

# HALLIBURTON

iCem<sup>®</sup> Service

## **EXTRACTION OIL & GAS**

Date: Friday, June 10, 2016

## **BRENIMAN #3 Surface**

Job Date: Friday, June 03, 2016

Sincerely,

**Julia Nichols**

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## 1.0 Cementing Job Summary

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### 1.1 Executive Summary

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Halliburton appreciates the opportunity to perform the cementing services on the **Breniman #3** 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.

**Approximately 16 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 #: 369404	Ship To #: 3615604	Quote #:	Sales Order #: 0903340006							
Customer: EXTRACTION OIL & GAS -		Customer Rep: JOSE TORRES								
Well Name: BRENIMAN	Well #: 3	API/UWI #: 05-123-40422-00								
Field: WATTENBERG	City (SAP): WINDSOR	County/Parish: WELD	State: COLORADO							
Legal Description: NE NW-16-6N-67W-508FNL-2113FWL										
Contractor: PATTERSON-UTI ENERGY		Rig/Platform Name/Num: FATTERSON 346								
Job BOM: 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA/HB71271		Srvc Supervisor: Christopher Fickell								
<b>Job</b>										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type	BHST									
Job depth MD	1533ft	Job Depth TVD	1533ft							
Water Depth		Wk Ht Above Floor	3ft							
Perforation Depth (MD)	From	To								
<b>Well Data</b>										
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	1533	0	1533
Open Hole Section			13.5				0	1533	0	1533
<b>Tools and Accessories</b>										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	9.625				Top Plug	9.625	1	HES		
Float Shoe	9.625	1		1533	Bottom Plug	9.625		HES		
Float Collar	9.625	1		1488	SSR plug set	9.625		HES		
Insert Float	9.625				Plug Container	9.625	1	HES		
Stage Tool	9.625				Centralizers	9.625		HES		
<b>Fluid Data</b>										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water	Fresh Water	50	bbl	8.33			5		
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	SwiftCem	SWIFTCM (TM) SYSTEM	550	sack	13.5	1.74	9.17	8		
9.17 Gal			FRESH WATER							

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*Cementing Job Summary*

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Fresh Water Displacement	Fresh Water Displacement	115	bbl	8.33			8	
Cement Left in Pipe		Amount	42 ft		Reason			Shoe Joint	
Comment Returned all spacer and 16 bbl of cement to surface.									

## 2.0 Real-Time Job Summary

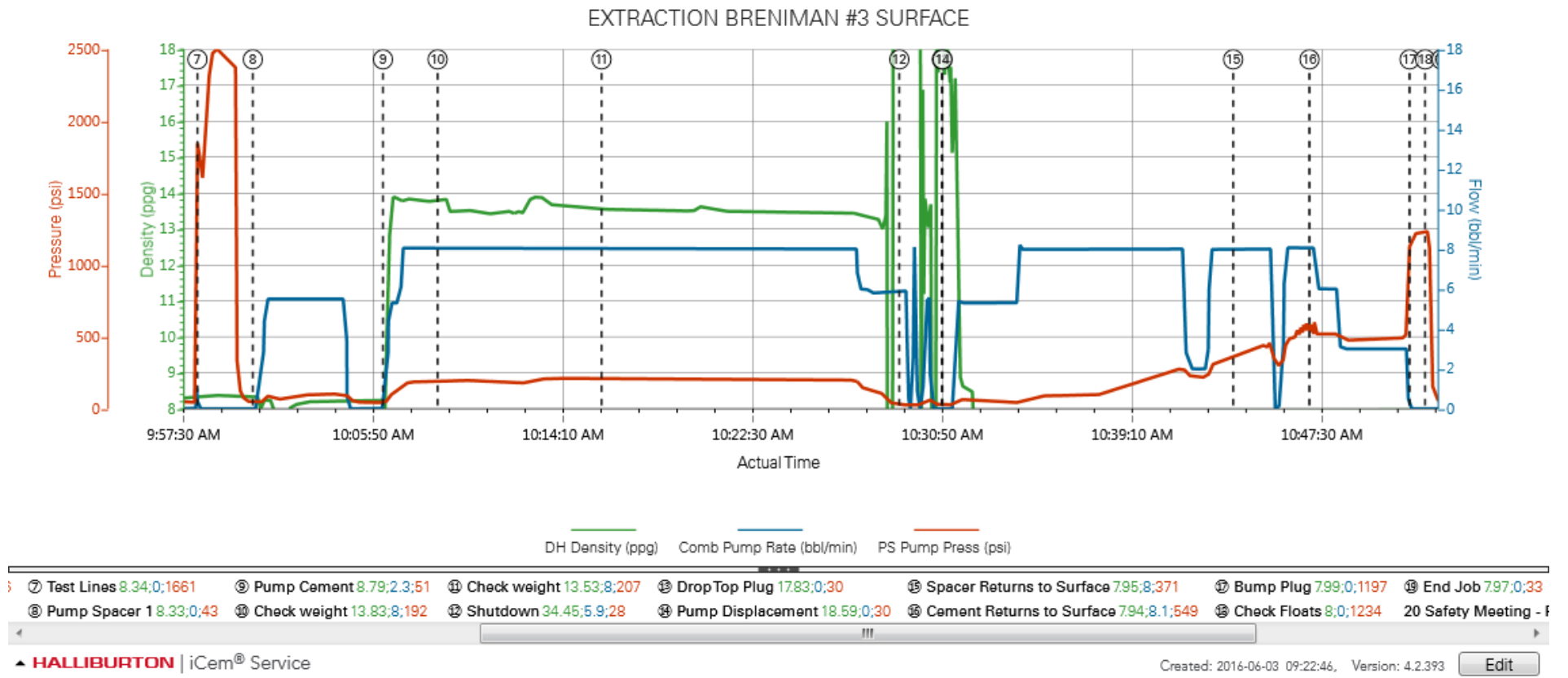
## 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pass-Side Pump Pressure (psi)	Comments
Event	1	Call Out	Call Out	6/3/2016	04:00:00	USER				Crew called out at 04:00 to be on location at 09:00. Crew was Chris Pickell, Nick Roles, Mark Phillips, Alvaro Perez, Lance Landvater, Andrew Brennecke
Event	2	Safety Meeting - Service Center or other Site	Safety Meeting - Service Center	6/3/2016	08:00:00	USER				Safety meeting held for journey. Pump Truck and the first 660 left together. The second 660 was held up and did not leave until 08:45.
Event	3	Arrive At Location	Arrive At Location	6/3/2016	08:45:00	USER				Arrive on location 15 minutes early. Rig had 2 joints of casing left to run. The second 660 arrived on location at 09:45.
Event	4	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	6/3/2016	08:50:00	USER				Safety meeting held for rig up. Hazard hunt performed. Rig up planned and executed.
Event	5	Safety Meeting - Pre Job	Safety Meeting - Pre Job	6/3/2016	09:50:00	USER	8.37	0.00	46.00	Safety meeting held with rig crew to discuss job safety and procedure
Event	6	Start Job	Start Job	6/3/2016	09:56:07	COM6	0.01	0.00	43.00	
Event	7	Test Lines	Test Lines	6/3/2016	09:58:15	COM6	8.34	0.00	1661.00	Pressure tested lines to 2500 psi
Event	8	Pump Spacer 1	Pump Spacer 1	6/3/2016	10:00:41	COM6	8.33	0.00	43.00	Pump 20 bbl of red dye water
Event	9	Pump Cement	Pump Cement	6/3/2016	10:06:24	COM6	8.79	2.30	51.00	Pump 550 sks 170.4 bbl SwiftCem cement 13.5 ppg 1.74 yield 9.17 gal/sk
Event	10	Check Weight	Check weight	6/3/2016	10:08:48	COM6	13.83	8.00	192.00	Cement scaled at 13.7 ppg
Event	11	Check Weight	Check weight	6/3/2016	10:16:00	COM6	13.53	8.00	207.00	Cement scaled at 13.5 ppg
Event	12	Shutdown	Shutdown	6/3/2016	10:29:05	USER	34.45	5.90	28.00	
Event	13	Drop Top Plug	Drop Top Plug	6/3/2016	10:30:57	COM6	17.83	0.00	30.00	HWE top plug preloaded.
Event	14	Pump Displacement	Pump Displacement	6/3/2016	10:30:59	COM6	18.59	0.00	30.00	Pump displacement using fresh water. Pump and lines washed on top of the plug

Event	15	Other	Spacer Returns to Surface	6/3/2016	10:43:45	COM6	7.95	8.00	371.00	Spacer returns to surface with 77 bbl away
Event	16	Other	Cement Returns to Surface	6/3/2016	10:47:06	COM6	7.94	8.10	549.00	Cement returns to surface with 99 bbl away
Event	17	Bump Plug	Bump Plug	6/3/2016	10:51:30	COM6	7.99	0.00	1197.00	Plug landed at calculated 115 bbl and at 500 psi. Pressure was brought up to 980 psi
Event	18	Other	Check Floats	6/3/2016	10:52:11	COM6	8.00	0.00	1234.00	Pressure was held for 1 minute then released. Floats held. 1/2 bbl back to tanks
Event	19	End Job	End Job	6/3/2016	10:52:54	COM6				Returned all spacer and 16 bbl of cement to surface
Event	20	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	6/3/2016	10:53:05	USER				Safety meeting held for rig down. Washed up pump to cellar. Rigged down all equipment
Event	21	Safety Meeting - Departing Location	Safety Meeting - Departing Location	6/3/2016	11:30:00	USER				Safety meeting held for journey. Left location for the yard

## 3.0 Attachments

### 3.1 Custom Results: Job Chart with Events



## 3.2 Custom Results: Job Chart without Events

