

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 0003751922	Quote #: 0022365926	Sales Order #: 0904388811							
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: Luke Rains								
Well Name: WAGNER	Well #: 27C-10HZ	API/UWI #: 05-123-43474-00								
Field: WATTENBERG	City (SAP): IONE	County/Parish: WELD	State: COLORADO							
Legal Description: SE NE-22-1N-87W-1594FNL-761FEL										
Contractor: PRECISION DRLG		Rig/Platform Name/Num: PRECISION 464								
Job BOM: 7522 7522										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HX41066		Srcv Supervisor: Nicholas Roles								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type	BHST									
Job depth MD	5878ft	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	1893	0	1893
Casing		7	6.276	26	LTC	HCP110	0	5861	0	0
Open Hole Section			8.5				1893	5871	1893	0
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	7				Top Plug	7		HES		
Float Shoe	7			5861	Bottom Plug	7		HES		
Float Collar	7				SSR plug set	7		HES		
Insert Float	7				Plug Container	7	1	HES		
Stage Tool	7				Centralizers	7		HES		
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	40	bbl	10.5	6.25		4		
0.70 gal/bbl		MUSOL A, 330 GAL TOTE - (790828)								
88.91 lbm/bbl		BARITE, BULK (100003681)								
37.58 gal/bbl		FRESH WATER								
0.70 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003685)								

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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	ELASTICEM (TM) SYSTEM	550	sack	13.2	1.57		7	7.53	
	0.20 %	HR-5, 50 LB SK (100005050)								
	7.54 Gal	FRESH WATER								
	0.10 %	SUPER CBL, 50 LB PAIL (100003668)								
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	
3	Displacement Fluid	Displacement Fluid	222	bbl	8.9			6.5		
Cement Left In Pipe		Amount	44 ft		Reason			Shoe Joint		
Comment 20 bbls of cement back to surface										

2.0 Real-Time Job Summary

2.1 Job Event Log

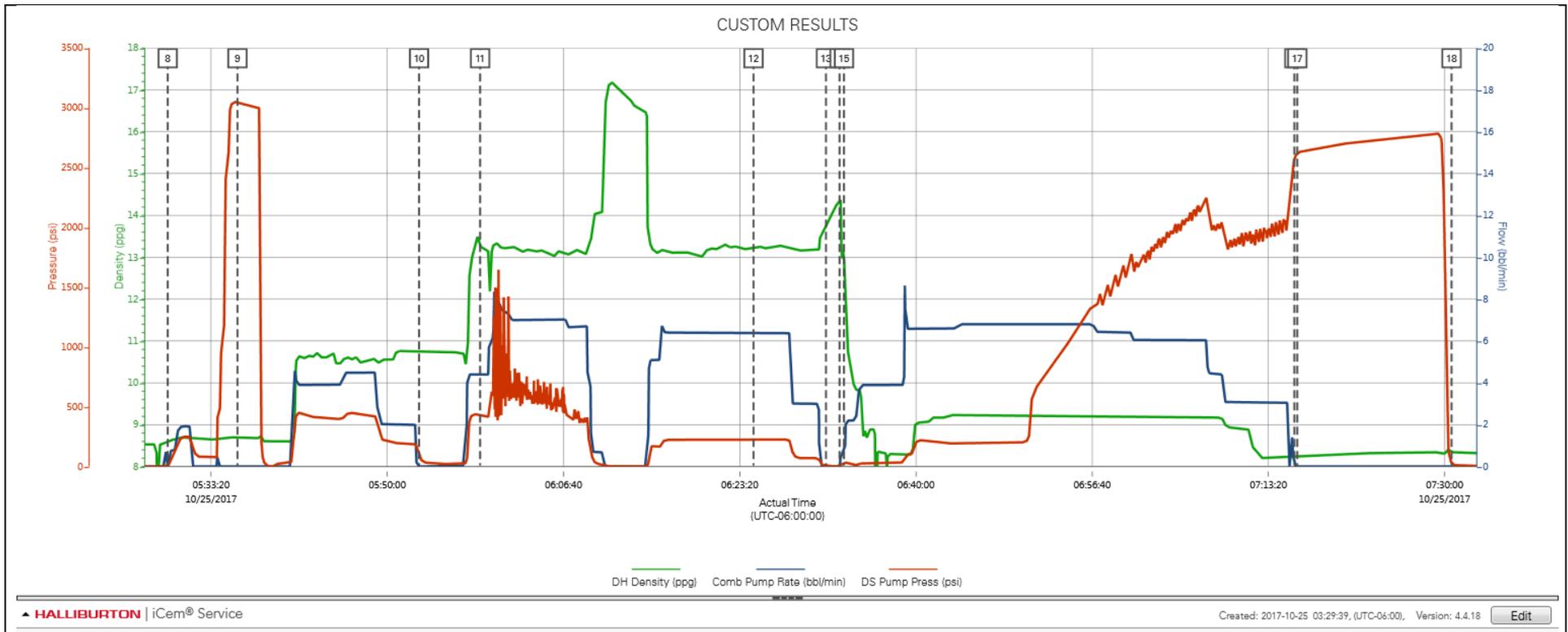
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	DS Pump Press <i>(psi)</i>	Comments
Event	1	Call Out	Call Out	10/24/2017	21:00:00	USER				Called out by Service Coordinator for O/L at 0200
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	10/25/2017	00:45:00	USER				Held meeting with all personnel in convoy to discuss directions and hazards associated with drive, all fit to drive.
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	10/25/2017	01:00:00	USER				Journey Management prior to departure
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	10/25/2017	01:30:00	USER				Upon arrival met with company man to discuss job details and calculations, performed hazard hunt and site assessment.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	10/25/2017	01:45:00	USER				Discussed rigging up hazards and procedure according to HMS.
Event	6	Other	Other	10/25/2017	02:00:00	USER				Water test- PH-6, Chlor-0, Temp-65. Cement temp-70.
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	10/25/2017	04:45:00	USER	8.53	0.00	1.00	Held safety meeting with all job associated personnel to discuss job procedure, hazards and stop work authority.
Event	8	Start Job	Start Job	10/25/2017	05:29:14	COM4	8.60	0.00	11.00	TD-5871', TP-5861' 7" 26#, FC-5817', OH-8.5", SURF-1893' 9.625" 36#, MUD-8.9#
Event	9	Test Lines	Test Lines	10/25/2017	05:35:49	COM4	8.69	0.00	3047.00	Pumped 5bbls fresh water to fill lines, shutdown, closed manifold, performed 500psi k/o function test, continued with 5th gear stall at 14500psi, proceeded to bring pressure to 3000psi. Held for 5min well, no leaks.
Event	10	Drop Bottom Plug	Drop Bottom Plug	10/25/2017	05:53:00	COM4	10.76	0.00	93.00	Dropped by HES supervisor, witnessed by company man.
Event	11	Pump Cement	Pump Cement	10/25/2017	05:58:47	COM4	13.26	4.40	436.00	Pumped 550sks or 154bbls of 13.2# 1.57y 7.53g/s Elasticem at 7bpm 400psi.
Event	12	Check Weight	Check weight	10/25/2017	06:24:38	COM4	13.21	6.40	220.00	Weight verified with pressurized mud scales.
Event	13	Shutdown	Shutdown	10/25/2017	06:31:29	COM4	13.71	0.00	4.00	Shutdown
Event	14	Pump Displacement	Pump Displacement	10/25/2017	06:32:46	COM4	14.37	0.00	3.00	Pumped 222bbls of OBM at 7 bpm. Last 10 bbls of fresh

water.

Event	15	Drop Top Plug	Drop Top Plug	10/25/2017	06:33:11	COM4	13.00	0.70	35.00	Dropped by HES supervisor, witnessed by company man.
Event	16	Bump Plug	Bump Plug	10/25/2017	07:15:47	COM4	8.25	0.00	2571.00	Slowed down at 200bbls away to 3bpm, Final Circulating Pressure-1920psi, Bump Pressure-2350psi.
Event	17	Pressure Up Well	Pressure Up Well	10/25/2017	07:16:04	COM4	8.25	0.00	2619.00	Pressured up to 2500 PSI for casing pressure test. 15 minutes
Event	18	Other	Other	10/25/2017	07:30:39	USER	8.35	0.00	29.00	Released pressure and got 2.5bbls back to truck. Floats held.
Event	19	End Job	End Job	10/25/2017	07:35:56	COM4	8.30	0.00	3.00	20 bbls of Cement back to surface.
Event	20	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	10/25/2017	07:40:00	USER	8.30	0.00	9.00	Met with crew and discussed swings, pinch points and team lifts. No incidents.
Event	21	Depart Location Safety Meeting	Depart Location Safety Meeting	10/25/2017	08:45:00	USER				Held meeting with all personnel in convoy to discuss directions and hazards associated with drive, all fit to drive.
Event	22	Depart Location	Depart Location	10/25/2017	09:00:00	USER				Pre journey management prior to departure.

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart without Events

