

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 3782359	Quote #: 0022391584	Sales Order #: 0904550056							
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: JEREMY WILDE								
Well Name: LEINWEBER FED		Well #: 31N-8HZ	API/UWI #: 05-123-44206-00							
Field: WATTENBERG	City (SAP): IONE	County/Parish: WELD	State: COLORADO							
Legal Description: NE NE-11-1N-87W-458FNL-350FEL										
Contractor: Xtreme		Rig/Platform Name/Num: Xtreme 22								
Job BOM: 7523 7523										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HX41066		Srcv Supervisor: Vitalijs Neverdasovs								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type	BHST									
Job depth MD	18535ft	Job Depth TVD	7277							
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	1862	0	0
Casing	0	5.5	4.892	17	LTC	HCP110	0	18545	0	7277
Open Hole Section			8.5				1862	18545	0	7277
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	18535	Bottom Plug	5.5	1	N/A		
Float Collar	5.5	1	N/A	18525	SSR plug set	5.5				
Insert Float	5.5				Plug Container	5.5	1	HES		
Stage Tool	5.5				Centralizers	5.5	326	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		4		
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 1/29/2018 10:06:42 AM

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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
2	ElastiCem	ELASTICEM (TM) SYSTEM	780	sack	13.2	1.57		8	7.53
	0.10 %	SUPER CBL, 50 LB PAIL (100003668)							
	0.45 %	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/min	Total Mix Fluid Gal
3	EconoCem	ECONOCEM (TM) SYSTEM	1780	sack	13.5	1.68		8	7.99
	8 Gal	FRESH WATER							
	0.35 %	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/min	Total Mix Fluid Gal
4	Biocide Water and MMCR	Biocide Water and MMCR	20	bbl	8.34			9	
	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/min	Total Mix Fluid Gal
5	Biocide Water	Biocide Water	410	bbl	8.34			9	
Cement Left In Pipe		Amount	Reason		Shoe Joint				
Comment : 60 BBLS OF SPACER BACK TO SURFACE. ESTIMATED TOT @ 5484'. TOL @ 402'									

2.0 Real-Time Job Summary

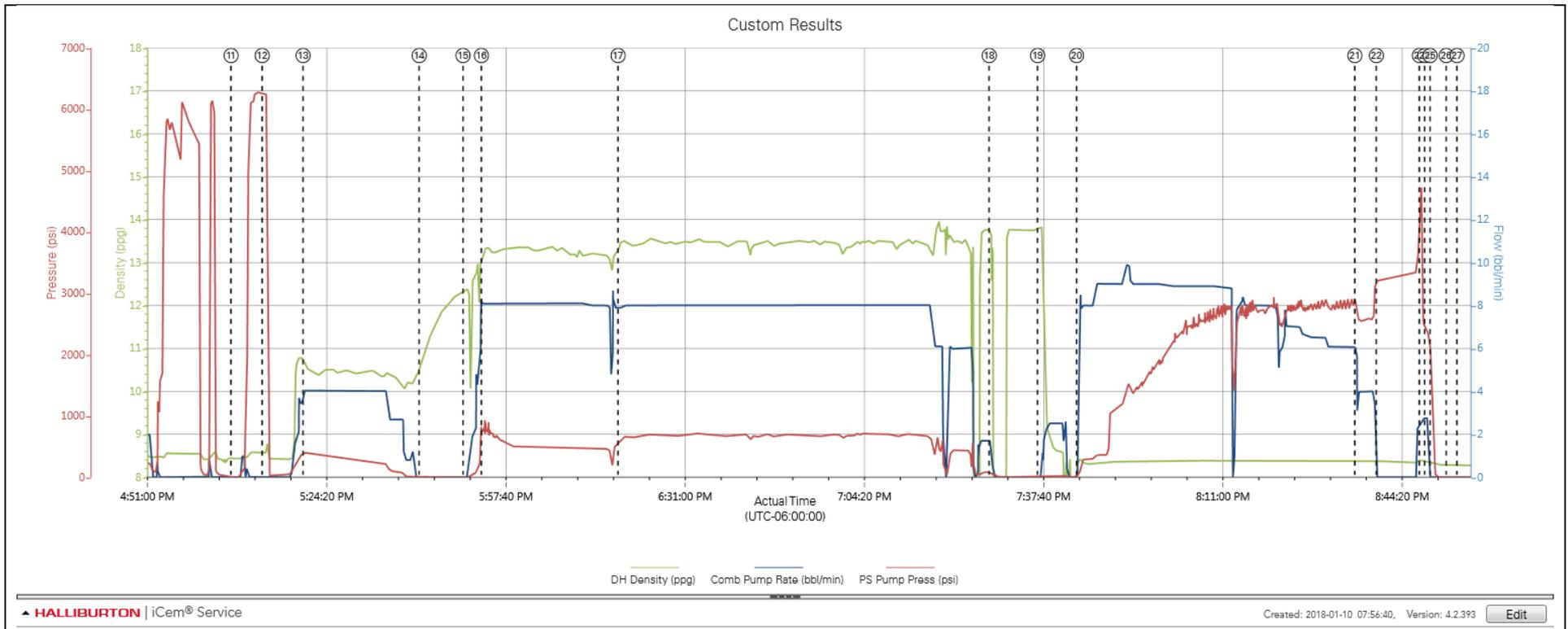
2.1 Job Event Log

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	1/10/2018	05:00:00	USER				ON LOLCATION @ 11:00
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	1/10/2018	10:00:00	USER				HELD JSA PRIOR LEAVING THE YARD
Event	3	Depart Shop for Location	Depart Shop for Location	1/10/2018	10:21:00	USER				CALLED JORNEY
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	1/10/2018	10:37:00	USER				6 MILES. DISCUSS NUMBERS AND PROCEDURE WITH CUSTOMER. RIG IS RUNNING CASING.
Event	5	Other	Other	1/10/2018	10:52:00	USER				SPOT TRUCKS
Event	6	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	1/10/2018	10:57:00	USER				RIG UP SAFETY MEETING
Event	7	Rig-up Lines	Rig-up Lines	1/10/2018	11:02:00	USER				RIG UP ALL SURFACE LINES TO THE BUFFER ZONE/ RIG IS RUNNING CASING.
Event	8	Casing on Bottom	Casing on Bottom	1/10/2018	13:44:00	USER				CASING LANDED
Event	9	Other	Other	1/10/2018	14:01:00	USER				RIG UP PLUG CONTAINER AND MANIFOLD FOR RIG TO CIRCULATE
Event	10	Safety Meeting - Pre Job	Safety Meeting - Pre Job	1/10/2018	16:20:00	USER	8.42	0.00	-15.00	HELD JSA WITH ALL PERSONAL INVOLVED IN CEMENT JOB
Event	11	Start Job	Start Job	1/10/2018	17:07:00	COM4	8.44	0.00	1.00	
Event	12	Test Lines	Test Lines	1/10/2018	17:12:47	USER	8.57	0.00	6251.00	LOAD AND TEST LINE @ 6081 PSI
Event	13	Pump Spacer	Pump Spacer	1/10/2018	17:20:24	USER	10.61	4.00	408.00	BATCH/WEIGH/PUMP 80 BBLS OF TUNED SPACER WITH SURFACTANTS @ 10.5 PPG
Event	14	Other	Other	1/10/2018	17:42:00	COM4	10.72	0.00	-7.00	SHUT DOWN/ DROP BUTTOM PLUG
Event	15	Pump Lead Cement	Pump Lead Cement	1/10/2018	17:50:08	COM4	12.36	0.00	-5.00	

Event	16	Pump Lead Cement	Pump Lead Cement	1/10/2018	17:53:33	USER	13.12	8.10	747.00	BATCH/WEIGH/PUMP 780 SKS (218.1 BBLS) OF ELASTICEM @ 13.2 PPG
Event	17	Pump Tail Cement	Pump Tail Cement	1/10/2018	18:18:58	USER	13.47	7.90	612.00	WEIGH/PUMP 1780 SKS (532.5 BBLS) OF ECONOCEM @ 13.5 PPG
Event	18	Shutdown	Shutdown	1/10/2018	19:28:00	USER	12.62	0.80	60.00	SHUTDOWN/ WASH PUMPS AND LINES
Event	19	Drop Top Plug	Drop Top Plug	1/10/2018	19:37:00	USER	13.80	0.00	2.00	
Event	20	Pump Displacement	Pump Displacement	1/10/2018	19:44:14	USER	8.40	4.20	50.00	FIRST 20 BBLS WITH MMCR + BIOCIDES. TOTAL DISPLACEMENT 430.7 BBLS. 60 BBLS OF SPACER BACK TO SURFACE.
Event	21	Slow Rate	Slow Rate	1/10/2018	20:36:00	USER	8.38	3.50	2688.00	SLOW RATE TO 4 BPM
Event	22	Bump Plug	Bump Plug	1/10/2018	20:40:00	USER	8.38	0.00	3218.00	BUMP PLUG 3221 PSI WITH 500 PSI OVER FINAL CIRCULATING PRESSURE OF 2670 PSI.PER CUSTOMER HOLD PRESSURE FOR 10 MIN CASING TEST
Event	23	Other	Other	1/10/2018	20:48:00	USER	8.40	2.70	3571.00	BURST WET SHOE SUB @ 4720 PSI AND PUMP 3 BBLS WET SHOE.
Event	24	Shutdown	Shutdown	1/10/2018	20:49:00	USER	8.36	2.80	2411.00	
Event	25	Check Floats	Check Floats	1/10/2018	20:50:00	USER	8.34	0.00	1209.00	FLOATS HELD
Event	26	End Job	End Job	1/10/2018	20:53:00	COM4	8.29	0.00	-1.00	
Event	27	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	1/10/2018	20:55:00	USER	8.28	0.00	0.00	HELD PRE RIG DOWN JSA
Event	28	Depart Location Safety Meeting	Depart Location Safety Meeting	1/10/2018	22:15:00	USER				
Event	29	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	1/10/2018	22:30:00	USER				

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart without Events

