

HALLIBURTON

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

Sold To #: 300466	Ship To #: 3794463	Quote #: 0022339434	Sales Order #: 0904243189							
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: David Cornet								
Well Name: RW	Well #: 13N-32HZ	API/UWI #: 05-123-44611-00								
Field: WATTENBERG	City (SAP): HUDSON	County/Parish: WELD	State: COLORADO							
Legal Description: SE SW-29-3N-65W-441FSL-1704FWL										
Contractor: Xtreme		Rig/Platform Name/Num: Xtreme 22								
Job BOM: 7523 7523										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Aaron Smith								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type		BHST								
Job depth MD	13460ft	Job Depth TVD	7114							
Water Depth		Wk Ht Above Floor	7							
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	1844	0	1844
Casing	0	5.5	4.778	20	LTC	HCP110	0	13448	0	7144
Open Hole Section			7.875				1844	13460	1844	7144
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	5.5				Top Plug	5.5	1	AOT		
Float Shoe	5.5	1	AOT	13448	Bottom Plug	5.5	1	AOT		
Float Collar	5.5	1	AOT	13403	SSR plug set	5.5		HES		
Insert Float	5.5				Plug Container	5.5	1	HES		
Stage Tool	5.5				Centralizers	5.5	207	AOT		
Fluid Data										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Tuned Spacer III	Tuned Spacer III	60	bbl	10.5	6.25				
Fluid Data										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	ElastiCem - Cap Cement	ELASTICEM (TM) SYSTEM	150	sack	13.2	1.57		6	7.52	

last updated on 8/29/2017 1:25:55 PM

Page 1 of 2

iCem® Service

(v. 4.4.18)

Created: Tuesday, August 29, 2017

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Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	ElastiCem	ELASTICEM (TM) SYSTEM	400	sack	13.2	1.57		6	7.53
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	EconoCem	ECONOCEM (TM) SYSTEM	820	sack	13.5	1.68		6	7.99
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
5	Biocide Water and MMCR	Biocide Water and MMCR	20	bbl	8.34				
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
6	Biocide Water	Biocide Water	277.8	bbl	8.34				
Cement Left In Pipe		Amount	45 ft		Reason			Shoe Joint	
Comment 12 bbls spacer to surface TOLC 1018', TOTC 5541'.									

2.0 Real-Time Job Summary

2.1 Job Event Log

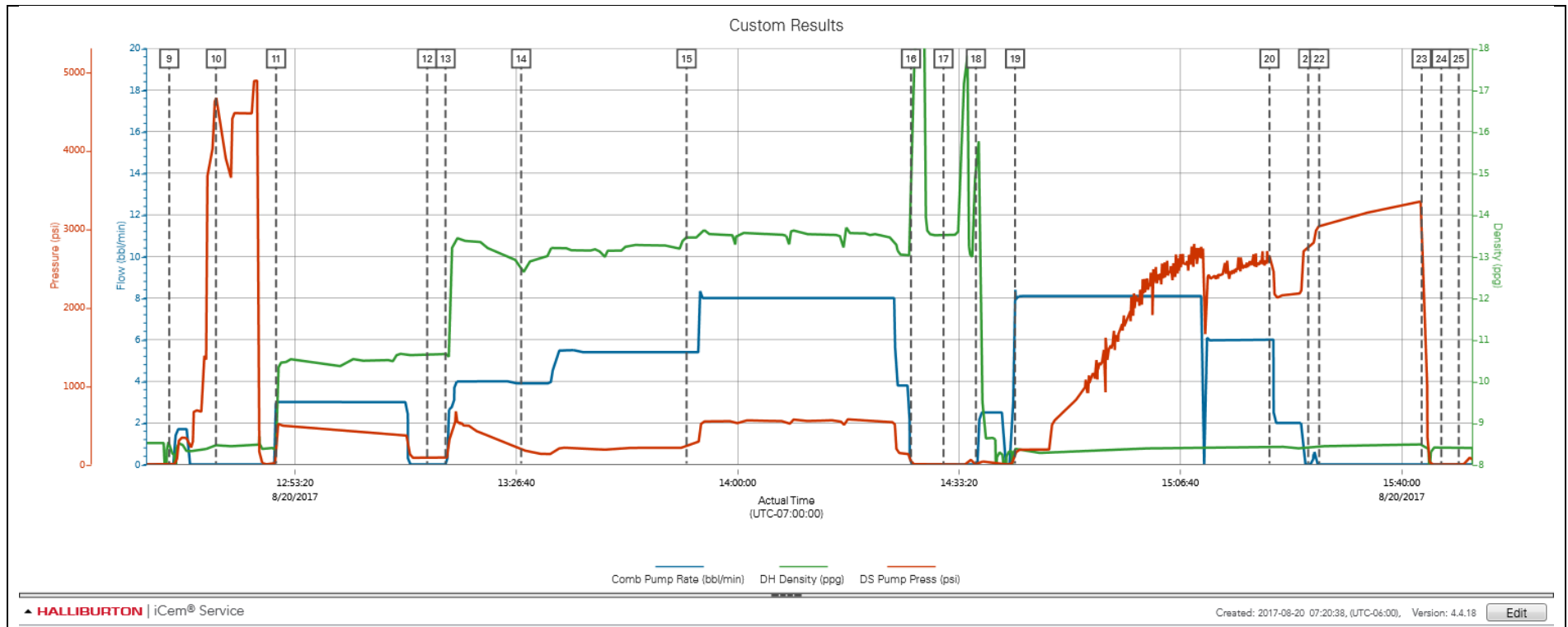
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DH Density (ppg)	DS Pump Press (psi)	Comments
Event	1	Call Out	Call Out	8/20/2017	02:30:00	USER				For on location at 0700.
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	8/20/2017	05:30:00	USER				Journey management meeting held prior to departure.
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	8/20/2017	05:40:00	USER				Journey called into dispatch
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	8/20/2017	06:00:00	USER				With all equipment and materials, rig had 5000' of casing left to run.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	8/20/2017	06:15:00	USER				JSA to discuss the hazards of rig-up.
Event	6	Rig-Up Equipment	Rig-Up Equipment	8/20/2017	06:20:00	USER				Rig-up all surface lines and equipment.
Event	7	Rig-Up Completed	Rig-Up Completed	8/20/2017	08:30:00	USER				With no incidents or injuries.
Event	8	Event	Pre-Job Safety Meeting	8/20/2017	12:00:00	USER	0.00	8.52	2.00	With all essential personnel.
Event	9	Start Job	Start Job	8/20/2017	12:34:23	COM5	0.00	8.56	0.00	With water supplied from frac tanks, water tested good to mix cement, PH 7, CI 52 ppm, Temp 74
Event	10	Test Lines	Test Lines	8/20/2017	12:41:26	USER	0.00	8.47	4694.00	@4500
Event	11	Pump Spacer	Pump Spacer	8/20/2017	12:50:29	USER	3.10	8.33	139.00	60 bbls tuned spacer @10.5 ppg, 6.25 ft3/sk, 40.2 gal/sk. Verified with pressurized scales.
Event	12	Drop Bottom Plug	Drop Bottom Plug	8/20/2017	13:13:14	USER	0.00	10.65	80.00	Pre-loaded bottom plug in HES plug container. Verified by customer rep.
Event	13	Pump Cap Cement	Pump Cap Cement	8/20/2017	13:15:59	USER	0.00	10.66	78.00	150 sks (41.94 bbls) ElastiCem @ 13.2 ppg, 1.57 ft3/sk, 7.52 gal/sk, Verified with pressurized scales.
Event	14	Pump Lead Cement	Pump Lead Cement	8/20/2017	13:27:23	USER	3.90	12.67	201.00	400 sks (111.85 bbls) ElastiCem @ 13.2 ppg, 1.57 ft3/sk, 7.53 gal/sk. Verified with pressurized scales.
Event	15	Pump Tail Cement	Pump Tail Cement	8/20/2017	13:52:18	USER	5.40	13.47	250.00	820 sks (245.35 bbls) 13.5 ppg, 1.68 ft3/sk, 7.99 gal/sk,

Verified with pressurized scales.

Event	16	Shutdown	Shutdown	8/20/2017	14:26:05	USER	0.00	14.41	37.00	To blow lines down.
Event	17	Drop Top Plug	Drop Top Plug	8/20/2017	14:30:59	USER	0.00	13.51	5.00	Remove cap and load top plug in plug container, verified by customer rep.
Event	18	Clean Lines	Clean Lines	8/20/2017	14:35:52	USER	0.00	15.18	-1.00	Wash pumps and lines to the pit.
Event	19	Pump Displacement	Pump Displacement	8/20/2017	14:41:46	USER	5.60	8.39	85.00	297.55 bbls fresh water, with 10 gallons mmcr in the first 20 bbls, and 5 gallons biocide throughout.
Event	20	Spacer Returns to Surface	Spacer Returns to Surface	8/20/2017	15:20:05	USER	6.00	8.41	2588.00	@ 286 bbls displacement, 11 bbls to surface.
Event	21	Bump Plug	Bump Plug	8/20/2017	15:25:54	USER	0.00	8.41	2770.00	@ 500 psi over, Final circulating pressure
Event	22	Other	Casing Test	8/20/2017	15:27:34	USER	0.00	8.43	3042.00	@3000 psi for 15 min.
Event	23	Check Floats	Check Floats	8/20/2017	15:42:59	USER	0.00	8.47	3286.00	floats good 3 bbls back.
Event	24	End Job	End Job	8/20/2017	15:45:57	COM5				End recording data
Event	25	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	8/20/2017	15:48:34	USER	0.00	8.40	9.00	JSA to discuss the hazards of rig-down.
Event	26	Rig-Down Equipment	Rig-Down Equipment	8/20/2017	16:00:14	USER	0.00	0.00	0.00	Rig-down all surface lines and equipment.
Event	27	Rig-Down Completed	Rig-Down Completed	8/20/2017	16:30:06	USER				With no incidents or injuries.
Event	28	Depart Location Safety Meeting	Depart Location Safety Meeting	8/20/2017	16:50:45	USER				Journey management meeting held prior to departure.
Event	29	Depart Location	Depart Location	8/20/2017	17:00:01	USER				Journey called into dispatch.

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart without Events

