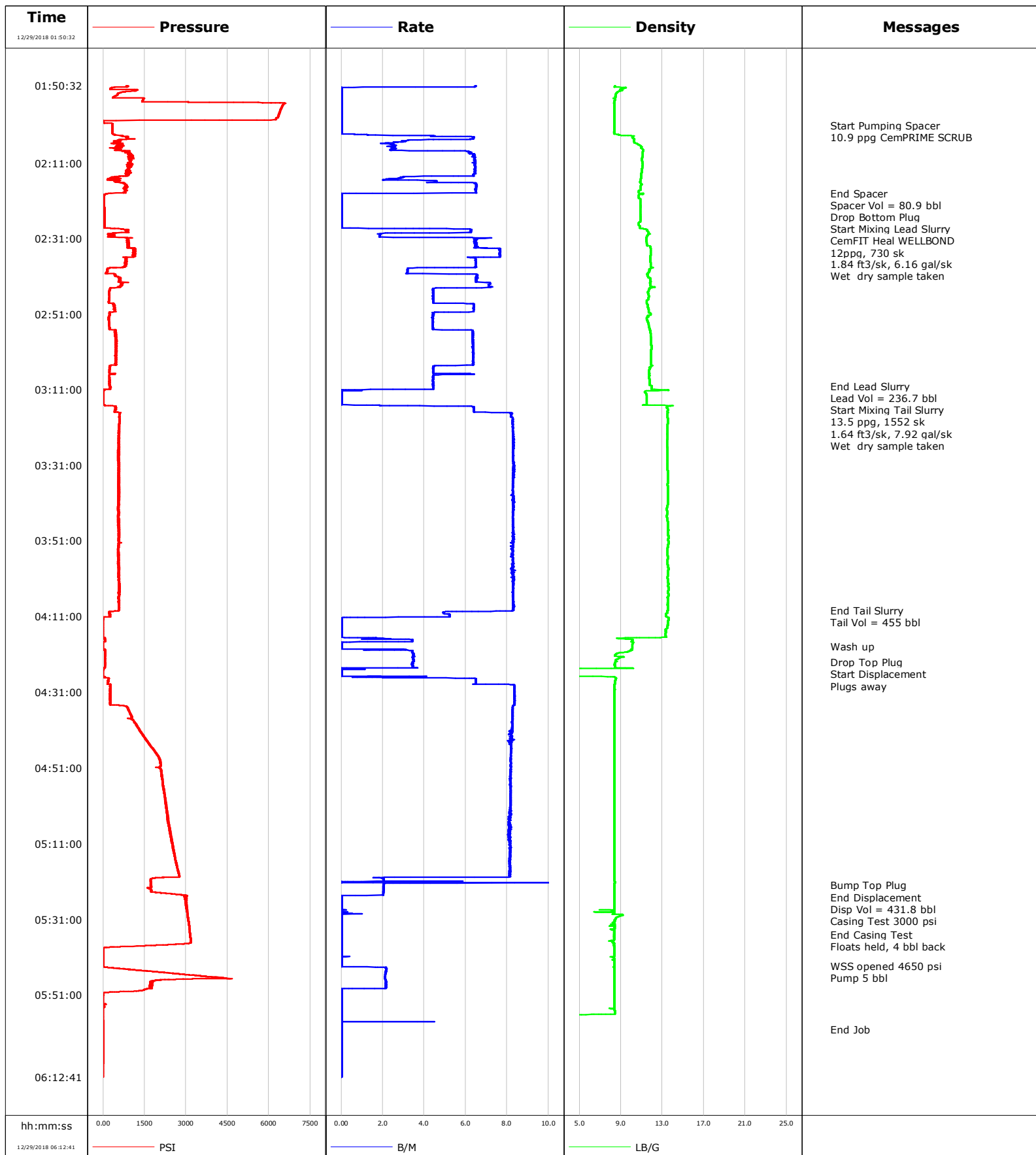


Well Castle Pines 19-12HZ
Field Wattenberg
Engineer Michael Navoy / Justin Storey
Country United States

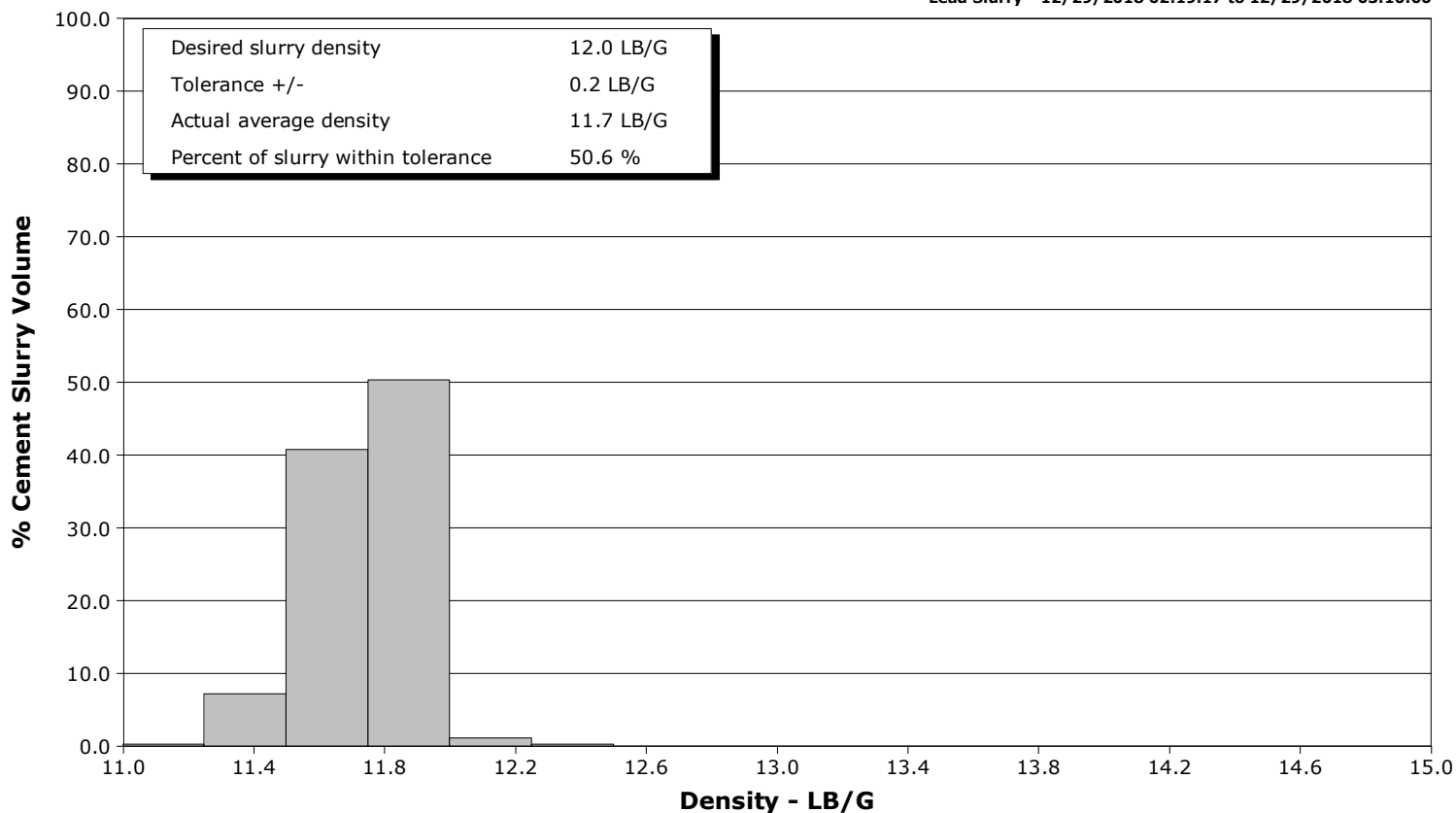
Client Anadarko
SIR No. E84H-00138
Job Type Cem Prod Casing
Job Date 12-29-2018



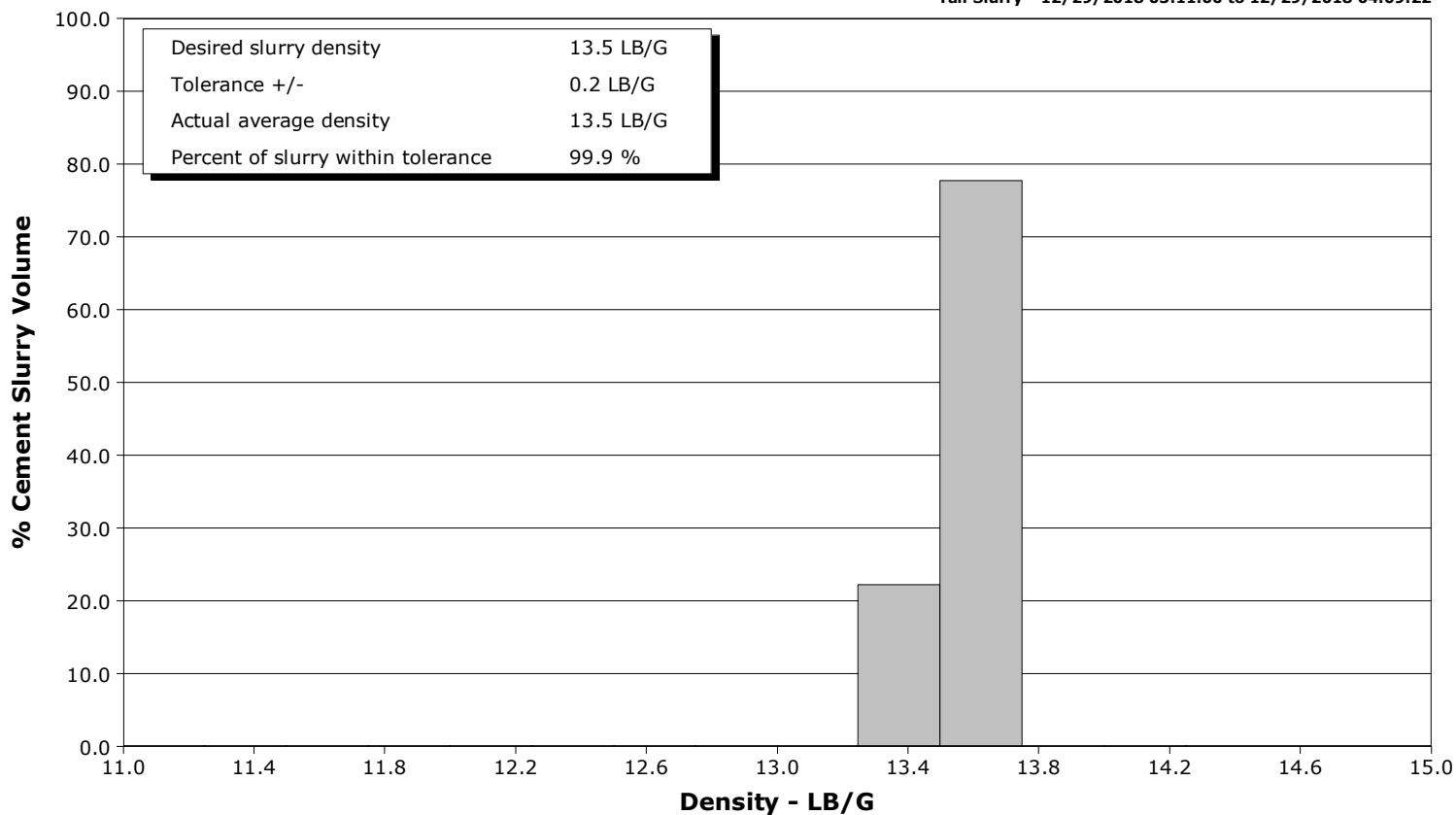
Well Castle Pines 19-12HZ
Field Wattenberg
Engineer Michael Navoy / Justin Storey
Country United States

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SIR No. E84H-00138
Job Type Cem Prod Casing
Job Date 12-29-2018

Lead Slurry - 12/29/2018 02:19:17 to 12/29/2018 03:10:00



Tail Slurry - 12/29/2018 03:11:00 to 12/29/2018 04:09:22



Cementing Service Report

				Customer Anadarko			Job Number E84H-00138			
Well Castle Pines 19-12HZ			Location (legal)		Schlumberger Location Cheyenne		Job Start Dec/29/2018			
Field Wattenberg		Formation Name/Type		Deviation 90 deg	Bit Size 8.5 in	Well MD 18623.0 ft	Well TVD 7262.0 ft			
County Weld		State/Province Colorado		BHP psi	BHST 230 degF	BHCT 230 degF	Pore Press. Gradient lb/gal			
Well Master 0631786903		API/UWI								
Rig Name P564	Drilled For	Service Via Land		Casing / Liner						
				Depth, ft	Size, in	Weight, lb/ft	Grade	Thread		
Offshore Zone	Well Class Old	Well Type Development		1844.0	9.6	36.0	J55	N/A		
				18623.0	5.5	17.0	P110	8RD		
Drilling Fluid Type		Max. Density lb/gal	Plastic Viscosity cP	Tubing / Drill Pipe						
				T/D	Depth, ft	Size, in	Weight, lb/ft	Grade Thread		
Service Line Cementing	Job Type Cem Prod Casing									
Max. Allowed Tub. Press psi	Max. Allowed Ann. Press psi	WH Connection		Perforations / Open Hole						
				Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval ft		
Service Instructions 5.5 inch Production				ft	ft			Diameter in		
				ft	ft					
				ft	ft					
				Treat Down Casing		Displacement 431.8 bbl		Packer Type		Packer Depth ft
				Tubing Vol. bbl		Casing Vol. 432.1 bbl		Annular Vol. 772.9 bbl		Openhole Vol. 0.0 bbl
Casing / Tubing Secured <input type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input 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 18323.0 ft			Tool Type			
No. Centralizers		Top Plugs 1	Bottom Plugs 1	Stage Tool Type			Tool Depth ft			
Cement Head Type Double				Stage Tool Depth ft			Tail Pipe Size in			
Job Scheduled For Dec/28/2018 21:00		Arrived on Location Dec/28/2018 20:30		Leave Location Dec/29/2018 08:00		Collar Type Float				
						Collar Depth 18621.0 ft				
						Sqz. Total Vol. bbl				
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
12/29/2018	01:50:32	898	6.5	8.41	0.0	Start Job				
12/29/2018	02:01:00	328	0.0	8.38	2.4	Start Pumping Spacer				
12/29/2018	02:03:28	419	1.2	8.77	0.1	10.9 ppg CemPRIME SCRUB				
12/29/2018	02:19:00	245	0.4	11.14	81.7	End Spacer				
12/29/2018	02:19:03	196	0.0	11.14	81.7	Spacer Vol = 80.9 bbl				
12/29/2018	02:19:10	91	0.0	11.12	81.7	Drop Bottom Plug				
12/29/2018	02:19:17	49	0.0	10.81	81.7	Start Mixing Lead Slurry				
12/29/2018	02:19:18	47	0.0	10.78	81.7	CemFIT Heal WELLBOND				
12/29/2018	02:19:19	46	0.0	10.75	81.7	12ppg, 730 sk				
12/29/2018	02:19:20	44	0.0	10.74	81.7	1.84 ft3/sk, 6.16 gal/sk				
12/29/2018	02:19:21	44	0.0	10.73	81.7	Wet dry sample taken				
12/29/2018	03:10:00	243	4.4	11.97	314.6	End Lead Slurry				
12/29/2018	03:10:01	255	4.4	11.97	314.7	Lead Vol = 236.7 bbl				
12/29/2018	03:11:00	4	0.0	13.56	318.4	Start Mixing Tail Slurry				
12/29/2018	03:11:01	4	0.0	13.56	318.4	13.5 ppg, 1552 sk				
12/29/2018	03:11:02	4	0.0	13.57	318.4	1.64 ft3/sk, 7.92 gal/sk				
12/29/2018	03:11:03	38	0.2	13.58	318.4	Wet dry sample taken				
12/29/2018	04:09:22	541	8.2	13.47	764.5	End Tail Slurry				
12/29/2018	04:09:23	547	8.2	13.46	764.7	Tail Vol = 455 bbl				
12/29/2018	04:19:00	-7	0.0	10.08	776.7	Wash up				
12/29/2018	04:23:00	68	3.4	8.43	788.6	Drop Top Plug				

Well Castle Pines 19-12HZ			Field Wattenberg		Job Start Dec/29/2018	Customer Anadarko		Job Number E84H-00138	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
12/29/2018	04:25:45	-4	0.0	0.05	793.7	Plugs away			
12/29/2018	05:22:00	1736	2.0	8.37	1227.4	Bump Top Plug			
12/29/2018	05:22:30	1739	2.0	8.37	1228.4	End Displacement			
12/29/2018	05:22:31	1734	2.0	8.37	1228.4	Disp Vol = 431.8 bbl			
12/29/2018	05:24:00	2220	2.0	8.37	1231.5	Casing Test 3000 psi			
12/29/2018	05:35:00	3147	0.0	8.35	1232.8	End Casing Test			
12/29/2018	05:36:00	3161	0.0	8.35	1232.8	Floats held, 4 bbl back			
12/29/2018	05:43:20	12	0.0	8.38	1232.8	WSS opened 4650 psi			
12/29/2018	05:45:00	2308	2.1	8.38	1236.0	Pump 5 bbl			

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 5.7	N2	Mud	Maximum Rate 8.4	Total Slurry 691.7	Mud 0.0	Spacer 80.9	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 4650	Final 22	Average 0	Bump Plug to 3000	Breakdown	Type	Volume bbl	Density lb/gal	
Avg. N2 Percent %		Designed Slurry Volume 0.0 bbl		Displacement 431.8 bbl	Mix Water Temp degF	Cement Circulated to Surface? <input type="checkbox"/>	Volume bbl	
						Washed Thru Perfs <input type="checkbox"/>	To ft	
Customer or Authorized Representative Company Man			Schlumberger Supervisor Michael Navoy / Justin Storey			Circulation Lost <input type="checkbox"/>	Job Completed <input type="checkbox"/>	
						-	-	