

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Jolley KP 17-15

Workover

Post Job Summary

Cement Perforation Squeeze

Date Prepared: 05/08/2014
Job Date: 05/07/2014

Submitted by: Tony Eschete - Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3474955	Quote #:	Sales Order #: 0901329933
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: BILLY ROREX	
Well Name: Jolley	Well #: 17-15	API/UWI #:	
Field:	City (SAP): SILT	County/Parish: GARFIELD	State: COLORADO
Legal Description:			
Contractor:		Rig/Platform Name/Num: Workover	
Job BOM: 7526			
Well Type: OIL			
Sales Person: HALAMERICA\HX46524		Srcv Supervisor: Andrew Brennecke	
Job			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	2530ft Job Depth TVD
Water Depth	Wk Ht Above Floor 3
Perforation Depth (MD)	From 2530 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	2474		
Casing		4.5	4	11.6			0	2530		

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			Conc		
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Conc			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	15	bbl	8.3			1.5		
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	Mud Flush III (Powder)	Mud Flush III	20	bbl	8.4			1.5		

42 gal/bbl		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	SqueezeCem	SQUEEZECEM (TM) SYSTEM	50	sack	16	1.14		1.5	4.82
94 lbm		CMT - PREMIUM - CLASS G REG OR TYPE V, BULK (100003685)							
4.82 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	SqueezeCem 2	SQUEEZECEM (TM) SYSTEM	50	sack	17	1		1.5	3.83
3.83 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
5	Displacement	Displacement	9.6	bbl	8.3			1.5	
Cement Left In Pipe	Amount	ft	Reason			Shoe Joint			
Comment									

1.1 Job Event Log

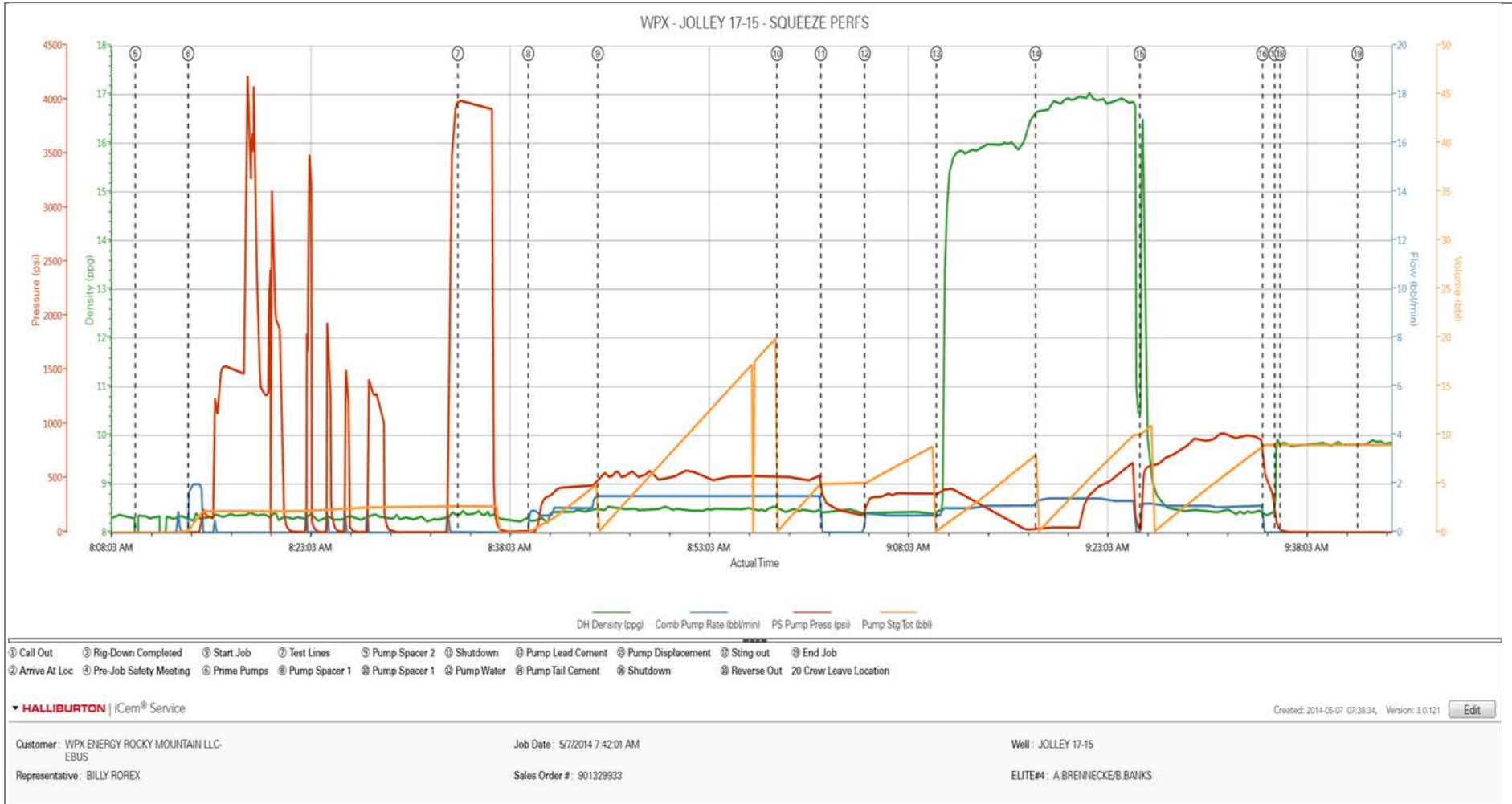
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comment
Event	1	Call Out	Call Out	5/7/2014	02:00:00	USER					CREW WAITING IN FIELD
Event	2	Arrive At Loc	Arrive At Loc	5/7/2014	07:00:00	USER					
Event	3	Rig-UP Completed	Rig-UP Completed	5/7/2014	07:47:33	USER		0.00	.00	0.0	1-ELITE, 1-400 BULK TRUCK, 2" IRON
Event	4	Pre-Job Safety Meeting	Pre-Job Safety Meeting	5/7/2014	08:00:00	USER	8.33	0.00	0.00	22.9	ALL HES AND RIG CREW PRESENT
Event	5	Start Job	Start Job	5/7/2014	08:10:00	COM5	8.34	0.00	-1.00	0.0	TB-2.375" 4.7#, CSG-4.5" 11.6#, RET-2474", PERF-2530, MAX PSI 1500
Event	6	Prime Pumps	Prime Pumps	5/7/2014	08:13:58	USER	8.33	2	3.00	2.0	FRESH WATER
Event	7	Test Lines	Test Lines	5/7/2014	08:34:16	COM5	8.37	0.00	3996.00	2.7	PRESSURE HELD AT 3996PSI, HAD TO CHANGE POP OFF VALVE
Event	8	Pump Spacer 1	Pump Spacer 1	5/7/2014	08:39:34	COM5	8.36	1.50	493.00	5.0	FRESH WATER
Event	9	Pump Spacer 2	Pump Spacer 2	5/7/2014	08:44:48	COM5	8.38	1.50	575.00	20.0	MUD FLUSH III
Event	10	Pump Spacer 1	Pump Spacer 1	5/7/2014	08:58:17	COM5	8.33	1.50	518.00	5.0	FRESH WATER
Event	11	Shutdown	Shutdown	5/7/2014	09:01:36	USER	8.39	0.00	339.00	5.0	SHUTDOWN TO MIX CMT
Event	12	Pump Water	Pump Water	5/7/2014	09:04:53	USER	8.39	0.80	360.00	4.0	PUMP WATER PER COMPANY REP REQUEST UNTIL CMT READY
Event	13	Pump Lead Cement	Pump Lead Cement	5/7/2014	09:10:17	COM5	16.00	1.50	354.00	10.2	50SKS, 16PPG, 1.14FT3/SK, 4.82GAL/SK
Event	14	Pump Tail Cement	Pump Tail Cement	5/7/2014	09:17:45	COM5	17.00	1.50	650.00	8.9	50SKS, 17PPG, 1FT3/SK, 3.83GAL/SK
Event	15	Pump Displacement	Pump Displacement	5/7/2014	09:25:37	COM5	8.42	1.30	904.00	9.5	FRESH WATER
Event	16	Shutdown	Shutdown	5/7/2014	09:34:50	USER	8.39	0.00	563.00	9.5	
Event	17	Sting out	Sting out	5/7/2014	09:35:45	USER	8.92	0.00	90.00	9.5	
Event	18	Reverse Out	Reverse Out	5/7/2014	09:36:10	USER	8.86	0.00	13.00	9.5	RIG REVERSED OUT
Event	19	End Job	End Job	5/7/2014	09:42:00	USER	8.81	0.00	3.00	9.5	1BBL CEMENT REVERSED OUT

Event	20	Crew Leave Location	Crew Leave Location	5/7/2014	11:30:00	USER
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THANK YOU FOR CHOOSING
HALLIBURTON, ANDREW
BRENECKE AND CREW

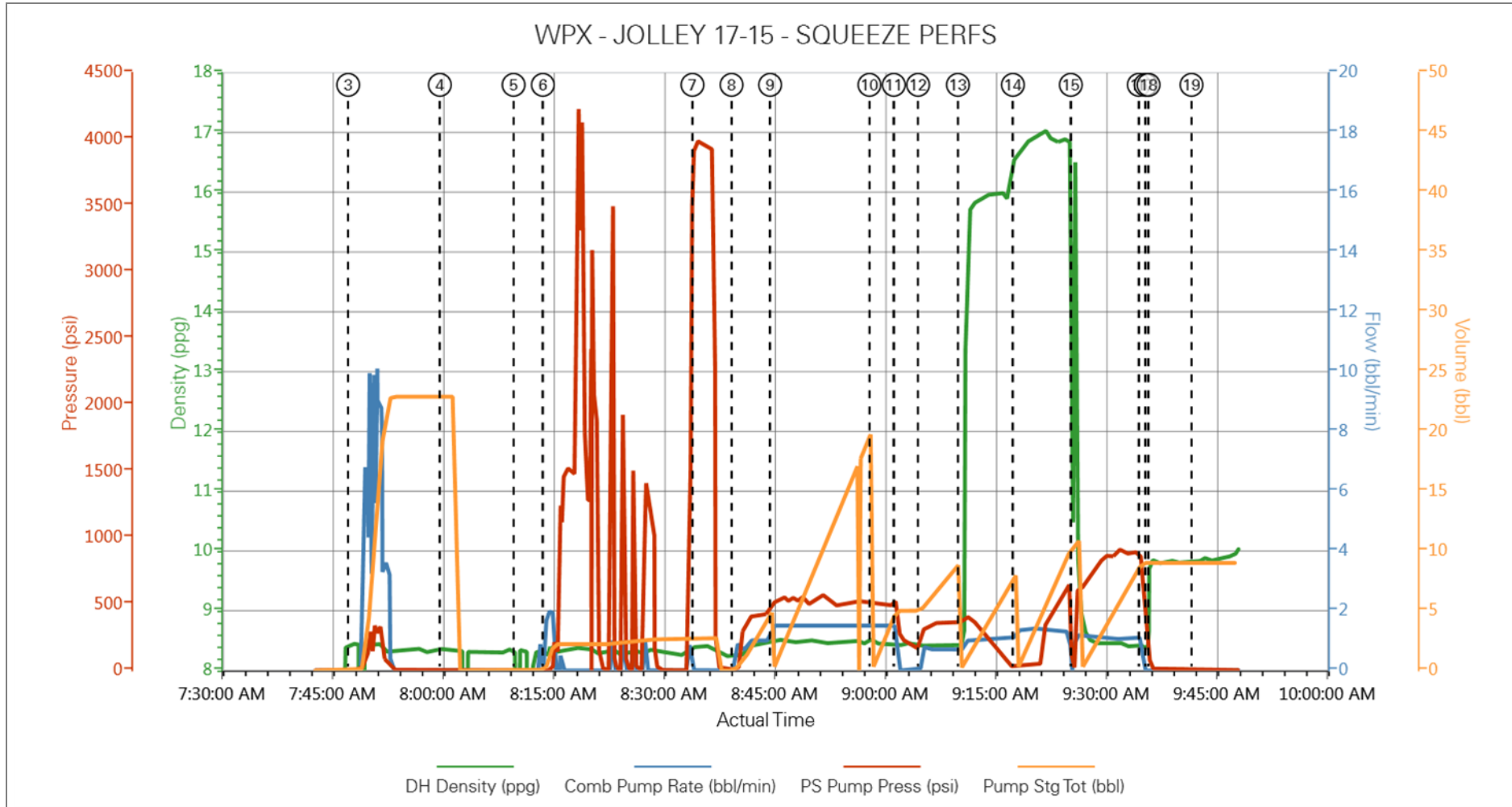
2.0 Attachments

2.1 Case 1-Custom Results.png



3.0 Custom Graphs

3.1 Custom Graph



HALLIBURTON

Water Analysis Report

Company: WPX
Submitted by: A.BRENNECKE
Attention: C.ROSS
Lease: JOLLEY
Well #: 17-15

Date: 5/7/2014
Date Rec.: 5/7/2014
S.O.#: 901329933
Job Type: SQUEEZE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	200 Mg / L
Calcium (Ca)	<i>500</i>	250 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
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-80</i>	49 Deg
Total Dissolved Solids		490 Mg / L

Respectfully: A.BRENNECKE

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 #: 0901329933	Line Item: 10	Survey Conducted Date: 5/7/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SQUEEZE PERFORATIONS BOM
Customer Representative:		API / UWI: (leave blank if unknown)
Well Name: Jolley		Well Number: N/A
Well Type: OIL	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	5/7/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB58348
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

Sales Order #: 0901329933	Line Item: 10	Survey Conducted Date: 5/7/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SQUEEZE PERFORATIONS BOM
Customer Representative:		API / UWI: (leave blank if unknown)
Well Name: Jolley		Well Number: N/A
Well Type: OIL	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date	5/7/2014
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	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
Total Operating Time (hours)	1.5
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?	
Operating Hours (Pumping Hours)	1
Total number of hours pumping fluid on this job. Enter in decimal format.	
Customer Non-Productive Rig Time (hrs)	0
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.	
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	
Number of Unplanned Shutdowns	0
Unplanned shutdown is when injection stops for any period of time.	
Was this a Primary Cement Job (Yes / No)	No

Sales Order #: 0901329933	Line Item: 10	Survey Conducted Date: 5/7/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SQUEEZE PERFORATIONS BOM
Customer Representative:		API / UWI: (leave blank if unknown)
Well Name: Jolley		Well Number: N/A
Well Type: OIL	Well Country: USA	
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	97
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	1.5
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

HALLIBURTON

Rockies, Grand Junction

Lab Results- Lead

Job Information

Request/Slurry	2131471/1	Rig Name	Workover	Date	06/MAY/2014
Submitted By	Carter Tuttle	Job Type	Perforation Squeeze	Bulk Plant	Grand Junction
Customer	WPX Energy, Inc.	Location	Garfield	Well	Jolley KP 17-15

Well Information

Casing/Liner Size	4.5 in / 114.3 mm	Depth MD	771 m / 2530 ft	BHST	51°C / 123°F
Hole Size	8.75 in / 222.25 mm	Depth TVD	771 m / 2530 ft	BHCT	41°C / 105°F
Pressure	132 bar / 1920 psi				

Drilling Fluid Information

Mud Supplier Name	AMC	Mud Trade Name		Density	
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Cement Information - Lead Design

<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	<u>Cement Properties</u>		
Mountain G	Bulk Blend	07.05.14	Tank 29	Slurry Density	16.000	lbm/gal
Fresh Water	Lab	12.03.13	N/A	Slurry Yield	1.14	ft3/sack
CaCl2 (Calcium Chloride) 94-97 % Salt	Bulk Blend	07.05.14	bj07cc34	Water Requirement	4.82	gal/sack
HALAD-344 (PB)	Bulk Blend	07.05.14	b414080a	Total Mix Fluid	4.82	gal/sack
HALAD-413 (PB)	Bulk Blend	07.05.14	zm310301a0			
SUPER CBL	Bulk Blend	07.05.14	14I0012			
				Water Source	Fresh Water	
				Water Chloride		

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Operation Test Results Request ID 2131471/1

Thickening Time **06/May/2014**

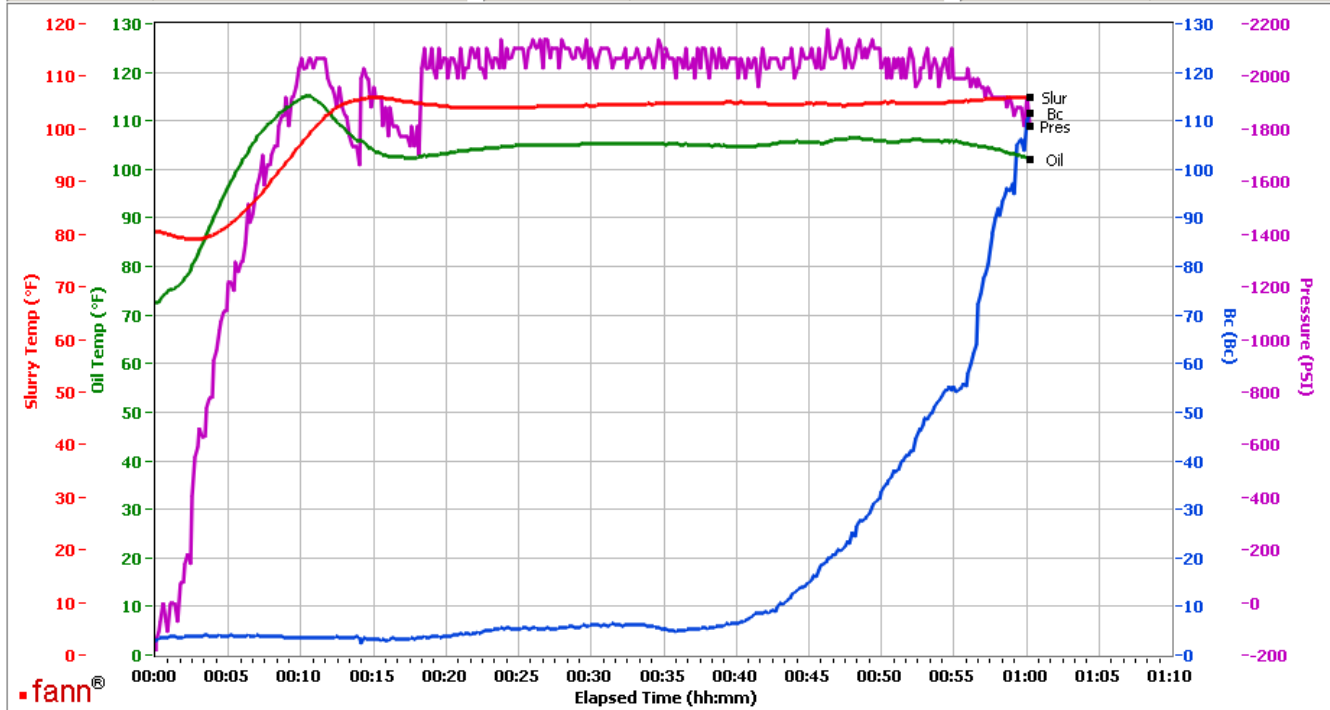
Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	40 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)
105	1920	10	4	0:49	0:51	0:53	0:56	0:59

Grand Junction Colorado

Fields	Values
Project Name	BULK
Test ID	GJ2131471-1
Request ID	
Tested by	CT
Customer	WPX
Well No	JOLLEY KP 17-15
Rig	
Casing/Liner Size	

Fields	Values
Job Type	
Cement Type	
Cement Weight	Standard
Test Date	05/07/14
Test Time	05:47 AM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.0.2.206

Events	Results
30.00 Bc	00h:49m
40.00 Bc	00h:51m
50.00 Bc	00h:53m
70.00 Bc	00h:56m
100.00 Bc	00h:59m
00h:30m	6.11
01h:00m	109.98
01h:30m	NaN



Data File C:\Documents and Settings\M290\Desktop\Test Data\GJ2131471-1 WPX.tdms
 Comments CS1619 TRAILER 8057 50 SKS

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HALLIBURTON

Rockies, Grand Junction

Lab Results- Tail

Job Information

Request/Slurry	2131470/1	Rig Name	Workover	Date	06/MAY/2014
Submitted By	Carter Tuttle	Job Type	Perforation Squeeze	Bulk Plant	Grand Junction
Customer	WPX Energy, Inc.	Location	Garfield	Well	Jolley KP 17-15

Well Information

Casing/Liner Size	4.5 in / 114.3 mm	Depth MD	771 m / 2530 ft	BHST	51°C / 123°F
Hole Size	8.75 in / 222.25 mm	Depth TVD	771 m / 2530 ft	BHCT	41°C / 105°F
Pressure	132 bar / 1920 psi				

Drilling Fluid Information

Mud Supplier Name	AMC	Mud Trade Name		Density	
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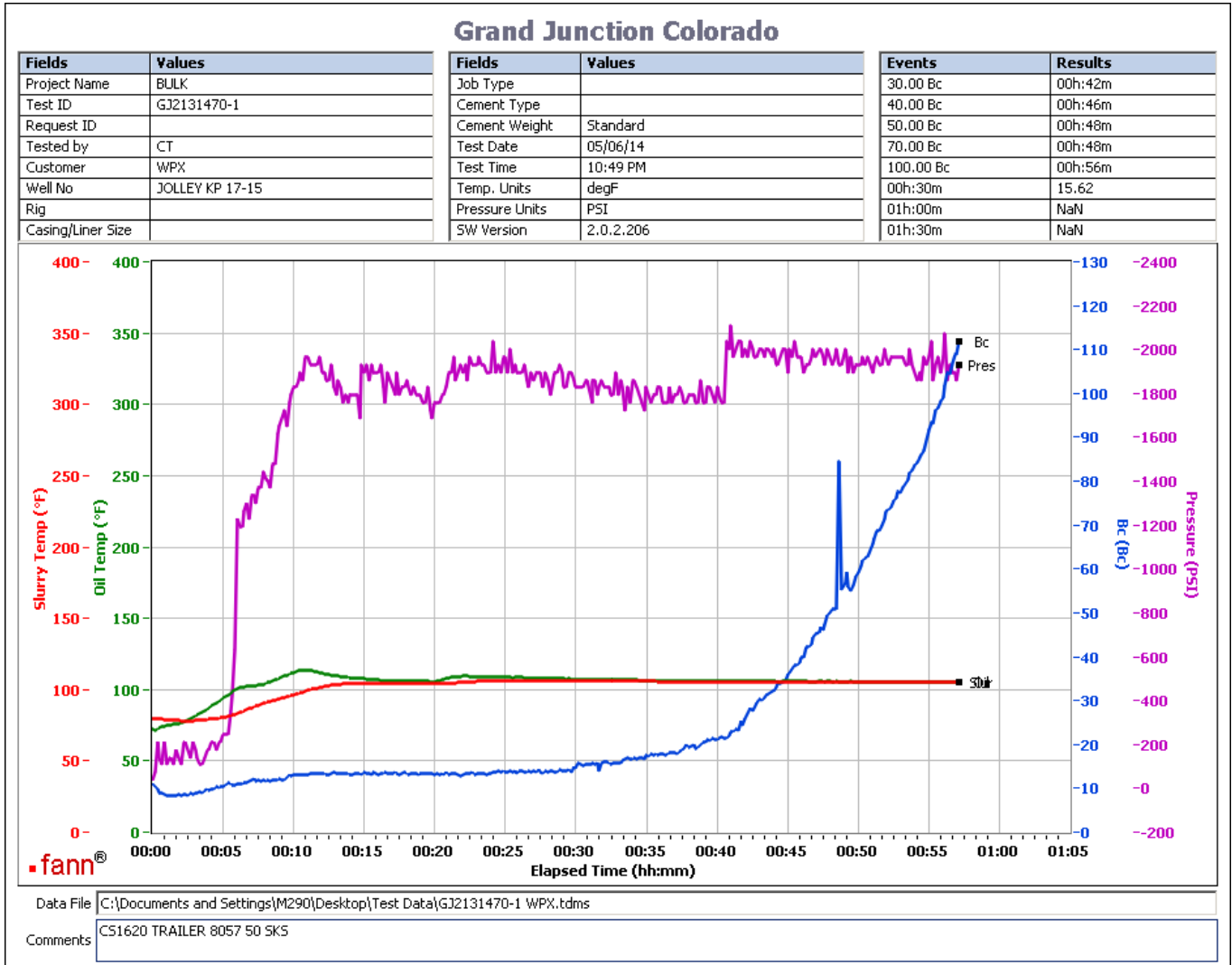
Cement Information - Tail Design

<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	<u>Cement Properties</u>		
Mountain G	Bulk Blend	07.05.14	Tank 29	Slurry Density	17.000	lbm/gal
Fresh Water	Lab	12.03.13	N/A	Slurry Yield	1	ft3/sack
CaCl2 (Calcium Chloride)	Bulk Blend	07.05.14	bj07cc34	Water Requirement	3.83	gal/sack
94-97 % Salt				Total Mix Fluid	3.83	gal/sack
CFR-3 (PB)	Bulk Blend	07.05.14	70220130			
				Water Source	Fresh Water	
				Water Chloride		

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Operation Test Results Request ID 2131470/1

Thickening Time								07/May/2014
Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	40 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)
105	1920	10	9	0:42	0:46	0:48	0:51	0:57



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