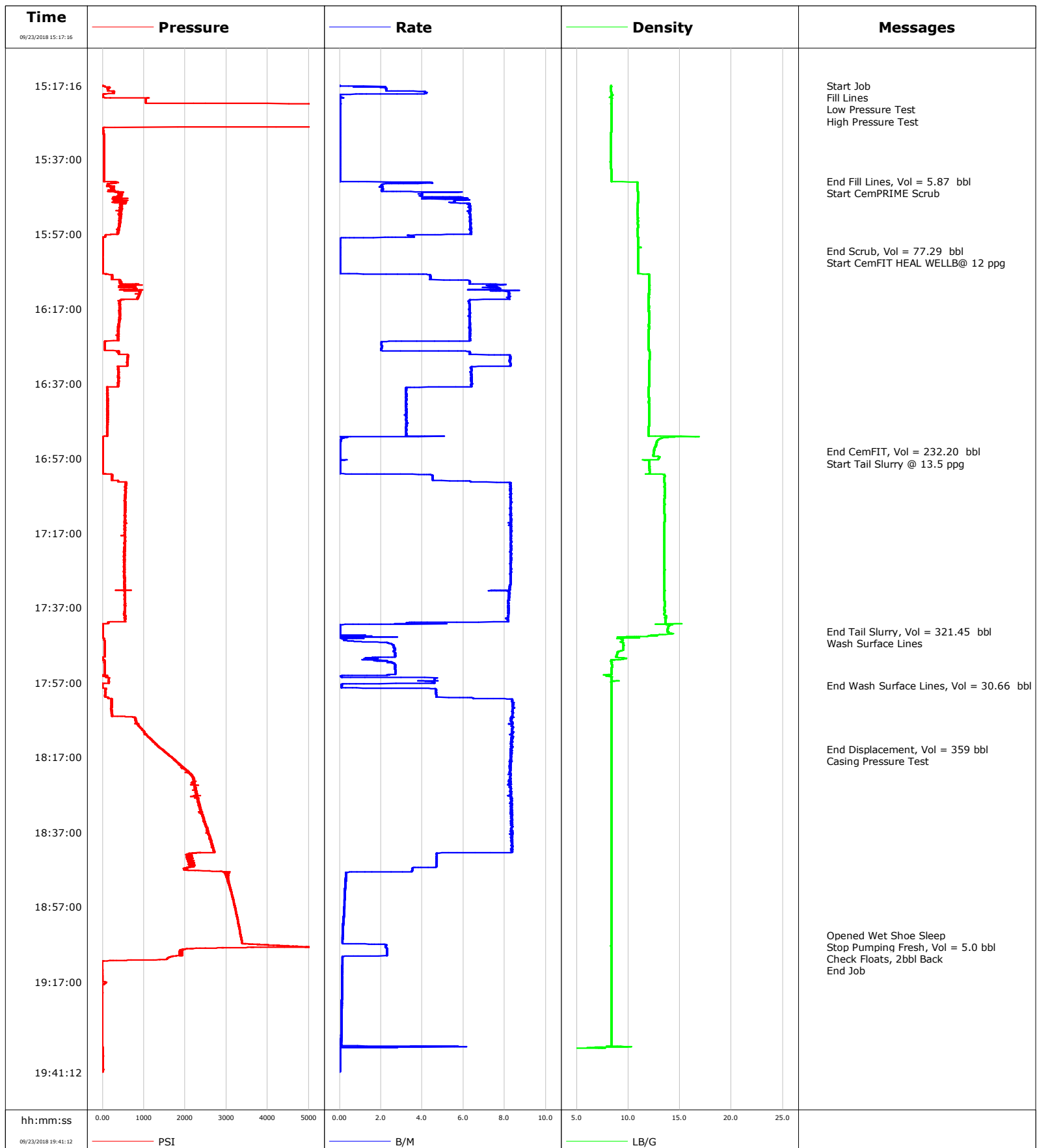


Well Cowboy 21-2HZ - 2HZ
Field Wattenberg
Engineer Adam Aasen
Country United States

Client ANADARKO PETROLEUM COMPANY
SIR No. E5N2-00042
Job Type Production
Job Date 09-23-2018



Cementing Service Report

				Customer ANADARKO PETROLEUM COMPANY		Job Number E5N2-00042		
Well Cowboy 21-2HZ - 2HZ			Location (legal)		Schlumberger Location Cheyenne		Job Start Sep/23/2018	
Field Wattenberg		Formation Name/Type		Deviation 90 deg	Bit Size 8.5 in	Well MD 15570.0 ft	Well TVD 7434.0 ft	
County		State/Province Wyoming		BHP psi	BHST 230 degF	BHCT 230 degF	Pore Press. Gradient lb/gal	
Well Master 0631780964		API/UWI						
Rig Name PD 564		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 New Well Completion		1888.0	9.6	
						15560.0	5.5	
Drilling Fluid Type Oil Mud		Max. Density 9.30 lb/gal		Plastic Viscosity 59.000 cP				
				Tubing/Drill Pipe				
				T/D	Depth, ft	Size, in	Weight, lb/ft	Grade
Service Line Cementing		Job Type Production						
Max. Allowed Tub. Press 3000 psi		Max. Allowed Ann. Press 3000 psi		WH Connection 5 1/2				
Service Instructions Cement 5 1/2 Production Casing CemPRIME Scrub: 77.29 bbl CemFIT HEAL: 232.2 bbl, 710sks, 12 ppg, Yield: 1.85ft3/sk, MW: 6.15gal/sk Tail: 321.45 bbl, 1110 sks, Yield: 1.62ft3/sk, MW: 7.92gal/sk Disp: 360 bbl TOL: 1,990.71 ft TOT: 7,681.89 ft				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 360.7 bbl	Packer Type	Packer Depth ft	
Tubing Vol. bbl	Casing Vol. 361.0 bbl	Annular Vol. 90.4 bbl	Openhole Vol. 557.8 bbl					
Casing/Tubing Secured <input checked="" 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 15560.0 ft		Tool Type		
No. Centralizers		Top Plugs 1		Bottom Plugs 1		Stage Tool Type		
Cement Head Type Double				Stage Tool Depth ft		Tool Depth ft		
Job Scheduled For Sep/23/2018 11:00		Arrived on Location Sep/23/2018 11:30		Leave Location Sep/23/2018 20:30		Collar Type Float		
						Tail Pipe Depth ft		
						Sqz. Total Vol. bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
09/23/2018	15:17:16	2	0.0	8.34	0.0	Started Acquisition		
09/23/2018	15:17:20	2	0.0	8.34	0.0	Start Job		
09/23/2018	15:17:30	50	0.5	8.34	0.0	Fill Lines		
09/23/2018	15:20:44	1058	0.0	8.40	0.0	Low Pressure Test		
09/23/2018	15:22:49	6412	0.0	8.35	0.0	High Pressure Test		
09/23/2018	15:42:55	34	0.0	8.35	0.0	End Fill Lines, Vol = 5.87 bbl		
09/23/2018	15:42:57	34	0.0	8.35	0.0	Start CemPRIME Scrub		
09/23/2018	16:01:28	0	0.0	10.95	0.0	End Scrub, Vol = 77.29 bbl		
09/23/2018	16:01:30	0	0.0	10.95	0.0	Start CemFIT HEAL WELLB@ 12 ppg		
09/23/2018	16:55:14	1	0.0	12.47	0.0	End CemFIT, Vol = 232.20 bbl		
09/23/2018	16:55:16	1	0.0	12.45	0.0	Start Tail Slurry @ 13.5 ppg		
09/23/2018	17:43:14	9	0.0	13.78	0.0	End Tail Slurry, Vol = 321.45 bbl		
09/23/2018	17:43:20	10	0.0	13.86	0.0	Wash Surface Lines		
09/23/2018	17:57:48	-8	0.1	8.37	0.0	End Wash Surface Lines, Vol = 30.66 bbl		
09/23/2018	18:14:45	1418	8.3	8.36	0.0	End Displacement, Vol = 359 bbl		
09/23/2018	18:14:47	1429	8.3	8.36	0.0	Casing Pressure Test		
09/23/2018	19:04:35	3341	0.1	8.36	0.0	Opened Wet Shoe Sleep		
09/23/2018	19:06:50	3392	0.2	8.35	0.0	Stop Pumping Fresh, Vol = 5.0 bbl		
09/23/2018	19:07:00	3648	1.7	8.35	0.0	Check Floats, 2bbl Back		

Well Cowboy 21-2HZ - 2HZ	Field Wattenberg	Job Start Sep/23/2018	Customer ANADARKO PETROLEUM COMPANY	Job Number E5N2-00042
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl						
Slurry 5.1	N2	Mud	Maximum Rate 8.7		Total Slurry 553.7	Mud 0.0	Spacer 77.3	N2			
Treating Pressure Summary, psi					Breakdown Fluid						
Maximum 6467	Final 0	Average 801	Bump Plug to 3083	Breakdown	Type FreshWater		Volume 734.0 bbl		Density 8.34 lb/gal		
Avg. N2 Percent %		Designed Slurry Volume 555.4 bbl		Displacement 360.0 bbl		Mix Water Temp 65 degF		Cement Circulated to Surface?	<input type="checkbox"/>	Volume bbl	
								Washed Thru Perfs	<input type="checkbox"/>	To ft	
Customer or Authorized Representative Josh Barkell				Schlumberger Supervisor Adam Aasen				Circulation Lost	<input type="checkbox"/>	Job Completed	<input checked="" type="checkbox"/>
								-		-	