

# HALLIBURTON

iCem<sup>®</sup> Service

## **EXTRACTION OIL & GAS**

United States of America

Date: Sunday, March 26, 2017

### **Kiteley 8**

Production

Job Date: Thursday, February 16, 2017

Sincerely,

**Justin Lansdale**

## Legal Notice

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## Table of Contents

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Cementing Job Summary .....	4
Executive Summary .....	4
Real-Time Job Summary .....	7
Job Event Log .....	7
Custom Graph.....	9

## 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 8 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.

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 [Fort Lupton]**

## HALLIBURTON

## Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 369404	Ship To #: 3770141	Quote #:	Sales Order #: 0903848021
Customer: EXTRACTION OIL & GAS		Customer Rep: Jose Torres	
Well Name: KITELEY	Well #: 8	API/UWI #: 05-123-43924-00	
Field: WATTENBERG	City (SAP): LONGMONT	County/Parish: WELD	State: COLORADO
Legal Description: NW SW-21-3N-68W-1389FSL-622FWL			
Contractor: CYCLONE		Rig/Platform Name/Num: CYCLONE 37	
Job BOM: 7523			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX38199		Srvc Supervisor: Vaughn Oteri	

Job			
Formation Name		Bottom	
Formation Depth (MD)	Top		
Form Type		BHST	
Job depth MD	11580ft	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	1582	0	0
Casing		5.5	4.778	20			0	11583	0	0
Open Hole Section			8.5				1582	11580	0	7100

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			11583	Bottom Plug	5.5			
Float Collar	5.5			11558	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 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		4		
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		6	7.48	

last updated on 2/21/2017 10:38:12 AM

Page 1 of 2

**HALLIBURTON**

*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/mi n	Total Mix Fluid Gal	
3	ElastiCem Tail	ELASTICEM (TM) SYSTEM	1800	sack	13.2	1.57		6	7.49	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
4	Displacement	Displacement	255	bbl	8.33			8		
Cement Left In Pipe		Amount	4 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	Comments
Event	1	Call Out	Call Out	2/16/2017	06:00:00	USER	Call out from ARC hub
Event	2	Arrive At Loc	Arrive At Loc	2/16/2017	07:00:00	USER	Arrived on location met with company rep to discuss job process and concerns
Event	3	Other	Other	2/16/2017	07:00:07	USER	TD-11580 TP-11563 FC-11558 OH-8.8 Casing 5.5 20# Surf-1582 Mud-9.2ppg Water temp-65 DEG
Event	4	Prime Pumps	Prime Pumps	2/16/2017	13:13:27	USER	Prime pumps and prepare for job
Event	5	Start Job	Start Job	2/16/2017	14:24:16	COM4	Held pre-job safety meeting with all hands on location to discuss job process and hazards
Event	6	Test Lines	Test Lines	2/16/2017	14:59:57	COM4	Pressure tested pumps and lines with fresh water found no leaks and pressure held good 4790psi
Event	7	Pump Spacer 1	Pump Spacer 1	2/16/2017	15:02:58	COM4	Mixed 50bbl of 11.5ppg Tuned spacer III at 6.0bpm 359psi
Event	8	Pump Cement	Pump Cement	2/16/2017	15:13:56	COM4	Mixed 1950sks or 545bbl of 13.2ppg Y-1.5\7 G/sk-7.48 Elasticem at 8.0bpm 474psi
Event	9	Shutdown	Shutdown	2/16/2017	16:23:07	COM4	
Event	10	Clean Lines	Clean Lines	2/16/2017	16:23:10	COM4	Washed pumps and lines with fresh water
Event	11	Drop Top Plug	Drop Top Plug	2/16/2017	16:23:13	COM4	KLX tool hand released plug witnessed by company rep and HES supervisor
Event	12	Pump Displacement	Pump Displacement	2/16/2017	16:28:38	COM4	Pumped 255bbl of fresh water to displace cement
Event	13	Bump Plug	Bump Plug	2/16/2017	16:56:35	COM4	Bumped plug 500 psi over final pump pressure
Event	14	Pressure Up Well	Pressure Up Well	2/16/2017	16:57:16	COM4	Pressure up well to blow disc in plug

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							3934psi and pumped 5.0bbl into shoe
Event	15	Other	Other	2/16/2017	16:59:39	COM4	Released pressure back to pump truck to check floats, floats held good 1.5bbl back to surface
Event	16	End Job	End Job	2/17/2017	17:01:03	COM4	50bbl of cement back to surface

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2.2 Custom Graph

