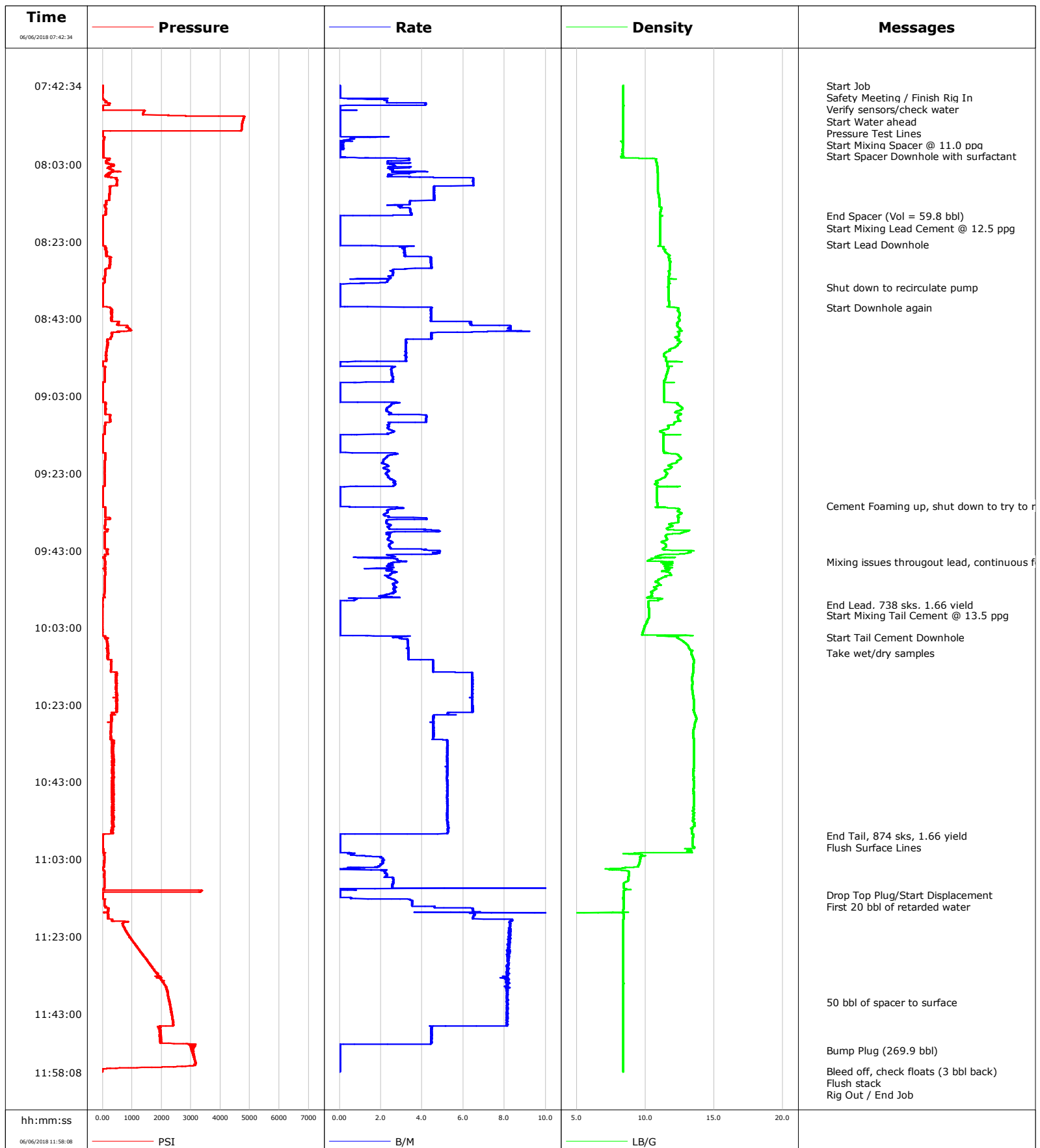


Well Ruegge 3E-4H-N165
Field Wattenberg
Engineer Cameron McNutt
Country United States

Client Crestone Peak
SIR No. E0ZP-00232
Job Type Production 5.5"
Job Date 06-06-2018



Cementing Service Report

				Customer Crestone Peak				Job Number E0ZP-00232			
Well Ruegge 3E-4H-N165			Location (legal)			Schlumberger Location Cheyenne			Job Start Jun/06/2018		
Field Wattenberg		Formation Name/Type		Deviation 90 deg		Bit Size 8.5 in		Well MD 12182.0 ft		Well TVD 7276.0 ft	
County		State/Province CO		BHP psi		BHST 227 degF		BHCT 197 degF		Pore Press. Gradient lb/gal	
Well Master 0631761980		API/UWI									
Rig Name E140		Drilled For Oil & Gas		Service Via Land		Casing/ Liner					
						Depth, ft		Size, in		Weight, lb/ft	
										Grade	
										Thread	
Offshore Zone		Well Class New		Well Type Development		2483.0		9.6		40.0	
						12182.0		5.5		20.0	
										J55	
										P110	
										BUTT	
Drilling Fluid Type OBM		Max. Density 10.00 lb/gal		Plastic Viscosity 70.000 cP		Tubing/Drill Pipe					
						T/D		Depth, ft		Size, in	
										Weight, lb/ft	
										Grade	
										Thread	
Service Line Cementing		Job Type Production 5.5"									
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection Double Cement head		Perforations/Open Hole					
						Top, ft		Bottom, ft		shot/ft	
										No. of Shots	
										Total Interval	
						ft		ft		ft	
						ft		ft		Diameter	
						ft		ft		in	
						Treat Down Casing		Displacement 269.0 bbl		Packer Type	
										Packer Depth	
										ft	
						Tubing Vol. bbl		Casing Vol. 270.0 bbl		Annular Vol. bbl	
										Openhole Vol. bbl	
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>				Casing Tools				Squeeze Job	
Lift Pressure psi						Shoe Type Float				Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 12182.0 ft				Tool Type	
No. Centralizers		Top Plugs 1		Bottom Plugs 0		Stage Tool Type NA				Tool Depth ft	
Cement Head Type Double						Stage Tool Depth ft				Tail Pipe Size in	
Job Scheduled For Jun/06/2018 04:00		Arrived on Location Jun/06/2018 04:00		Leave Location Jun/06/2018 13:00		Collar Type Float				Tail Pipe Depth ft	
						Collar Depth 12171.0 ft				Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
06/06/2018	07:42:34	1	0.0	8.40	0.0	Started Acquisition					
06/06/2018	07:42:35	1	0.0	8.40	0.0	Start Job					
06/06/2018	07:42:44	1	0.0	8.40	0.0	Safety Meeting / Finish Rig In					
06/06/2018	07:42:48	1	0.0	8.40	0.0	Verify sensors/check water					
06/06/2018	07:42:54	0	0.0	8.40	0.0	Start Water ahead					
06/06/2018	07:51:44	4757	0.0	8.40	5.3	Pressure Test Lines					
06/06/2018	07:56:54	31	0.0	8.34	6.1	Start Mixing Spacer @ 11.0 ppg					
06/06/2018	08:00:50	24	0.0	8.32	6.2	Start Spacer Downhole with surfactant					
06/06/2018	08:16:23	13	0.0	11.21	64.8	End Spacer (Vol = 59.8 bbl)					
06/06/2018	08:16:30	12	0.0	11.08	64.8	Start Mixing Lead Cement @ 12.5 ppg					
06/06/2018	08:23:41	5	0.0	11.08	64.8	Start Lead Downhole					
06/06/2018	08:34:51	4	0.0	11.68	96.7	Shut down to recirculate pump					
06/06/2018	08:40:04	237	4.5	12.14	97.2	Start Downhole again					
06/06/2018	09:31:27	2	0.0	10.85	215.9	Cement Foaming up, shut down to try to recirculate					
06/06/2018	09:45:59	84	3.0	11.99	255.7	Mixing issues throughtout lead, continuous foam out					
06/06/2018	09:57:00	-0	0.0	10.23	279.8	End Lead Cement (Vol = 217 bbl)					
06/06/2018	09:59:43	-1	0.0	10.27	279.8	Start Mixing Tail Cement @ 13.5 ppg					
06/06/2018	10:05:37	165	2.9	12.31	281.3	Start Tail Cement Downhole					
06/06/2018	10:09:34	179	3.3	13.36	294.3	Take wet/dry samples					
06/06/2018	10:56:54	14	0.0	13.49	541.9	End Tail Cement (Vol = 262 bbl)					
06/06/2018	10:56:59	14	0.0	13.50	541.9	Flush Surface Lines					

Well			Field		Job Start		Customer		Job Number	
Ruegge 3E-4H-N165			Wattenberg		Jun/06/2018		Crestone Peak		E0ZP-00232	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
06/06/2018	11:15:21	109	4.6	8.41	568.4	First 20 bbl of retarded water				
06/06/2018	11:40:04	2266	8.1	8.40	764.8	50 bbl of spacer to surface				
06/06/2018	11:52:28	3073	0.0	8.40	835.5	Bump Plug (269.9 bbl)				
06/06/2018	11:57:50	-5	0.0	8.41	835.5	Bleed off, check floats (3 bbl back)				
06/06/2018	11:58:00	-4	0.0	8.41	835.5	Flush stack				

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl							
Slurry 4.4	N2	Mud	Maximum Rate 12.3		Total Slurry 479.0	Mud 0.0	Spacer 60.0	N2				
Treating Pressure Summary, psi					Breakdown Fluid							
Maximum 4827	Final -3	Average 530	Bump Plug to 3200	Breakdown	Type	Volume bbl	Density lb/gal					
Avg. N2 Percent %	Designed Slurry Volume 476.0 bbl	Displacement 269.9 bbl	Mix Water Temp 60 degF	Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl						
				Washed Thru Perfs <input type="checkbox"/>		To ft						
Customer or Authorized Representative			Schlumberger Supervisor Cameron McNutt			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>					
						-	-					