

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

Date: Saturday, July 23, 2016

Breniman #6

Production

Job Date: Sunday, July 17, 2016

Sincerely,

Lauren Roberts

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Breniman #6** 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.

25 bbl. of cement 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]



Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 369404		Ship To #: 3615691		Quote #:		Sales Order #: 0903418374				
Customer: EXTRACTION OIL & GAS				Customer Rep: HUGH						
Well Name: BRENNIMAN			Well #: 6		API/UWI #: 05-123-40420-00					
Field: WATTENBERG		City (SAP): WINDSOR		County/Parish: WELD		State: COLORADO				
Legal Description: NE NW-16-6N-67W-582FNL-2070FWL										
Contractor: PATTERSON-UTI ENERGY				Rig/Platform Name/Num: PATTERSON 346						
Job BOM: 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199				Srvc Supervisor: Joseph Fantasia						
Job										
Formation Name										
Form Type				BHST						
Job depth MD		17315ft		Job Depth TVD		7050				
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	1534	0	1534
Casing		5.5	4.778	20			0	17315	0	7050
Open Hole Section			7.875				1534	17320	1534	7050
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		
35.40 gal/bbl		FRESH WATER								
149.34 lbm/bbl		BARITE, 100 LB SK (100003680)								
0.30 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)								
0.30 gal/bbl		MUSOL A, 330 GAL TOTE - (790828)								
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	1.57		8	7.48	
7.48 Gal		FRESH WATER								
0.90 %		HR-5, 50 LB SK (100005050)								

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Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	ElastiCem W/ Super CBL	ELASTICEM (TM) SYSTEM	1900	sack	13.2	1.57		8	7.49
7.49 Gal		FRESH WATER							
0.80 %		HR-5, 50 LB SK (100005050)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
4	Displacement	Displacement	384	bbl	8.33			8	
Cement Left in Pipe		Amount	ft	Reason				Shoe Joint	
Comment APPROX 25 BBLs CEMENT TO SURFACE									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Combined Pump Rate (bbl/min)	Pass-Side Pump Pressure (psi)	Recirc Density (ppg)	Comments
Event	1	Call Out	Call Out	7/17/2016	05:00:00	USER				CALL OUT AT 0500. REQUESTED ON LOCATION AT 1000.
Event	2	Arrive at Location from Service Center	Arrive at Location from Service Center	7/17/2016	09:30:00	USER				ARRIVE AT LOCATION. HELD SITE ASSESSMENT AND PRE RIG UP SAFETY MEETING WITH CREW PRIOR TO RIGGING UP EQUIPMENT.
Event	3	Other	Other	7/17/2016	10:30:00	USER				WATER TEST - PH 7 - CHLORIDES 0 - TEMP 75
Event	4	Start Job	Start Job	7/17/2016	18:47:18	COM6	0.00	-83.00	8.10	HELD PRE JOB SAFETY MEETING WITH ALL PRESENT PERSONNEL PRIOR TO STARTING JOB.
Event	5	Casing on Bottom	Casing on Bottom	7/17/2016	19:01:00	USER	0.00	-73.00	11.47	CASING ON BOTTOM.
Event	6	Test Lines	Test Lines	7/17/2016	19:28:40	COM6	0.00	4748.00	11.45	PRESSURE TEST LINES TO 4800 PSI. PRESSURE TEST SUCCESSFUL
Event	7	Pump Spacer 1	Pump Spacer 1	7/17/2016	19:31:27	COM6	3.00	175.00	11.42	PUMP 50 BBLS TUNED SPACER MIXED AT 11.5 PPG. DENSITY VERIFIED BY SCALE. 15 GALLONS OF MUSOL A, 15 GALLONS DUAL SPACER B AND 5 GALLONS D AIR ADDED TO SPACER. DOWNHOLE DENSOMETER WAS WORKING SPORADICALLY BUT RECIRC WAS ACCURATE AND MIXING WELL.
Event	8	Pump Cement	Pump Cement	7/17/2016	19:46:00	USER	0.00	-59.00	13.10	PUMP 573 BBLS (2050 SKS) ELASTICEM MIXED AT 13.2 PPG. FIRST 150 SKS WITH OUT SUPER CBL. DENSITY VERIFIED BY SCALE. SCALED SLURRY 4 TIMES PER POD TO VERIFY DENSITY.
Event	9	Shutdown	Shutdown	7/17/2016	21:23:42	COM6	0.00	-43.00	0.10	
Event	10	Clean Lines	Clean Lines	7/17/2016	21:28:00	COM6	0.00	-81.00	0.10	BLOW LINES DOWN TO PIT.
Event	11	Drop Top Plug	Drop Top Plug	7/17/2016	21:30:07	COM6	0.00	-85.00	0.10	3RD PARTY TOP PLUG DROPPED DURING SHUTDOWN.
Event	12	Pump Displacement	Pump Displacement	7/17/2016	21:30:46	COM6	11.30	359.00	0.10	DISPLACE USING 384 BBLS WATER. GOOD RETURNS THROUGHOUT. APPROX 25 BBLS CEMENT TO SURFACE.
Event	13	Bump Plug	Bump Plug	7/17/2016	22:23:56	USER	0.00	3080.00	8.50	PLUG LANDED AT 3080 PSI. PRESSURE BROUGHT TO 3300

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Event	14	Check Floats	Check Floats	7/17/2016	22:25:15	USER	0.00	3117.00	8.50	FLOATS HELD. 3 BBLS BACK TO TRUCK
Event	15	Pump Water	Pump Water	7/17/2016	22:26:38	USER	2.20	-41.00	8.50	PUMP 5 BBLS WATER OVER THE 3 BBLS BACK FOR WET SHOE. TOTAL 8 BBLS WATER PUMPED.
Event	16	Check Floats	Check Floats	7/17/2016	22:30:19	USER	4.70	2914.00	8.50	FLOATS HELD. 3 BBLS BACK TO TRUCK
Event	17	End Job	End Job	7/17/2016	22:39:35	USER	0.00	-75.00	8.50	HELD PRE RIG DOWN SAFETY MEETING WITH CREW PRIOR TO RIGGING DOWN LINES.
Event	18	Depart Location	Depart Location	7/17/2016	23:00:00	USER				DEPART LOCATION

3.0 Attachments

3.1 EXTRACTION BRENNIMAN #6 PRODUCTION-Custom Results.png

