

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3816708		Quote #: 0022387681		Sales Order #: 0904511824				
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep: JEREMY WILDE						
Well Name: ROBIN			Well #: 9-12HZ		API/UWI #: 05-123-45152-00					
Field: WATTENBERG		City (SAP): HUDSON		County/Parish: WELD		State: COLORADO				
Legal Description: SW SE-9-1N-85W-884FSL-2493FEL										
Contractor: Xtreme				Rig/Platform Name/Num: Xtreme 22						
Job BOM: 7523 7523										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HX41066				Srvc Supervisor: Vitalijs Neverdasovs						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		18103ft		Job Depth TVD		7153'				
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	1874	0	1874
Casing	0	5.5	4.892	17	LTC	HCP110	0	18103	0	7153
Open Hole Section			7.875				1874	18113	1874	7153
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5					Top Plug	5.5	1	N/A	
Float Shoe	5.5	1	N/A	18103		Bottom Plug	5.5	1	N/A	
Float Collar	5.5	1	N/A	18094		SSR plug set	5.5			
Insert Float	5.5					Plug Container	5.5	1	HES	
Stage Tool	5.5					Centralizers	5.5	236	N/A	
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	80	bbl	10.5	6.25		5		
37.58 gal/bbl		FRESH WATER								
0.70 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)								
0.25 gal/bbl		D-AIR 3000L, 5 GAL PAIL (101007444)								
0.70 gal/bbl		MUSOL A, 330 GAL TOTE - (790828)								
88.91 lbm/bbl		BARITE, BULK (100003681)								

last updated on 1/3/2018 9:21:13 AM

Page 1 of 3

HALLIBURTON

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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
2	ElastiCem	ELASTICEM (TM) SYSTEM	630	sack	13.2	1.57		6	7.53
0.10 %		SUPER CBL, 50 LB PAIL (100003668)							
0.40 %		SCR-100 (100003749)							
7.53 Gal		FRESH WATER							
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	EconoCem	ECONOCEM (TM) SYSTEM	1310	sack	13.5	1.68		7	7.98
8 Gal		FRESH WATER							
0.40 %		HR-5, 50 LB SK (100005050)							
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	Biocide Water and MMCR	Biocide Water and MMCR	20	bbl	8.34			7	
0.50 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							
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	Biocide Water	400	bbl	8.34			7	
Cement Left In Pipe		Amount	Reason		Shoe Joint				
Comment : 45 BBLs OF SPACER BACK TO SURFACE. ESTIMATED TOP OF TAIL @ 5400'. TOP OF LEAD 742'									

2.0 Real-Time Job Summary

2.1 Job Event Log

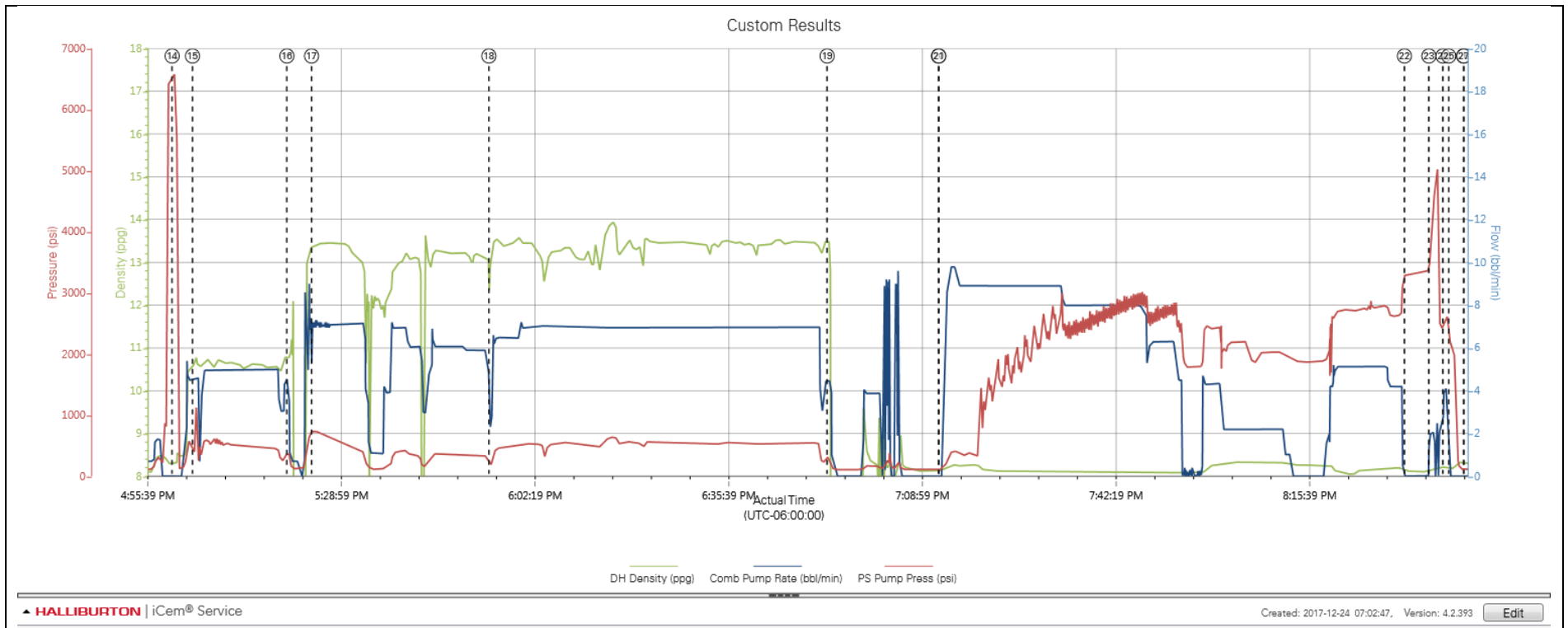
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	PS Pump Press <i>(psi)</i>	Comments
Event	1	Call Out	Call Out	12/23/2017	21:30:00	USER				CUSTOMER REQUESTED CREW ON LOCATION @ 02:00.
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	12/24/2017	09:45:00	USER				HELD JSA PRIOR LEAVING THE YARD
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	12/24/2017	10:32:00	USER				13 MILES. DISCUSS NUMBERS AND PROCEDURE WITH CUSTOMER. RIG IS CIRCULAITING/ WAITING
Event	4	Other	Other	12/24/2017	10:40:00	USER				SPOT TRUCKS
Event	5	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	12/24/2017	10:45:00	USER				RIG UP SAFETY MEETING
Event	6	Rig-up Lines	Rig-up Lines	12/24/2017	10:51:00	USER				RIG UP ALL LINES
Event	7	Safety Meeting - Pre Job	Safety Meeting - Pre Job	12/24/2017	12:35:00	USER	0.38	0.00	-1.00	HELD JSA WITH ALL PERSONAL INVOLVED IN CEMENT JOB
Event	8	Other	Other	12/24/2017	12:50:00	USER	0.38	0.00	-3.00	RIG UP PLUG CONTAINER AND MANIFOLD
Event	9	Other	Other	12/24/2017	13:15:00	USER	0.38	0.00	-3.00	PRIME UP CEMENT PUMP
Event	10	Other	Other	12/24/2017	14:31:50	USER	8.41	14.80	1.00	CEMENT TRUCK WILL NOT PRIME UP AND START LEAKING WATER FROM DRIVER SIDE SUCTION MANIFOLD SEAL. LEAK WAS FIXED. HAD ANOTHER ATTEMPT TO PRIME UP/ MANIFOLD START LEAKING AGAIN. DECISION WAS MADE TO CALL FOR ANOTHER PUMP TRUCK.
Event	11	Other	Other	12/24/2017	15:56:00	USER				CEMENT TRUCK ARRIVED. CREW IS ATTACHING IRON AND WATER HOSE TO THE TRUCK.
Event	12	Other	Other	12/24/2017	16:23:15	USER	8.07	0.00	152.00	PRIMING UP CEMENT TRUCK
Event	13	Start Job	Start Job	12/24/2017	16:50:39	COM4	8.12	0.70	116.00	
Event	14	Test Lines	Test Lines	12/24/2017	17:00:14	COM4	8.31	0.00	6587.00	LOAD AND TEST LINE TO 6570 PSI
Event	15	Pump Spacer 1	Pump Spacer 1	12/24/2017	17:03:44	COM4	10.73	4.50	388.00	BATCH/WEIGH/PUMP 80 BBLs OF TUNED SPACER WITH

SURFACTANTS @ 10.5 PPG

Event	16	Drop Bottom Plug	Drop Bottom Plug	12/24/2017	17:20:00	USER	10.77	2.30	343.00	SHUTDOWN/ DROP BOTTOM PLUG
Event	17	Pump Lead Cement	Pump Lead Cement	12/24/2017	17:24:14	COM4	13.39	7.00	742.00	BATCH/WEIGH/PUMP 630 SKS (176.2 BBLS) OF ELASTICEM @ 13.2 PPG
Event	18	Pump Tail Cement	Pump Tail Cement	12/24/2017	17:54:46	COM4	13.10	2.30	167.00	WEIGH/PUMP 1310 SKS (392 BBLS) OF ECONOCEM @ 13.5 PPG
Event	19	Shutdown	Shutdown	12/24/2017	18:53:00	USER	13.48	4.50	321.00	WASH PUMPS AND LINES
Event	20	Drop Top Plug	Drop Top Plug	12/24/2017	19:12:10	COM4	8.14	0.00	113.00	
Event	21	Pump Displacement	Pump Displacement	12/24/2017	19:12:13	COM4	8.14	0.00	113.00	FIRST 20 BBLS WITH MMCR + BIOCID
Event	22	Bump Plug	Bump Plug	12/24/2017	20:32:23	COM4	8.12	0.00	3311.00	BUMP PLUG 3280 PSI WITH 500 PSI OVER FINAL CIRCULATING PRESSURE OF 2640 PSI.PER CUSTOMER HOLD PRESSURE FOR 5 MIN CASING TEST
Event	23	Other	Other	12/24/2017	20:36:35	USER	8.15	2.00	3858.00	PRESSURE UP AND BURST DISC. PUMP 5 BBLS OF WET SHOE. DISC BURST @ 5020 PSI
Event	24	Shutdown	Shutdown	12/24/2017	20:39:00	USER	8.21	4.10	2585.00	
Event	25	Check Floats	Check Floats	12/24/2017	20:40:00	USER	8.18	0.00	2124.00	FLOATS HELD
Event	26	End Job	End Job	12/24/2017	20:42:34	COM4	8.30	0.00	113.00	
Event	27	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	12/24/2017	20:42:35	USER	8.30	0.00	113.00	HELD PRE RIG DOWN JSA
Event	28	Depart Location Safety Meeting	Depart Location Safety Meeting	12/24/2017	22:10:00	USER				
Event	29	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	12/24/2017	22:30:00	USER				

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart without Events

