

# HALLIBURTON

iCem<sup>®</sup> Service

## **EXTRACTION OIL & GAS**

Date: Thursday, March 09, 2017

### **Kiteley #7**

Job Date: Sunday, February 19, 2017

Sincerely,

**Julia Nichols**

## Legal Notice

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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 **Kiteley #7** 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 56 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 #: 3770361		Quote #:		Sales Order #: 0903853272				
Customer: EXTRACTION OIL & GAS				Customer Rep: Jose Torres						
Well Name: KITELEY			Well #: 7		API/UWI #: 05-123-43919-00					
Field: WATTENBERG		City (SAP): LONGMONT		County/Parish: WELD		State: COLORADO				
Legal Description: NW SW-21-3N-68W-1409FSL-606FWL										
Contractor: CYCLONE				Rig/Platform Name/Num: CYCLONE 37						
Job BOM: 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199					Srcv Supervisor: Michael Loughran					
Job										
Job depth MD		11608.35		Job Depth TVD		6930				
Water Depth				Wk Ht Above Floor		5				
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	1588	0	1588
Casing		5.5	4.778	20			0	11608	0	6930
Open Hole Section			8.5				1588	11630	0	6930
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			11608.35						
Float Collar	5.5			11605.05						
Fluid Data										
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	11.5 lb/gal Tuned Spacer III	Tuned Spacer III	50	bbl	11.5	3.74		5.5		
Fluid Data										
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	ElastiCem W/O CBL	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)								
Fluid Data										
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	ElastiCem Tail	ELASTICEM (TM) SYSTEM	1750	sack	13.2	1.57		8	7.49	
7.49 Gal		FRESH WATER								
0.80 %		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 <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Displacement	Displacement	258	bbl	8.33			8	
Cement Left In Pipe		Amount	Reason			5 bbl wet shoe			
Mix Water:		pH 7	Mix Water Chloride: 0 ppm		Mix Water Temperature: 50 °F				
Comment									

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate <i>(bbl/min)</i>	DH Density <i>(ppg)</i>	DS Pump Press <i>(psi)</i>	Comments
Event	1	Call Out	Call Out	2/18/2017	19:20:00	USER				Callout for on loc. time 2400
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	2/18/2017	21:50:00	USER				Discuss route, Safe driving, start JM
Event	3	Crew Leave Yard	Crew Leave Yard	2/18/2017	22:10:00	USER				
Event	4	Arrive At Loc	Arrive At Loc	2/18/2017	22:45:00	USER				Meet with customer to discuss job. Rig running casing.
Event	5	Safety Meeting - Assessment of Location	Safety Meeting - Assessment of Location	2/18/2017	22:50:00	USER				hazard hunt, discuss where to spot trucks
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	2/18/2017	23:00:00	USER				JSAS safe rig up
Event	7	Rig-Up Equipment	Rig-Up Equipment	2/18/2017	23:10:00	USER				rig up all surface lines and iron to buffer zone
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	2/19/2017	01:15:00	USER	0.00	8.33	0.00	With all associated personnel. Discuss hazards of our equipment, iron, pressure. Rig lands casing at 2400 Hrs. Circulate 8 bbl/min. 800 psi. 9.3 ppg OBM, 38 VIS.
Event	9	Start Job	Start Job	2/19/2017	01:42:24	USER	0.00	8.34	7.00	
Event	10	Test Lines	Test Lines	2/19/2017	01:45:17	COM1	0.00	8.47	4636.00	HMS pressure test to 4500 PSI
Event	11	Pump Spacer 1	Pump Spacer 1	2/19/2017	01:48:51	COM1	2.20	11.46	94.00	Tuned Spacer III, 50 bbls, 11.5 ppg, 3.74 Yield, 23.7 Gal/Sk w? 15 Gal Musol, 15 Gal Dual Spacer B, 20 Gal D-Air
Event	12	Check Weight	Check Weight	2/19/2017	01:59:42	COM1	0.00	11.41	-18.00	Lead cement 13.2 PPG
Event	13	Pump Lead Cement	Pump Lead Cement	2/19/2017	02:01:42	COM1	3.90	13.09	142.00	150 sacks ElastiCem, 41.94 BBLS, 13.2 PPG, 1.57 Yield, 7.48 Gal/Sk
Event	14	Pump Tail Cement	Pump Tail Cement	2/19/2017	02:07:20	COM1	7.00	13.20	486.00	1750 Sacks ElastiCem w/ Super CBL, 489.33 BBLS, 13.2 PPG, 1.57 Yield, 7.49 Gal/Sack
Event	15	Check Weight	Check Weight	2/19/2017	02:09:26	COM1	8.00	13.25	621.00	13.2 PPG Tail

Event	16	Shutdown	Shutdown	2/19/2017	03:17:22	COM1	0.00	13.07	119.00	To wash pumps and lines to wash up tank, Rig blows lines clean with air to wash up tank
Event	17	Drop Top Plug	Drop Top Plug	2/19/2017	03:23:33	COM1	2.80	11.09	-3.00	KLX drops Plug
Event	18	Pump Displacement	Pump Displacement	2/19/2017	03:29:44	COM1	1.70	8.47	-6.00	Fresh water displacement
Event	19	Other	Other	2/19/2017	03:54:08	COM1				Cement returns to surface @ 200 bbls into displacement. 56 bbls cement to surface
Event	20	Bump Plug	Bump Plug	2/19/2017	04:03:09	COM1	4.50	8.32	2458.00	pressure up @ 2 bbl min, Plug bursts at 3396 psi. , Pump 5 bbl wet shoe @ 5 bbl min.
Event	21	Check Floats	Check Floats	2/19/2017	04:06:58	USER	0.00	8.31	2014.00	Floats hold, 1.5 bbls back to pump truck
Event	22	End Job	End Job	2/19/2017	04:08:02	COM1				
Event	23	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	2/19/2017	04:10:00	USER				JSA safe rig down
Event	24	Rig Down Lines	Rig Down Lines	2/19/2017	04:15:00	USER				
Event	25	Crew Leave Location	Crew Leave Location	2/19/2017	05:20:00	USER				Start JM. Thanks for choosing Halliburton!

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart without Events

