

HALLIBURTON

## Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 343492	Ship To #: 3676844	Quote #:	Sales Order #: 0902761697							
Customer: BILL BARRETT CORPORATION E-BILL		Customer Rep: KIM GRITZ								
Well Name: ANSCHUTZ STATE	Well #: 5-62-22-1609C2	API/UWI #: 05-123-41754-00								
Field: WATTENBERG	City (SAP): KERSEY	County/Parish: WELD	State: COLORADO							
Legal Description: SW NW-22-5N-62W-2000FNL-350FWL										
Contractor:		Rig/Platform Name/Num: Cade 24								
Job BOM: 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HB21661		Srv Supervisor: Christopher Pickell								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type	BHST									
Job depth MD	828ft	Job Depth TVD	828							
Water Depth		Wk Ht Above Floor	4ft							
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		J-55	0	823		823
Open Hole Section			13.5				0	828		828
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	9.625			823		Top Plug	9.625	1		
Float Shoe	9.625					Bottom Plug	9.625			
Float Collar	9.625			782.4		SSR plug set	9.625			
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 <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water Spacer	Fresh Water Spacer	10	bbl	8.33			2		
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	Lead Cement	SWIFTCM (TM) SYSTEM	350	sack	14.2	1.54	7.76	5		
8.47 Gal		FRESH WATER								

last updated on 9/22/2015 5:23:57 PM

Page 1 of 3

iCem® Service

(v. 4.2.384)

## 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/min	Total Mix Fluid Gal
3	Displacement	Displacement	60.5	bbl	8.33			5	
Cement Left In Pipe		Amount	44 ft		Reason			Shoe Joint	
<b>Comment</b> ALL CEMENT SCALED WITHIN RANGE. ALL SPACER TO SURFACE AS WELL AS 37 BBL OF CEMENT. PLUG BUMPED ON CALCULATED. FLOAT HELD. 1 BBL BACK CHECKING THE FLOAT.									

## 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	9/22/2015	08:30:00	USER				Crew called out at 08:30 to be on location 13:00. Crew was Chris Pickell, Frank Adams, Brad Hinkle
Event	2	Safety Meeting - Service Center or other Site	Safety Meeting - Service Center or other Site	9/22/2015	11:00:00	USER				Safety meeting held for journey. Equipment double checked. Left the yard for Cade 24
Event	3	Arrive At Loc	Arrive At Loc	9/22/2015	12:30:00	USER				Arrive on location 30 minutes early. Rig had 700 ft of casing left to run
Event	4	Casing on Bottom	Casing on Bottom	9/22/2015	14:15:00	USER				Casing on bottom at 14:20. Rig began to circulate at 5 bbl/min and rig down the casing crew
Event	5	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	9/22/2015	14:55:00	USER				Once casing crew completed rigging down, safety meeting held for rig up. Spotted in trucks and rigged up all equipment.
Event	6	Safety Meeting - Pre Job	Safety Meeting - Pre Job	9/22/2015	15:10:00	USER				Safety meeting held with rig crew to discuss job safety and procedure
Event	7	Start Job	Start Job	9/22/2015	15:21:13	COM6				
Event	8	Test Lines	Test Lines	9/22/2015	15:23:52	COM6	8.34	0.00	2821.00	Pressure tested lines to 2500 psi. Checked for visible leaks and pressure loss
Event	9	Pump Spacer 1	Pump Spacer 1	9/22/2015	15:28:54	COM6	8.32	1.00	5.00	Pumped 10 bbl of water with 2 pounds of red dye added in
Event	10	Other	Shutdown	9/22/2015	15:34:04	COM6	8.28	0.00	19.00	Shutdown to mix up and scale first tub of cement. First tub scaled at 14.2 ppg
Event	11	Pump Cement	Pump Cement	9/22/2015	15:43:39	COM6	14.35	2.40	56.00	Pump 350 sks 96 bbl of Swiftcem cement 14.2 ppg 1.54 yield 7.76 yield
Event	12	Check Weight	Check weight	9/22/2015	15:45:00	COM6	14.36	5.00	137.00	Cement scaled at 14.15 ppg

Event	13	Check Weight	Check weight	9/22/2015	15:53:31	COM6	14.23	5.00	130.00	Cement scaled at 14.3 ppg
Event	14	Shutdown	Shutdown	9/22/2015	16:05:29	COM6	0.15	1.00	23.00	
Event	15	Drop Top Plug	Drop Top Plug	9/22/2015	16:05:32	COM6	0.00	1.00	28.00	Customers plug preloaded. Witnessed by company man. Washed pumps and lines on top of the plug
Event	16	Pump Displacement	Pump Displacement	9/22/2015	16:06:25	COM6	8.43	1.00	5.00	Pump displacement using water
Event	17	Bump Plug	Bump Plug	9/22/2015	16:24:23	COM6	8.43	3.10	297.00	Plug landed with 300 psi shutting down with 930 psi
Event	18	Other	Check Floats	9/22/2015	16:25:48	COM6	8.45	0.00	940.00	Pressure was held for 1 minute then released. Floats held. 1 bbl back to tanks
Event	19	End Job	End Job	9/22/2015	16:26:49	COM6				All spacer and 37 bbl of cement back to surface.
Event	20	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	9/22/2015	16:27:26	USER				Safety meeting held for rig down. Finished washing up truck into wash up tank and rigged down all equipment
Event	21	Safety Meeting - Departing Location	Safety Meeting - Departing Location	9/22/2015	17:30:00	USER				Safety meeting held for journey. Left location for the yard