/Parish: GARFIELD	State: COLORADO
Legal Description: SW NE-4-7S-96W-1401FNL-2354FEL			
Contractor:		Rig/Platform Name/Num: Workover	
Job BOM: 7526			
Well Type: HORIZONTAL GAS			
Sales Person: HALAMERICA\HB50180		Srvc Supervisor: Bill Jamison	
Job			

Formation Name	
Formation Depth (MD)	Top
Form Type	BHST
Job depth MD	8500ft
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
Tubing		2.375	1.995	4.6			0	8448		

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe						Top Plug			
Float Shoe						Bottom Plug			
Float Collar						SSR plug set			
Insert Float						Plug Container			
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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water	Fresh Water	9	bbl	8.4			.7		
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	SqueezeCem	SQUEEZECM (TM) SYSTEM	75	sack	15.8	1.52		1	6.18	
6.20 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	Displacement	Displacement		31	bbl	8.3			1	
Cement Left In Pipe		Amount	ft			Reason		Shoe Joint		
Comment										

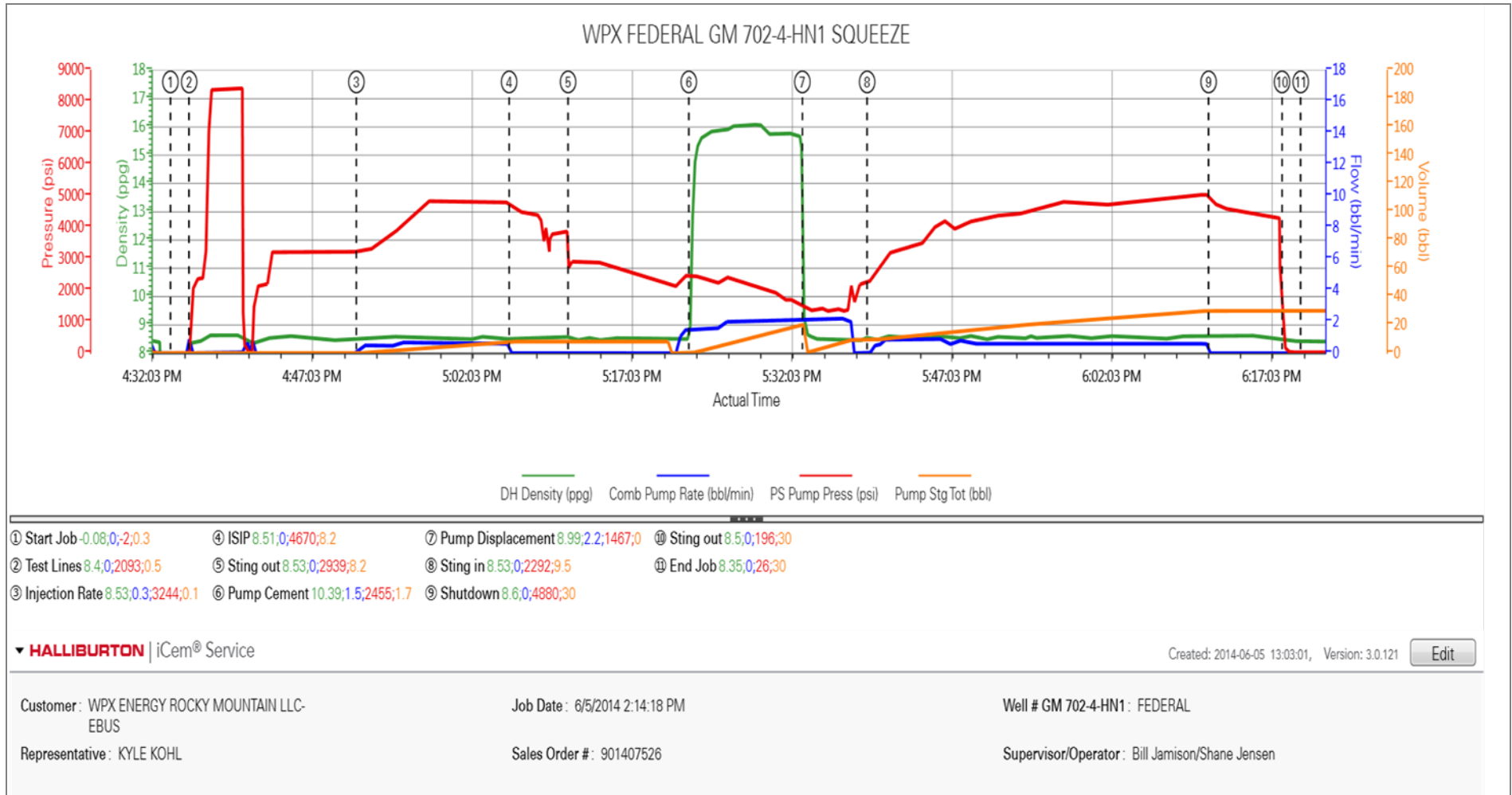
4.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comment
Event	1	Call Out	6/5/2014	04:00:00	USER					RETAINER SET @ 8448 TUBING 2.375 4.6 SET @ 8444 CASING 4.5 15.1 # PERFS @ 8500
Event	2	Depart Yard Safety Meeting	6/5/2014	08:20:00	USER					
Event	3	Crew Leave Yard	6/5/2014	08:30:00	USER					
Event	4	Arrive At Loc	6/5/2014	12:00:00	USER					
Event	5	Assessment Of Location Safety Meeting	6/5/2014	12:15:00	USER					
Event	6	Pre-Rig Up Safety Meeting	6/5/2014	12:30:00	USER					
Event	7	Pre-Job Safety Meeting	6/5/2014	16:13:00	USER					
Event	8	Start Job	6/5/2014	16:34:00	COM2					
Event	9	Test Lines	6/5/2014	16:35:45	COM2			8430		
Event	10	Injection Rate	6/5/2014	16:51:26	USER	8.4	0.7	4856	9	FRESH WATER
Event	11	ISIP	6/5/2014	17:05:45	USER			4719		
Event	12	Sting out	6/5/2014	17:11:17	USER					PULLED OUT OF RETAINER TO SPOT CEMENT
Event	13	Pump Cement	6/5/2014	17:22:36	COM2	15.8	2	2460	20	75 SKS 15.8 YIELD 1.52 WAT/REQ 6.18
Event	14	Pump Displacement	6/5/2014	17:33:15	COM2	8.4	2.	5064		FRESH WATER
Event	15	Sting in	6/5/2014	17:39:20	USER					PUMP 20 BBLS OF CEMENT AND 11 BBLS OF DISPLACEMENT BEFORE STINGING BACK IN TO RETAINER PUMP 21 MORE BBLS OF DISPLACEMENT BEFORE STINGING OUT OF RETAINER AND RIG REVERSING OUT
Event	16	Shutdown	6/5/2014	18:11:21	USER	8.4	0	5064	31	
Event	17	Sting out	6/5/2014	18:18:14	USER	8.4	0.00	196.00	31	
Event	18	End Job	6/5/2014	18:20:00	USER					RIG REVERSED .75 BBLS OF CEMENT TO PIT
Event	19	Post-Job Safety Meeting (Pre Rig-Down)	6/5/2014	18:30:00	USER					
Event	20	Depart Location Safety	6/5/2014	19:20:00	USER					

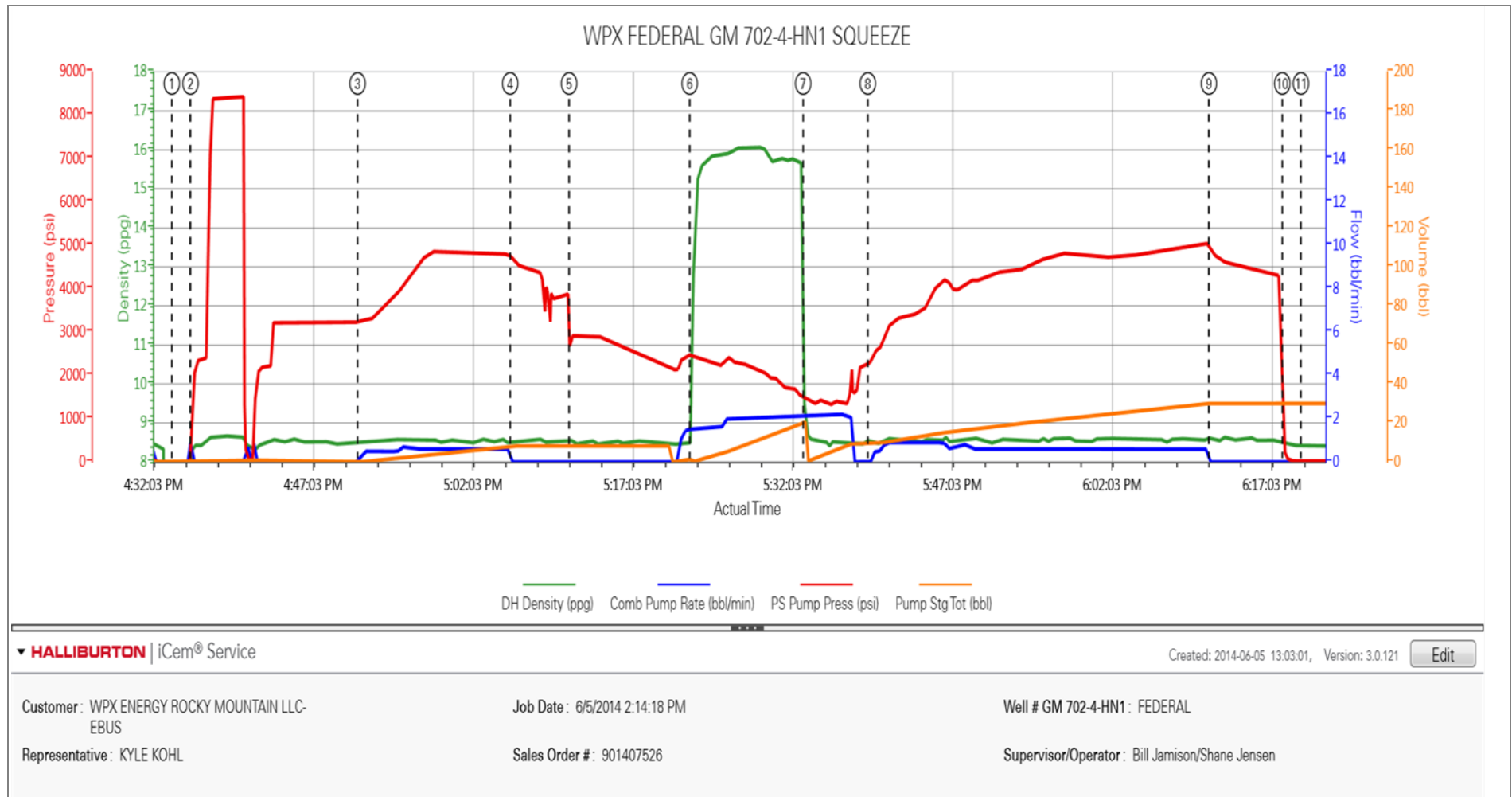
Meeting						
Event	21	Crew Leave Location	6/5/2014	19:30:00	USER	THANKS FOR USING HALLIBURTON BILL JAMISON & CREW

5.0 Attachments

5.1 WPX FEDERAL GM 702-4-HN1 SQUEEZE.png

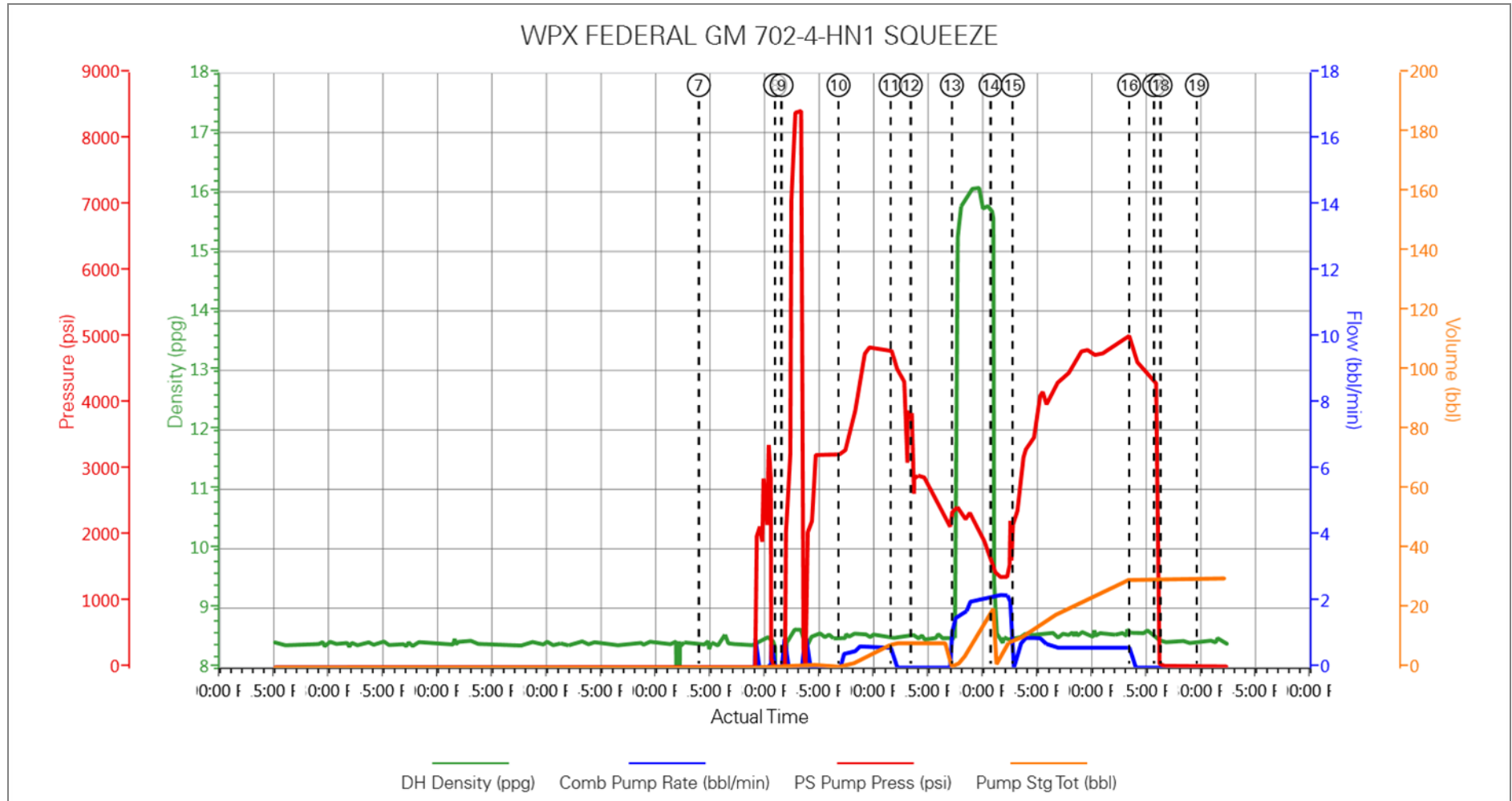


5.2 WPX FEDERAL GM 702-4-HN1 SQUEEZE.png



6.0 Custom Graphs

6.1 Custom Graph



HALLIBURTON

Water Analysis Report

Company: WILLIAMS PRODUCTION

Submitted by: BILL JAMISON

Attention: DALLAS SCOTT

Lease FEDERAL

Well # GM 702-4-HN1

Date: 6/5/2014

Date Rec.: 6/5/2014

S.O.# 901407526

Job Type: SQUEEZE

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>8</i>
Potassium (K)	<i>5000</i>	<i>200</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>below 200</i> Mg / L
Chlorine (Cl ₂)		<i>0</i> Mg / L
Temp	<i>40-80</i>	<i>67</i> Deg
Total Dissolved Solids		<i>250</i> Mg / L

Respectfully: BILL JAMISON

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 #: 0901407526	Line Item: 10	Survey Conducted Date: 6/5/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SQUEEZE PERFORATIONS BOM
Customer Representative: KYLE KOHL		API / UWI: (leave blank if unknown) 05-045-22051-00
Well Name: FEDERAL		Well Number: 0080202587
Well Type: HORIZONTAL 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	6/5/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HAL9235
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	KYLE KOHL
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 THANK YOU

CUSTOMER SIGNATURE

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KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	6/5/2014

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.	High Angle
Total Operating Time (hours) Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	5
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
Operating Hours (Pumping Hours) Total number of hours pumping fluid on this job. Enter in decimal format.	3
Customer Non-Productive Rig Time (hrs) 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.	0
Type of Rig Classification Job Was Performed Type Of Rig (classification) Job Was Performed On	Workover
Number Of JSAs Performed Number Of Jsas Performed	5
Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time.	0
Was this a Primary Cement Job (Yes / No)	No

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H2S Present: No	Well State: COLORADO	Well County: GARFIELD

Primary Cement Job= Casing job, Liner job, or Tie-back job.	
Was this a Plug or a Squeeze Job? Please select the appropriate choice	No
Was this a Primary or a Remedial Job? Kick off plug, Plug to Abandon, LCM plug or Planned Liner Top Squeeze, Squeeze of existing perforations, Squeeze of casing leak	No
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
Was Automated Density Control Used? Was Automated Density Control (ADC) Used ?	Yes
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
Nbr of Remedial Sqz Jobs Rqd - Competition Number Of Remedial Squeeze Jobs Required After Primary Job Performed By Competition	0
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