

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

Date: Saturday, December 10, 2016

Mickey #2 Production

Job Date: Sunday, November 27, 2016

Sincerely,

Julia Nichols

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Table of Contents

1.0	Cementing Job Summary	4
1.1	Executive Summary	4
2.0	Real-Time Job Summary	7
2.1	Job Event Log	7
3.0	Attachments.....	8
3.1	Custom Results – Job Chart with Events	8
3.2	Custom Results – Job Chart without Events.....	9

1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Mickey #2** 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.

Approximately 50 barrels of cement were returned to surface.

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]

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 389404		Ship To #: 3788818		Quote #:		Sales Order #: 0903681445				
Customer: EXTRACTION OIL & GAS				Customer Rep: Kalyn Holgate						
Well Name: MICKEY			Well #: 2		API/UWI #: 05-123-43850-00					
Field: WATTENBERG		City (SAP): WINDSOR		County/Parish: WELD		State: COLORADO				
Legal Description: SW NE-5-8N-67W-2419FNL-1783FEL										
Contractor: PATTERSON-UTI ENERGY			Rig/Platform Name/Num: PATTERSON 346							
Job BOM: 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199				Srvc Supervisor: Vaughn Oteri						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type										
BHST										
Job depth MD		17728ft		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	8.921	36			0	1540		1540
Casing		5.5	4.778	20			0	17715	0	6873
Open Hole Section			7.875				1540	17728	0	0
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	5.5				Top Plug	5.5	1	KLX		
Float Shoe	5.5			17715	Bottom Plug	5.5				
Float Collar	5.5			17713	SSR plug set	5.5				
Insert Float	5.5				Plug Container	5.5	1	HES		
Stage Tool	5.5				Centralizers	5.5				
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	11.5 lb/gal Tuned Spacer III	Tuned Spacer III	50	bbl	11.5	3.74		4		
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	ElastiCemW/O CBL	ELASTICEM (TM) SYSTEM	150	sack	13.2	1.57		8	7.48	

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Cementing Job Summary

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	ElastiCem W/ Super CBL	ELASTICEM (TM) SYSTEM	2090	sack	13.2	1.57		8	7.49	
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	MMCR Displacement	MMCR Displacement	0	bbl	8.33			8		
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	0	bbl	8.34			8		
Cement Left In Pipe		Amount	2 ft		Reason			Shoe Joint		
Comment 50bbl of cement back to surface										

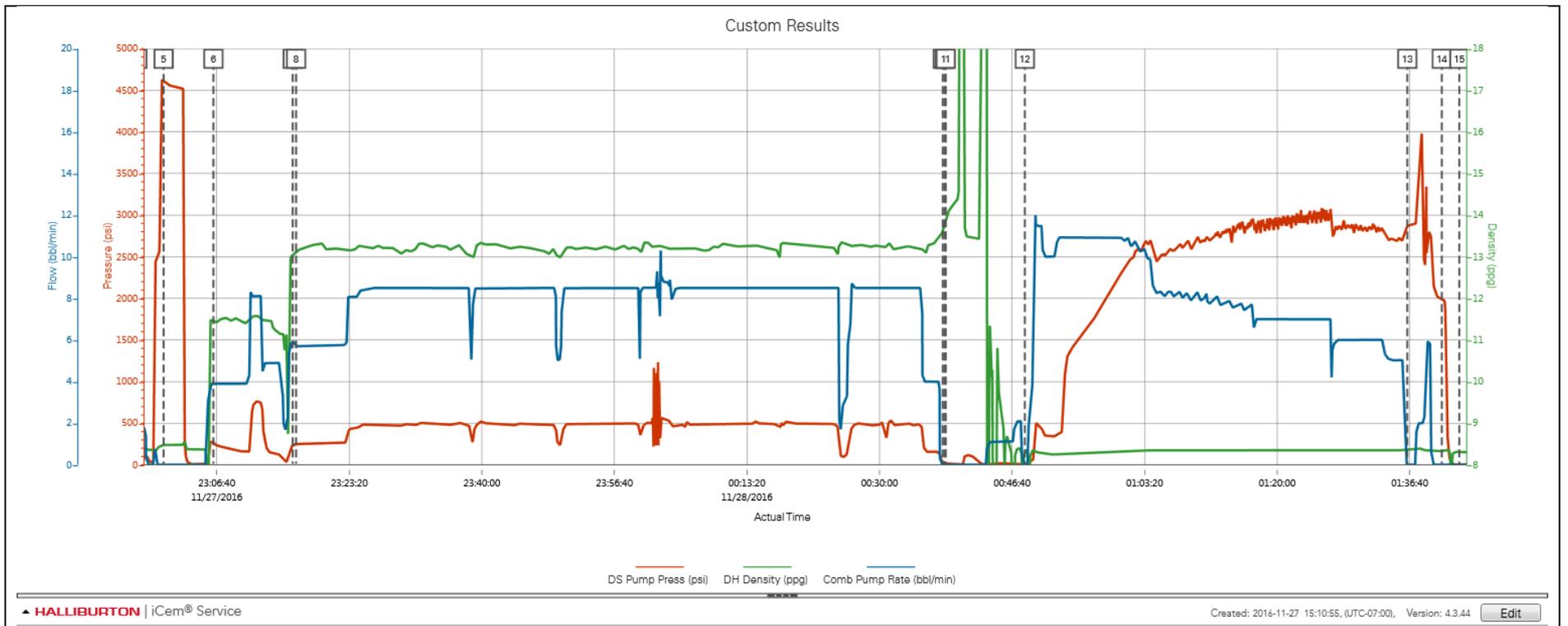
2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DS Pump Press <i>(psi)</i>	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	Comments
Event	1	Call Out	Call Out	11/27/2016	08:00:00	USER				Call out from ARC hub
Event	2	Arrive At Loc	Arrive At Loc	11/27/2016	13:00:00	USER				Requested on location at 1530 Arrived at 1300 met with company rep to discuss job process and concerns
Event	3	Other	Other	11/27/2016	13:01:00	USER				TD-17728 TP-17715 FC-17713 Casing 5.5 20# OH-7 7/8 Surf-1540
Event	4	Start Job	Start Job	11/28/2016	22:56:40	COM4				Held pre-job safety meeting with all hands on location to discuss job process and hazards
Event	5	Test Lines	Test Lines	11/28/2016	22:59:58	COM4	4600.00	8.48	0.00	Pressure tested pumps and lines with fresh water 4670psi ,found no leaks and pressure held good
Event	6	Pump Spacer 1	Pump Spacer 1	11/28/2016	23:06:15	COM4	253.00	11.44	3.90	Mixed 50bbl of 11.5ppg Tuned Spacer III at 4.0bpm 205psi
Event	7	Pump Cement	Pump Cement	11/28/2016	23:16:13	COM4	238.00	13.15	5.80	Mixed 2240sk or 626bbl of 13.2ppg Y-1.57 G/sk7.48 Elasticem at 8.0bpm 495psi
Event	8	Check Weight	Check weight	11/28/2016	23:16:38	COM4				Confrimed weight on scales of 13.2ppg
Event	9	Shutdown	Shutdown	11/28/2016	00:37:57	COM4				Shut down so that rig could blow lines clear with air
Event	10	Clean Lines	Clean Lines	11/28/2016	00:38:14	COM4				Washed pumps and lines with fresh water
Event	11	Drop Top Plug	Drop Top Plug	11/28/2016	00:38:19	COM4				KLX tool hand released plug witnessed by company rep and HES supervisor
Event	12	Pump Displacement	Pump Displacement	11/28/2016	00:48:16	COM4	6.00	8.36	0.00	Pumped 391bbl of fresh water to displace cement
Event	13	Bump Plug	Bump Plug	11/28/2016	01:36:22	COM4	2882.00	8.35	0.00	Bumped plug 500psi over final pump pressure
Event	14	Other	Other	11/28/2016	01:40:42	COM4	1989.00	8.33	0.00	Released pressure back to pump truck to check floats- floats held good 2.5bbl back
Event	15	End Job	End Job	11/28/2016	01:42:54	COM4	0.00	8.31	0.00	50bbl of cement back to surface

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart without Events

