

**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						Srcv Supervisor: Christopher Pickell					
<b>Job</b>											
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						
<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		J-55	0	823		823	
Open Hole Section			13.5				0	828		828	
<b>Tools and Accessories</b>											
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			
<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 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	SWIFTCEM (TM) SYSTEM	350	sack	14.2	1.54	7.76	5			
8.47 Gal		FRESH WATER									

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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	Displacement	Displacement	60.5	bbl	8.33			5	
<b>Cement Left In Pipe</b>		<b>Amount</b>	44 ft		<b>Reason</b>			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