

**HALLIBURTON**

*Cementing Job Summary*

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3794472		Quote #: 0022345197		Sales Order #: 0904261388					
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep:							
Well Name: RW			Well #: 29N-29HZ			API/UWI #: 05-123-44622-00					
Field: WATTENBERG		City (SAP): HUDSON		County/Parish: WELD		State: COLORADO					
Legal Description: SE SW-29-3N-85W-441FSL-1749FWL											
Contractor: Xtreme					Rig/Platform Name/Num: Xtreme 22						
Job BOM: 7523 7523											
Well Type: HORIZONTAL GAS											
Sales Person: HALAMERICA\HX41066					Srcv Supervisor:						
<b>Job</b>											
Formation Name											
Formation Depth (MD)		Top			Bottom						
Form Type											
BHST											
Job depth MD		12434ft			Job Depth TVD		7133ft				
Water Depth											
Perforation Depth (MD)					Wk Ht Above Floor						
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	1859	0	0	
Casing		5.5	4.778	20	LTC	HCP110	0	12423	0	7133	
Open Hole Section			7.875				1859	12434	0	7133	
<b>Tools and Accessories</b>											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe						Top Plug	5.5	1	Weatherford		
Float Shoe	5.5			12423		Bottom Plug	5.5	1	Weatherford		
Float Collar	5.5			12374		SSR plug set					
Insert Float						Plug Container	5.5	1	HES		
Stage Tool						Centralizers					
<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	10.5 lb/gal Tuned Spacer III	Tuned Spacer III			60	bbl	10.5	6.25		4	
Stage/Plug #: 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	ElastiCem - Cap Cement	ELASTICEM (TM) SYSTEM			150	sack	13.2	1.57		7	7.52

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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	ElastiCem	ELASTICEM (TM) SYSTEM	395	sack	13.2	1.57		7	7.54	
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	EconoCem	ECONOCEM (TM) SYSTEM	705	sack	13.5	1.68		7	7.99	
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	
5	Biocide Water and MMCR	Biocide Water and MMCR	20	bbl	8.34			8		
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	
6	Biocide Water	Biocide Water	254	bbl	8.34			8		
<b>Cement Left In Pipe</b>		<b>Amount</b>	49 ft		<b>Reason</b>			Shoe Joint		
<p><b>Comment</b> Full returns throughout the job. Got 3 bbls. of spacer to surface. Estimated top of cap cement is 1,190', top of lead is 2,179', top of tail is 5,753'.</p>										

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

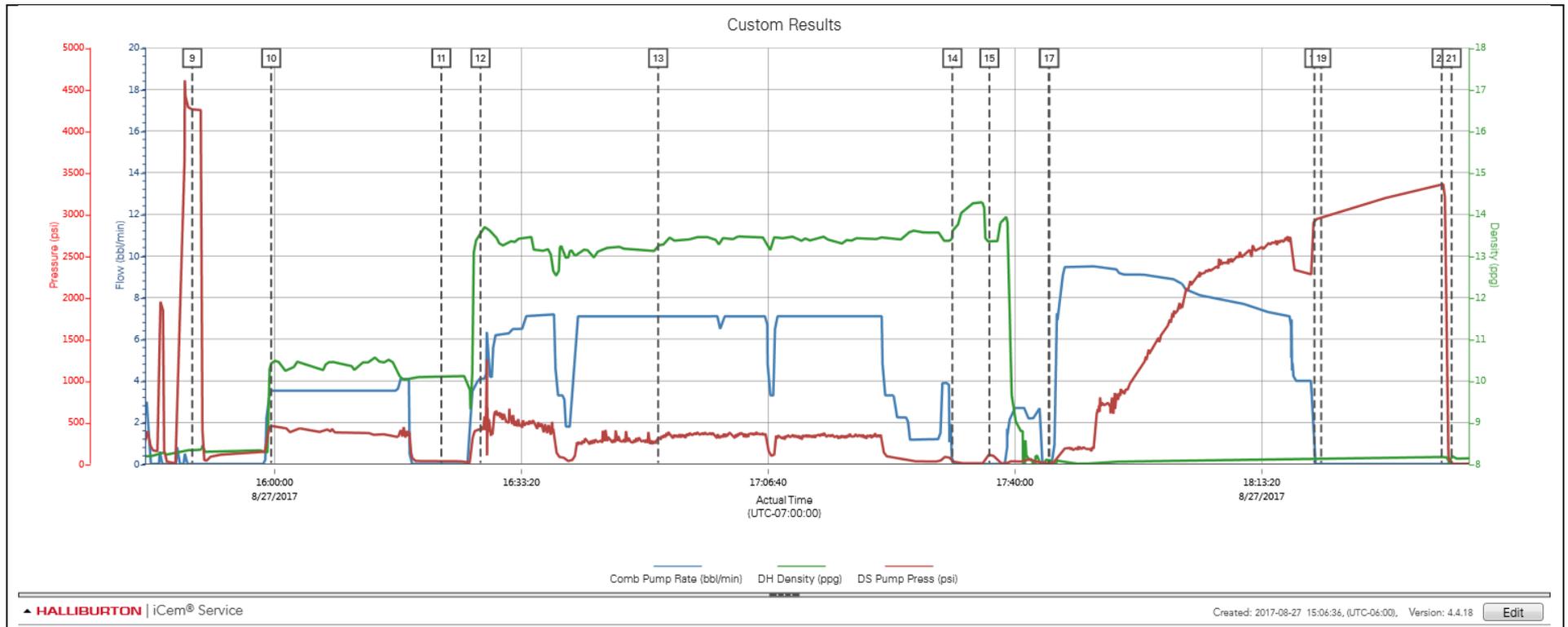
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DH Density (ppg)	DS Pump Press (psi)	Comments
Event	1	Call Out	Call Out	8/27/2017	10:00:00	USER				Crew was called out at 03:00 for an on location time of 06:30.
Event	2	Depart Location Safety Meeting	Depart Location Safety Meeting	8/27/2017	12:20:00	USER				Held a pre journey safety meeting and JSA with the crew.
Event	3	Depart Shop for Location	Depart Shop for Location	8/27/2017	12:30:00	USER				Started journey management with dispatch and left the yard.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	8/27/2017	13:15:00	USER				C
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	8/27/2017	13:30:00	USER				Held a pre rig up safety meeting and JSA with the crew.
Event	6	Rig-Up Equipment	Rig-Up Equipment	8/27/2017	13:40:00	USER				The crew rigged up all lines, hoses and equipment for the job.
Event	7	Safety Meeting	Safety Meeting	8/27/2017	15:00:00	USER				Held a pre job safety meeting and JSA with all personnel on location.
Event	8	Start Job	Start Job	8/27/2017	15:37:44	COM5	0.00	7.85	20.00	Pumed 3 bbls. of fresh water to fill lines.
Event	9	Test Lines	Test Lines	8/27/2017	15:48:53	COM5	0.00	8.34	4259.00	Pressure tested lines to 4,000 psi. with a 500 psi. kick out test.
Event	10	Pump Spacer 1	Pump Spacer 1	8/27/2017	15:59:32	COM5	3.60	10.43	472.00	Pumped 60 bbls. of Tuned Spacer III mixed at 10.5 ppg. with surfactants. Density was verified by pressurized scales.
Event	11	Drop Bottom Plug	Drop Bottom Plug	8/27/2017	16:22:31	USER	0.00	10.10	33.00	Dropped the bottom plug witnessed by the customer.
Event	12	Pump Lead Cement	Pump Lead Cement	8/27/2017	16:27:48	COM5	4.10	13.55	424.00	Pumped 42 bbls. (150 sks.) of Ellasticem mixed at 13.2 ppg. Density was verified by pressurized scales.
Event	13	Pump Tail Cement	Pump Tail Cement	8/27/2017	16:51:49	COM5	7.10	13.27	280.00	Pumped 211 bbls. 705 sks. of Econocem mixed at 13.5 ppg. Density was verified by pressurized scales.
Event	14	Shutdown	Shutdown	8/27/2017	17:31:33	COM5	0.00	13.59	37.00	Rig blew down the iron to the wash up tank. Halliburton

washed pumps and lines until clean.

Event	15	Clean Lines	Clean Lines	8/27/2017	17:36:33	USER	0.00	13.35	119.00	Washed pumps and lines until clean.
Event	16	Drop Top Plug	Drop Top Plug	8/27/2017	17:44:33	COM5	0.00	8.09	7.00	Dropped the top plug witnessed by the company man.
Event	17	Pump Displacement	Pump Displacement	8/27/2017	17:44:38	COM5	0.00	8.09	7.00	Pumped 274 bbls. of fresh water with MMCR in the first 20 bbls. and Biocide throughout the rest the of displacment.
Event	18	Bump Plug	Bump Plug	8/27/2017	18:20:27	COM5	0.00	8.12	2932.00	Bumped the plug 500 psi. over 2,450 psi. at 3 bpm. Finale pressure was 2,850 psi. Got 3 bbls. of spacer to surface. Estimated top of lead cement is at 1,190', estimatd top of tail is at 5,085,.
Event	19	Pressure Up Well	Pressure Up Well	8/27/2017	18:21:22	COM5	0.00	8.13	2966.00	Pressured up the well to 3,000 psi. for a 15 minute casing test.
Event	20	Other	Other	8/27/2017	18:37:38	COM5	0.00	8.17	3364.00	Bled off pressure to check floats. Floats held. Got 3 bbls. back to the truck.
Event	21	End Job	End Job	8/27/2017	18:38:58	COM5				Washed pumps and lines until clean.
Event	22	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	8/27/2017	19:20:58	USER				Held pre rig down safety meeting and JSA.
Event	23	Rig-Down Equipment	Rig-Down Equipment	8/27/2017	19:25:00	USER				Rigged down all lines hoses and equipment.
Event	24	Depart Location Safety Meeting	Depart Location Safety Meeting	8/27/2017	19:55:00	USER				Held pre journey safety meeting and JSA
Event	25	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	8/27/2017	20:33:00	USER				Started journey management with dispatch and Halliburton cement crew left loction.

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart without Events

