

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

Breniman 7

Surface

Job Date: Tuesday, May 31, 2016

Sincerely,
Derek Trier

Legal Notice

Warning Disclaimer

Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

Limitations of Liability

Except as expressly set forth herein, there are no representations or warranties by Halliburton, express or implied, including implied warranties of merchantability and/or fitness for a particular purpose. In no event will Halliburton or its suppliers be liable for consequential, incidental, special, punitive or exemplary damages (including, without limitation, loss of data, profits, use of hardware, or software). Customer accepts full responsibility for any investment made based on results from the Software. Any interpretations, analyses or modeling of any data, including, but not limited to Customer data, and any recommendation or decisions based upon such interpretations, analyses or modeling are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional may differ. Accordingly, Halliburton cannot and does not warrant the accuracy, correctness or completeness of any such interpretation, recommendation, modeling or other products of the Software Product. As such, any interpretation, recommendation or modeling resulting from the Software for the purpose of any drilling, well treatment, production or financial decision will be at the sole risk of Customer. Under no circumstances will Halliburton or its suppliers be liable for any damages.

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	Case 1-Custom Results (3).png	8
3.2	Case 1-Custom Results (4).png	9

1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Breniman 7 cement Surface** 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:	5/31/2016	0500	MTN
Arrived On Location At:		0800	
Job Started At:		1233	
Job Completed At:		1359	
Departed Location At:		1500	

Sold To #: 369404	Ship To #: 3615653	Quote #:	Sales Order #: 0903334869
Customer: EXTRACTION OIL & GAS -		Customer Rep: Shane	
Well Name: BRENNIMAN		Well #: 7	API/UWI #: 05-123-40419-00
Field: WATTENBERG	City (SAP): WINDSOR	County/Parish: WELD	State: COLORADO
Legal Description: NE NW-16-6N-67W-607FNL-2056FWL			
Contractor: PATTERSON-UTI ENERGY		Rig/Platform Name/Num: PATTERSON 346	
Job BOM: 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HB71271		Srcv Supervisor: Vaughn Oteri	

Job

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1553ft 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	1552	0	1552
Open Hole Section			13.5				0	1553	0	1553

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625				Top Plug	9.625		HES
Float Shoe	9.625			1552	Bottom Plug	9.625	1	HES
Float Collar	9.625			1511	SSR plug set	9.625		HES
Insert Float	9.625				Plug Container	9.625	1	HES
Stage Tool	9.625				Centralizers	9.625		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	Fresh Water	Fresh Water/Red tracer dye	20	bbl	8.33				

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	SwiftCem	SWIFTCEM (TM) SYSTEM	550	sack	13.5	1.74		6	9.17

9.17 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	Fresh water	Fresh water	117	bbl	9				
Cement Left In Pipe	Amount	42 ft		Reason				Shoe Joint	
Comment 17bbl of cement back to surface									

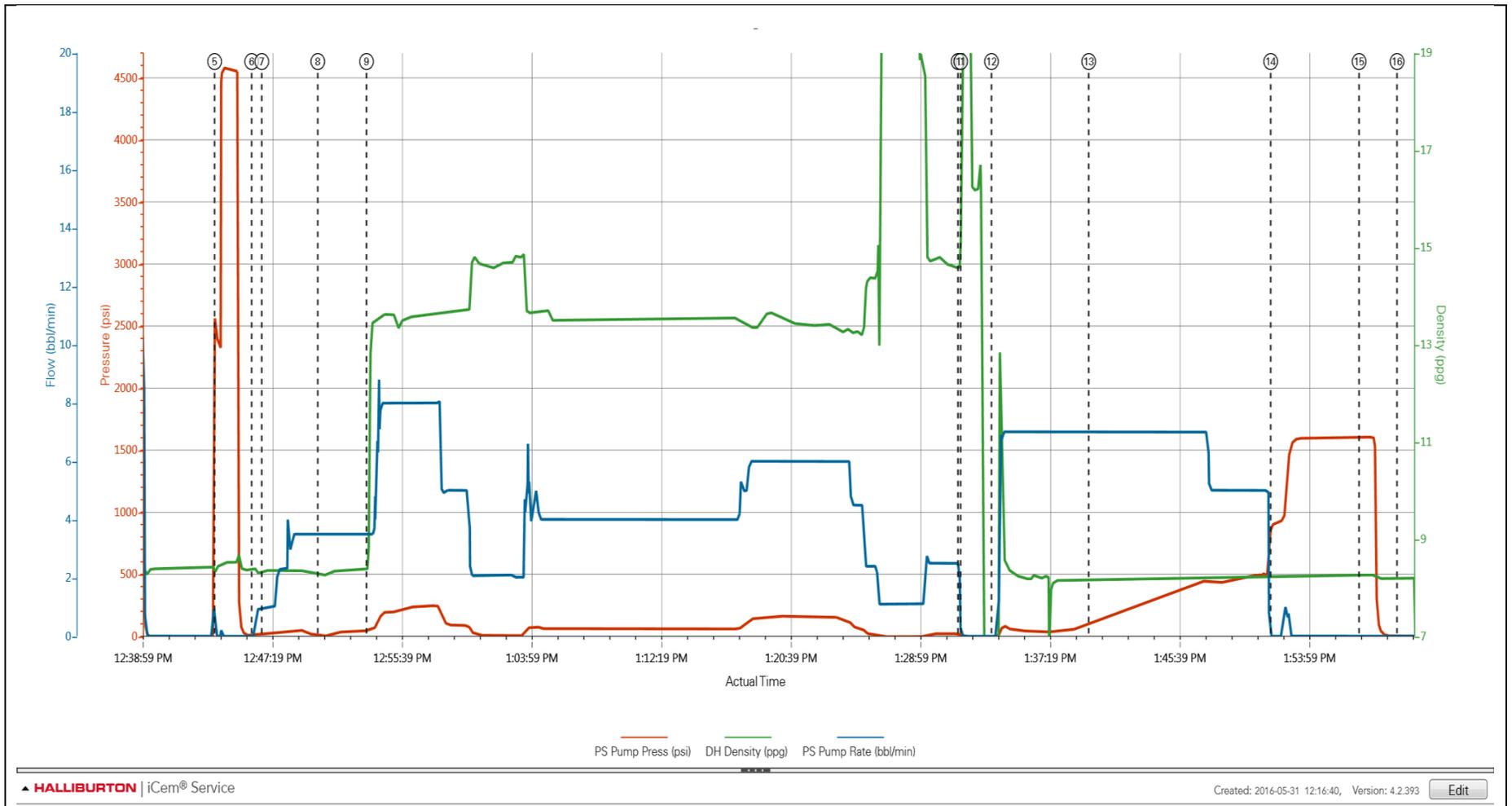
2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	PS Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	5/31/2016	05:00:00	USER				Call out from Arc hub
Event	2	Arrive At Loc	Arrive At Loc	5/31/2016	08:00:00	USER				Requested on location @1000 Arrived on location @0800 met with compny rep to discuss job process and concerns advised due to all the activity on location to stage out on main road till rig was ready for HES
Event	3	Start Job	Start Job	5/31/2016	12:33:45	COM4				Held pre-job safety meeting with all hands on location to discuss job process and hazards
Event	4	Prime Pumps	Prime Pumps	5/31/2016	12:37:08	COM4				Primed pumps and lines with fresh water
Event	5	Test Lines	Test Lines	5/31/2016	12:43:43	COM4	2425.00	8.44	0.00	Pressure tested pumps and lines found no leaks and pressure held good
Event	6	Pump Spacer 1	Pump Spacer 1	5/31/2016	12:46:06	COM4	3.00	8.39	0.00	Pumped 10bbl of Red Tracer Dye 3.5bpm 40psi
Event	7	Check Weight	Check weight	5/31/2016	12:46:45	COM4	17.00	8.34	1.00	Confirm weight of cement of 13.5ppg
Event	8	Pump Spacer 2	Pump Spacer 2	5/31/2016	12:50:22	COM4	6.00	8.31	3.50	Pumped 10bbl of fresh water at 3.5bpm 40psi
Event	9	Pump Cement	Pump Cement	5/31/2016	12:53:29	COM4	46.00	9.20	3.50	Mixed 550sk or 170bbl of 13.5ppg Y-1.74 G/sk-9.17 Swiftcem at 8.0bpm 220psi
Event	10	Shutdown	Shutdown	5/31/2016	13:31:32	COM4				
Event	11	Drop Top Plug	Drop Top Plug	5/31/2016	13:31:42	COM4				Released plug witnessed by company rep
Event	12	Pump Displacement	Pump Displacement	5/31/2016	13:33:41	COM4	4.00	0.43	0.00	Pumped 117bbl of fresh water to dispalce cement
Event	13	Displ Reached Cmnt	Displ Reached Cmnt	5/31/2016	13:39:56	COM4	103.00	8.15	7.00	Caught cement
Event	14	Bump Plug	Bump Plug	5/31/2016	13:51:38	COM4	904.00	8.22	0.00	Bump plug 500psi over final pump pressure
Event	15	Other	Other	5/31/2016	13:57:19	COM4	1604.00	8.26	0.00	Released pressure back to pump truck to check floats . Floats held good 1.0bbl back
Event	16	End Job	End Job	5/31/2016	13:59:45	COM4				17bbl of cement back to surface

3.0 Attachments

3.1 Case 1-Custom Results (3).png



3.2 Case 1-Custom Results (4).png

