

HALLIBURTON

*Cementing Job Summary**The Road to Excellence Starts with Safety*

Sold To #: 300466	Ship To #: 3765233	Quote #: 0022310171	Sales Order #: 0904073712							
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: Josh Johnson								
Well Name: BABCOCK	Well #: 22N-33HZ	API/UWI #: 05-123-43806-00								
Field: WATTENBERG	City (SAP): FIRESTONE	County/Parish: WELD	State: COLORADO							
Legal Description: SE NW-4-2N-67W-2138FNL-2085FWL										
Contractor: Precision		Rig/Platform Name/Num: Precision 464								
Job BOM: 7523 7523										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Vaughn Oteri								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type		BHST								
Job depth MD	12220ft	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		J-55	0	1876	0	1876
Casing		5.5	4.892	17	LTC	HCP110	0	12209	0	7178
Open Hole Section			7.875				1876	12220	1876	7178
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5					Top Plug	5.5	1	Weatherford	
Float Shoe	5.5			12209		Bottom Plug	5.5	1	Weatherford	
Float Collar	5.5			12116		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 ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Tuned Spacer III	Tuned Spacer III	60	bbl	10.5			6		
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 - Cap Cement	ELASTICEM (TM) SYSTEM	150	sack	13.2	1.57		8	7.53	

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Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	ElastiCem	ELASTICEM (TM) SYSTEM	390	sack	13.2	1.57		8	7.55
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
4	EconoCem	ECONOCEM (TM) SYSTEM	670	sack	13.5	1.68		8	7.98
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
5	Biocide Water and MMCR	Biocide Water and MMCR	20	bbl	8.34			10	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
6	Biocide Water	Biocide Water	260	bbl	8.34			8	
Cement Left In Pipe		Amount	93 ft		Reason			Shoe Joint	
Comment 40bbl of spacer back to surface.HOTC-6487.37 TOTC-5721.63 HOLC-650.10 In surface casing TOLC-1224.9									

2.0 Real-Time Job Summary

2.1 Job Event Log

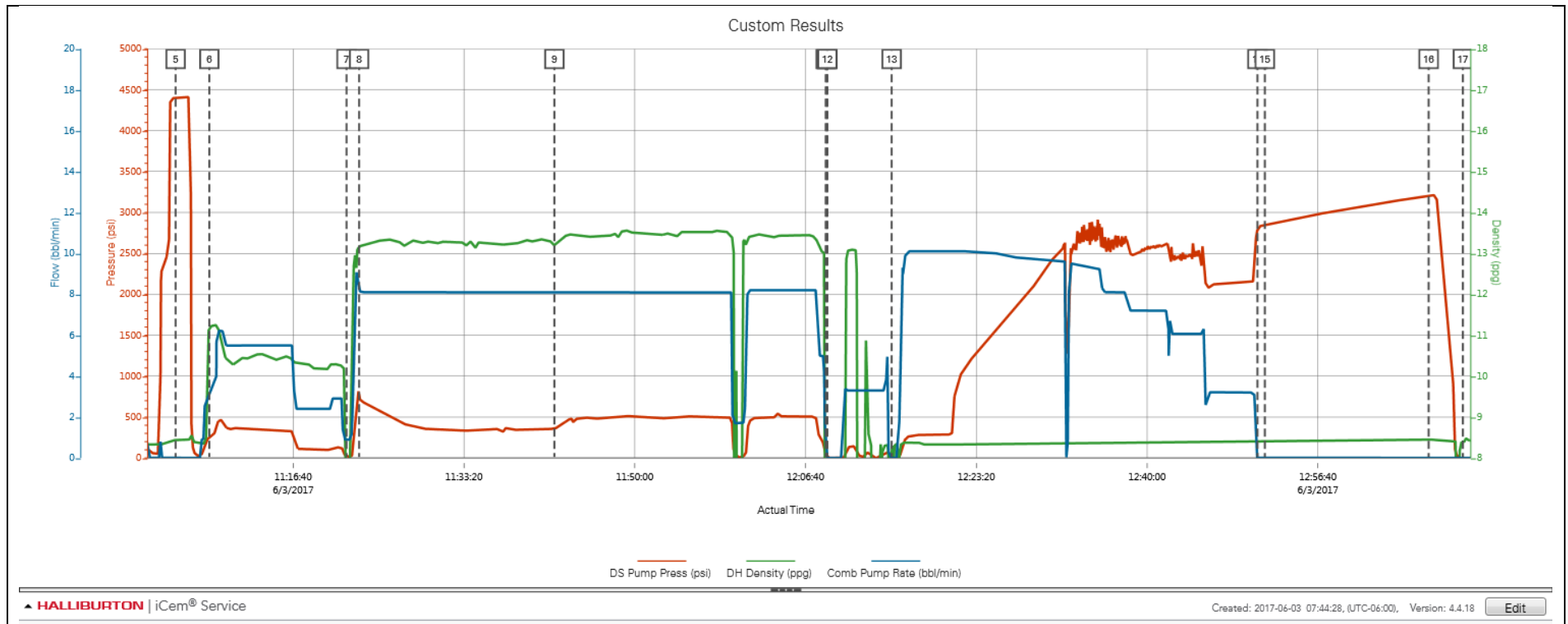
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	6/3/2017	02:30:00	USER				Call out from ARC hub
Event	2	Arrive At Loc	Arrive At Loc	6/3/2017	06:00:00	USER				Arrived on location met with company rep to discuss job process and concerns
Event	3	Other	Other	6/3/2017	06:01:00	USER				TD-12220 TP-12209 FC-12116 SURF-1875 MUD-9.5PPG KOP-6645 Casing 5.5 17# OH-7.875
Event	4	Start Job	Start Job	6/3/2017	10:55:19	COM4	-10.00	8.43	0.00	Held pre-job safety meeting with all hands on location to discuss job process and hazards
Event	5	Test Lines	Test Lines	6/3/2017	11:05:11	COM4	4406.00	8.44	0.00	Pressure tested pumps and lines with fresh water 4510psi found no leaks and pressure held good
Event	6	Pump Spacer 1	Pump Spacer 1	6/3/2017	11:08:29	COM4	254.00	11.19	3.10	Mixed 60bbl of 10.5ppg Tuned spacer III at 6.0bpm 502psi
Event	7	Drop Bottom Plug	Drop Bottom Plug	6/3/2017	11:21:52	COM4	12.00	1.95	0.90	Released plug witnessed by company rep
Event	8	Pump Lead Cement	Pump Lead Cement	6/3/2017	11:23:06	COM4	720.00	13.16	8.20	Mixed 540sks or 150bbl of 13.2ppg Y1.57 G/sk 7.53 Elasticem at 8.0bpm 771psi
Event	9	Pump Tail Cement	Pump Tail Cement	6/3/2017	11:42:09	COM4	352.00	13.23	8.10	Mixed 670sks or 200bbl of 13.5ppg Y-1.68 G/sk-7.98 Econocem at 8.0bpm 447psi
Event	10	Shutdown	Shutdown	6/3/2017	12:08:38	COM4	49.00	1.84	0.00	
Event	11	Drop Top Plug	Drop Top Plug	6/3/2017	12:08:44	COM4	23.00	0.41	0.00	Released plug witnessed by company rep
Event	12	Clean Lines	Clean Lines	6/3/2017	12:08:48	COM4	12.00	0.28	0.00	Washed pumps and lines with fresh water
Event	13	Pump Displacement	Pump Displacement	6/3/2017	12:15:04	COM4	0.00	8.21	0.00	Pumped 281bbl of fresh water to displace cement
Event	14	Bump Plug	Bump Plug	6/3/2017	12:50:46	COM4	2795.00	8.40	0.00	Bumped plug 500psi over final pump pressure
Event	15	Pressure Up Well	Pressure Up Well	6/3/2017	12:51:29	COM4	2850.00	8.40	0.00	Pressure up well to 3000psi For 15min
Event	16	Other	Other	6/3/2017	13:07:28	COM4	3207.00	8.45	0.00	Released pressure back to pump truck to check floats

3.0bbl back

Event	17	End Job	End Job	6/3/2017	13:10:49	COM4	-7.00	8.41	0.00	40bbl of spacer back to surface,HOTC-6487.37 TOTC-5721.63 HOLC-650.10 In surface cesing TOLC-1224.9
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3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart with Events

