

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

For: Ty Entenmann

Date: Saturday, January 30, 2016

Johnson Trust #4

JOHNSON TRUST #4

Job Date: Monday, January 25, 2016

Sincerely,

Derek Trier

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Johnson Trust #4** cement **Production** casing job. A pre-job safety meeting was held before the job where details of the job were discussed, potential safety hazards were reviewed, and environmental compliance procedures were outlined.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

Halliburton [Ft. Lupton]

Job Times

	Date	Time	Time Zone
Called Out Time:	1/25/2016	0430	MTN
Arrived On Location At:		0730	
Job Started At:		1603	
Job Completed At:		1829	
Departed Location At:		2000	

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 369404	Ship To #: 3699341	Quote #:	Sales Order #: 0903076804							
Customer: EXTRACTION OIL & GAS		Customer Rep: HUGH MCGRAW								
Well Name: JOHNSON TRUST		Well #: 4	API/UWI #: 05-123-42320-00							
Field: WATTENBERG	City (SAP): LONGMONT	County/Parish: WELD	State: COLORADO							
Legal Description: NW SW-13-2N-68W-2181FSL-389FWL										
Contractor: PATTERSON-UTI ENERGY		Rig/Platform Name/Num: PATTERSON 346								
Job BOM: 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199		Srcv Supervisor: Christopher Pickell								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type										
Job depth MD		12207ft	Job Depth TVD 7300ft							
Water Depth			Wk Ht Above Floor 4ft							
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	1561		0
Casing		5.5	4.778	20			0	12200		0
Open Hole Section			7.875				1561	12207	0	7300
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	5.5	1	KLX	12207	Top Plug	5.5	1	KLX		
Float Shoe	5.5	1	KLX	12200	Bottom Plug	5.5		HES		
Float Collar	5.5	1	KLX	12195	SSR plug set	5.5		HES		
Insert Float	5.5				Plug Container	5.5	1	HES		
Stage Tool	5.5				Centralizers	5.5		HES		
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	11.5 lb/gal Tuned Spacer III	Tuned Spacer III	50	bbl	11.5	3.74	6	4		
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	
2	ElastiCem	ELASTICEM (TM) SYSTEM	150	sack	13.2	1.6	7.68	8		

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Cementing Job Summary

7.68 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	ElastiCem	ELASTICEM (TM) SYSTEM	1370	sack	13.2	1.6	7.68	8	
7.69 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	Displacement	Displacement	267	bbl	8.33			8.3	
Cement Left In Pipe	Amount	5 ft		Reason				Shoe Joint	
Comment ALL CEMENT SCALED WITHIN RANGE. PLUG BUMPED ON TIME AND RUPTURE PLUG WAS BLOWN AND 5 BBL INTENTIONAL WET SHOE WAS MADE. RETURNED ALL 50 BBL OF TUNED SPACER AND 22 BBL OF CEMENT TO SURFACE									

2.0 Real-Time Job Summary

2.1 Job Event Log

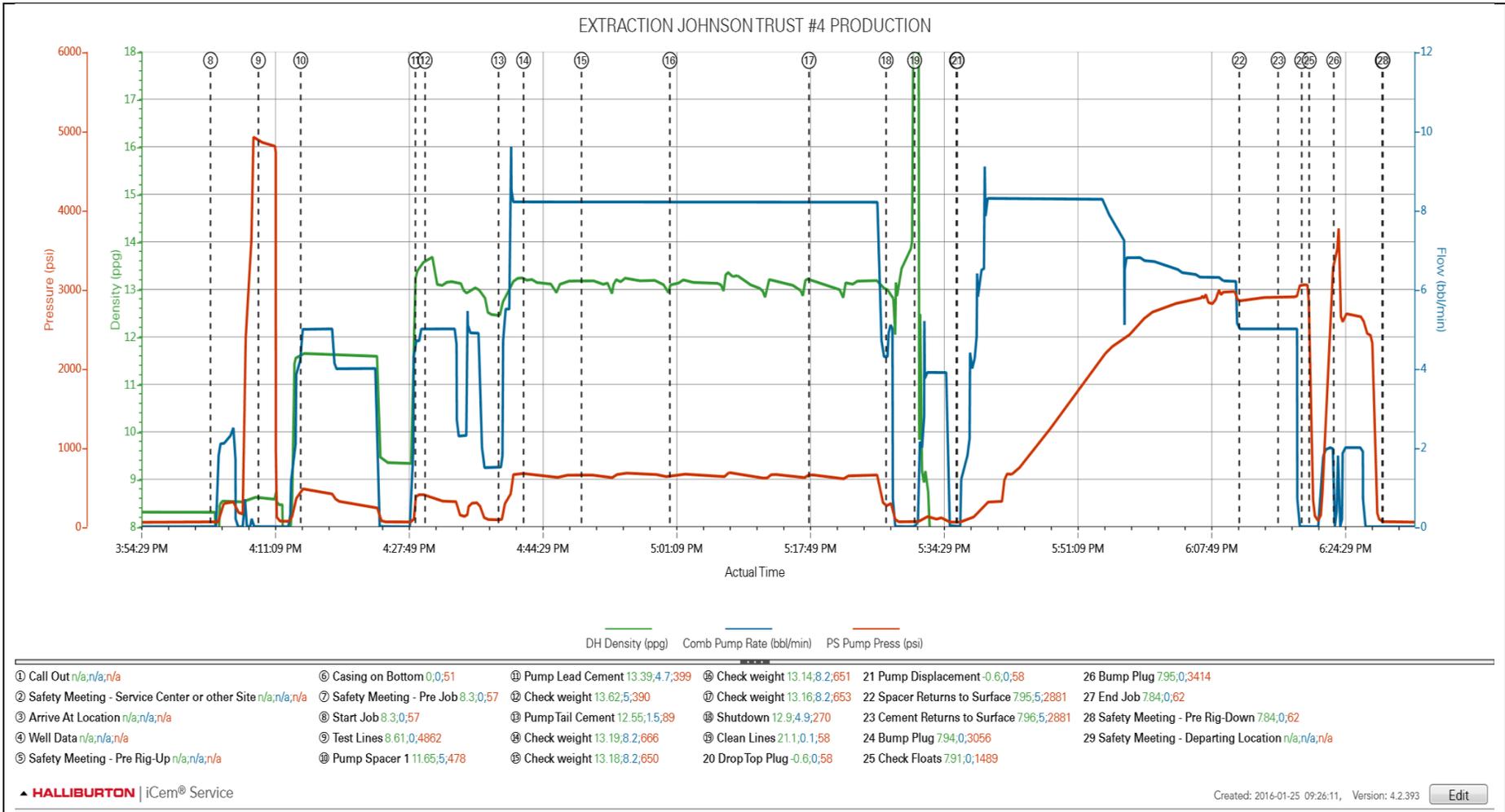
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Downhole Density <i>(ppg)</i>	Combined Pump Rate <i>(bbl/min)</i>	Pass-Side Pump Pressure <i>(psi)</i>	Comments
Event	1	Call Out	Call Out	1/25/2016	04:30:00	USER				Crew called out at 04:30. Crew was Chris Pickell, Nick Roles, Dennis Elder, Sam Hunter, Brian Schenck, Derek Trier
Event	2	Safety Meeting - Service Center or other Site	Safety Meeting - Service Center or other Site	1/25/2016	07:00:00	USER				Safety meeting held for journey, equipment double checked. Left the yard for Patterson 346
Event	3	Arrive At Loc	Arrive At Location	1/25/2016	07:30:00	USER				Arrive on location 1.5 hours early. Rig had 5000 ft of casing left to run
Event	4	Other	Well Data	1/25/2016	07:31:00	USER				TD 12207. TP 12200 5 1/2" 20#. LC 12195. OH 7 7/8. SURF 1561 9 5/8' 36#. TVD 7300. INVERT MUD 9.8 PPG
Event	5	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	1/25/2016	07:40:00	USER				Safety meeting held for rig up. Hazard hunt performed. Rig up planned and executed
Event	6	Casing on Bottom	Casing on Bottom	1/25/2016	15:00:00	USER				Casing on bottom at 15:00. Rig began to circulate and rig down casing crew
Event	7	Safety Meeting - Pre Job	Safety Meeting - Pre Job	1/25/2016	15:30:00	USER				Safety meeting held with rig crew to discuss job safety and procedure
Event	8	Start Job	Start Job	1/25/2016	16:03:21	COM6				
Event	9	Test Lines	Test Lines	1/25/2016	16:09:19	COM6	8.61	0.00	4862.00	Pressure test pumps and lines to 5000 psi. Check for visible leaks and pressure loss
Event	10	Pump Spacer 1	Pump Spacer 1	1/25/2016	16:14:36	COM6	11.65	5.00	478.00	Pump 50 bbl of tuned spacer 11.5# 3.74 yield 23.8 gal/sk
Event	11	Pump Lead Cement	Pump Lead Cement	1/25/2016	16:28:53	COM6	13.39	4.70	399.00	Pump 43 bbl 150 sks of lead Elasticem cement 13.2 ppg 1.6 yield 7.68 gal/sk
Event	12	Check Weight	Check weight	1/25/2016	16:30:06	COM6	13.62	5.00	390.00	Cement scaled 13.1 ppg
Event	13	Pump Tail Cement	Pump Tail Cement	1/25/2016	16:39:15	COM6	12.55	1.50	89.00	Pump 390.5 bbl 1370 sks of Tail Elasticem cement 13.2

ppg 1.6 yield 7.68 gal/sk

Event	14	Check Weight	Check weight	1/25/2016	16:42:22	COM6	13.19	8.20	666.00	Cement scaled 13.3 ppg
Event	15	Check Weight	Check weight	1/25/2016	16:49:35	COM6	13.18	8.20	650.00	Cement scaled 13.3 ppg
Event	16	Check Weight	Check weight	1/25/2016	17:00:36	COM6	13.14	8.20	651.00	Cement scaled 13.2 ppg
Event	17	Check Weight	Check weight	1/25/2016	17:17:56	COM6	13.16	8.20	653.00	Cement scaled 13.2 ppg
Event	18	Shutdown	Shutdown	1/25/2016	17:27:33	USER	12.90	4.90	270.00	
Event	19	Clean Lines	Clean Lines	1/25/2016	17:31:05	USER	21.10	0.10	58.00	Blow back lines from rig floor to wash up tank. Then wash pumps and lines to the wash up tank
Event	20	Drop Top Plug	Drop Top Plug	1/25/2016	17:36:18	COM6				Rupture dart plug dropped by tool hand
Event	21	Pump Displacement	Pump Displacement	1/25/2016	17:36:24	COM6				Pump displacement using water
Event	22	Spacer Returns to Surface	Spacer Returns to Surface	1/25/2016	18:11:33	USER	8.33	5.00	2881.00	Spacer returns to surface with 207 bbl away
Event	23	Cement Returns to Surface	Cement Returns to Surface	1/25/2016	18:16:23	USER	8.33	5.00	2881.00	Cement returns to surface with 250 bbl away
Event	24	Bump Plug	Bump Plug	1/25/2016	18:19:20	COM6	8.33	0.00	3056.00	Plug landed with 267 bbl away with 3050 psi at 5 bbl/min
Event	25	Other	Check Floats	1/25/2016	18:20:16	COM6	8.33	0.00	1489.00	Pressure was held for 1 minute then released. Floats held. 3 bbl back to the tanks
Event	26	Bump Plug	Bump Plug	1/25/2016	18:23:19	USER	8.33	0.00	3414.00	Rupture plug with 3400 psi at 3.5 bbl away. Then pump 5 bbl of water over for an intentional wet shoe. Flow was established upon breaking rupture plate.
Event	27	End Job	End Job	1/25/2016	18:29:22	COM6				With pumping the 5 bbl over we returned all tuned spacer and 22 bbl of cement to surface
Event	28	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	1/25/2016	18:29:27	USER				Safety meeting held to discuss rig down safety and procedure. Washed up all equipment to the pit. Blew down lines and rigged down all equipment.
Event	29	Safety Meeting - Departing Location	Safety Meeting - Departing Location	1/25/2016	20:00:00	USER				Safety meeting held for journey. Left location for the yard

3.0 Attachments

3.1 JOHNSON TRUST #4-Custom Results.png



3.2 JOHNSON TRUST #4-Custom Results (1).png

