

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3819717		Quote #: 0022371129		Sales Order #: 0904420306																																																																				
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep: JOHN TRUETT																																																																						
Well Name: ROBIN			Well #: 9-16HZ			API/UWI #: 05-123-45250-00																																																																				
Field: WATTENBERG		City (SAP): HUDSON		County/Parish: WELD		State: COLORADO																																																																				
Legal Description: SE SE-9-1N-65W-317FSL-859FEL																																																																										
Contractor: NABORS DRLG				Rig/Platform Name/Num: NABORS X22																																																																						
Job BOM: 7523 7523																																																																										
Well Type: HORIZONTAL GAS																																																																										
Sales Person: HALAMERICA\HX41066					Srvc Supervisor: Jason Welton																																																																					
Job																																																																										
Formation Name																																																																										
Formation Depth (MD)		Top			Bottom																																																																					
Form Type																																																																										
BHST																																																																										
Job depth MD		18341ft			Job Depth TVD		7115																																																																			
Water Depth																																																																										
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2	ElastiCem	ELASTICEM (TM) SYSTEM	630	sack	13.2	1.57		6	7.54	
0.10 %		SUPER CBL, 50 LB PAIL (100003888)								
0.30 %		SCR-100 (100003749)								
7.54 Gal		FRESH WATER								
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3	EconoCem	ECONOCEM (TM) SYSTEM	1320	sack	13.5	1.68		6	7.98	
7.98 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/min	Total Mix Fluid Gal	
4	Biocide Water and MMCR	Biocide Water and MMCR	20	bbl	8.34					
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	405.5	bbl	8.34					
Cement Left In Pipe		Amount	5 ft		Reason			Shoe Joint		
Mix Water pH		##	Mix Water Chloride		## ppm		Mix Water Temperature			## °F °C
Cement Temperature		## °F °C	Plug Displaced by		## lb/gal kg/m3 XXXX		Disp. Temperature			## °F °C
Plug Bumped?		Yes/No	Bump Pressure		#### psi MPa		Floats Held?			Yes/No
Cement Returns		## bbl m3	Returns Density		## lb/gal kg/m3		Returns Temperature			## °F °C
Comment JOB EXECUTED AS PER DESIGN.										

2.0 Real-Time Job Summary

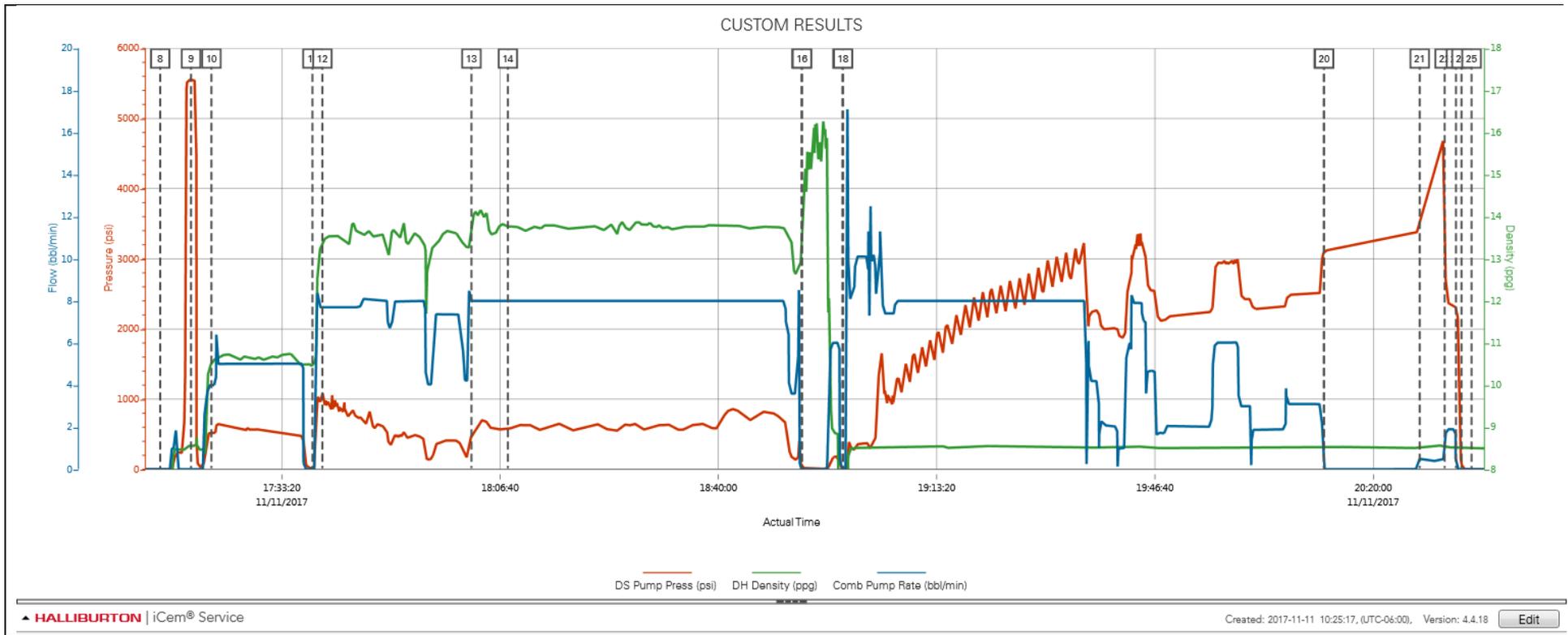
2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DS Pump Press <i>(psi)</i>	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	Comments
Event	1	Arrive At Loc	Arrive At Loc	11/11/2017	08:45:00	USER				CREW CALLED OUT AT 0530/REQUESTED ON LOCATION AT 1000/RIG RUNNING CASING 4000' OFF BOTTOM
Event	2	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	11/11/2017	09:00:00	USER				TEST WATER/SPOT IN HES EQUIPMENT
Event	3	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	11/11/2017	09:30:00	USER				TEAM LIFTS/PPE
Event	4	Rig-Up Equipment	Rig-Up Equipment	11/11/2017	09:35:00	USER				
Event	5	Rig-Up Completed	Rig-Up Completed	11/11/2017	10:30:00	USER				HES READY
Event	6	Wait on Customer or Customer Sub-Contractor Equip - Start Time	Wait on Customer or Customer Sub-Contractor Equip - Start Time	11/11/2017	10:35:00	USER				RIG FINISH RUNNING CASING/CONDITION WELL
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	11/11/2017	12:51:32	USER	108.00	8.45	0.00	REVIEW JOB AND SAFETY PROCEDURES
Event	8	Start Job	Start Job	11/11/2017	17:14:45	COM4	-1.00	0.00	0.00	
Event	9	Test Lines	Test Lines	11/11/2017	17:19:27	COM4	5556.00	8.56	0.00	500PSI LOW/5500PSI HIGH/TESTS GOOD
Event	10	Pump Spacer 1	Pump Spacer 1	11/11/2017	17:22:35	COM4	532.00	10.51	4.00	80BBLS TUNED SPACER III @ 10.5PPG/5BPM/600PSI
Event	11	Drop Bottom Plug	Drop Bottom Plug	11/11/2017	17:38:00	USER	16.00	10.56	0.00	WEATHERFORD BOTTOM PLUG
Event	12	Pump Lead Cement	Pump Lead Cement	11/11/2017	17:39:31	COM4	949.00	13.38	7.70	630SKS/176BBLS @ 13.2PPG/7.7BPM/1000PSI
Event	13	Pump Tail Cement	Pump Tail Cement	11/11/2017	18:02:17	COM4	472.00	13.82	8.00	1320SKS/395BBLS @ 13.5PPG/8BPM/475PSI
Event	14	Check Weight	Check weight	11/11/2017	18:07:51	COM4	581.00	13.80	8.00	DENSITY VERIFIED
Event	15	Shutdown	Shutdown	11/11/2017	18:52:41	COM4	50.00	13.26	0.00	
Event	16	Clean Lines	Clean Lines	11/11/2017	18:52:46	COM4	34.00	13.39	0.00	TO HALF ROUND

Event	17	Drop Plug	Drop Plug	11/11/2017	18:58:56	COM4	13.00	0.03	0.00	WEATHERFORD TOP PLUG
Event	18	Pump Displacement	Pump Displacement	11/11/2017	18:59:02	COM4	10.00	0.02	0.00	425BBLS FRESHWATER/FIRST 20 w/MMCR/REMAINDER w/BIOCIDE/8BPM/350PSI
Event	19	Bump Plug	Bump Plug	11/11/2017	20:12:26	COM4	3098.00	8.53	0.00	PLUG LANDED AT 425BBLS DISPLACED/3100PSI/FULL RETURNS THROUGHOUT JOB/CIRCULATED 55BBLS SPACER TO SURFACE
Event	20	Other	Other	11/11/2017	20:12:30	COM4	3099.00	8.51	0.00	15MIN CASING TEST AT 3000PSI/TEST GOOD
Event	21	Other	Other	11/11/2017	20:27:05	COM4	3463.00	8.53	0.50	OPEN WET SHOE SUB AT 4730PSI
Event	22	Pump Spacer 1	Pump Spacer 1	11/11/2017	20:30:54	COM4	3174.00	8.54	0.60	PUMP 3BBLS FRESHWATER PER WET SHOE PROCESS
Event	23	Other	Other	11/11/2017	20:32:38	COM4	2297.00	8.53	0.00	CHECK FLOATS/HELD/3BBLS BACK
Event	24	End Job	End Job	11/11/2017	20:33:28	COM4				
Event	25	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	11/11/2017	20:35:00	USER	-3.00	8.50	0.00	
Event	26	Rig-Down Equipment	Rig-Down Equipment	11/11/2017	20:40:00	USER	-3.00	8.48	0.00	
Event	27	Rig-Down Completed	Rig-Down Completed	11/11/2017	21:40:00	USER				
Event	28	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	11/11/2017	21:50:00	USER				
Event	29	Depart Location	Depart Location	11/11/2017	22:00:00	USER				THANK YOU

3.0 Attachments

3.1 CUSTOM RESULTS – JOB CHART WITH EVENTS



3.2 CUSTOM RESULTS – JOB CHART WITHOUT EVENTS

