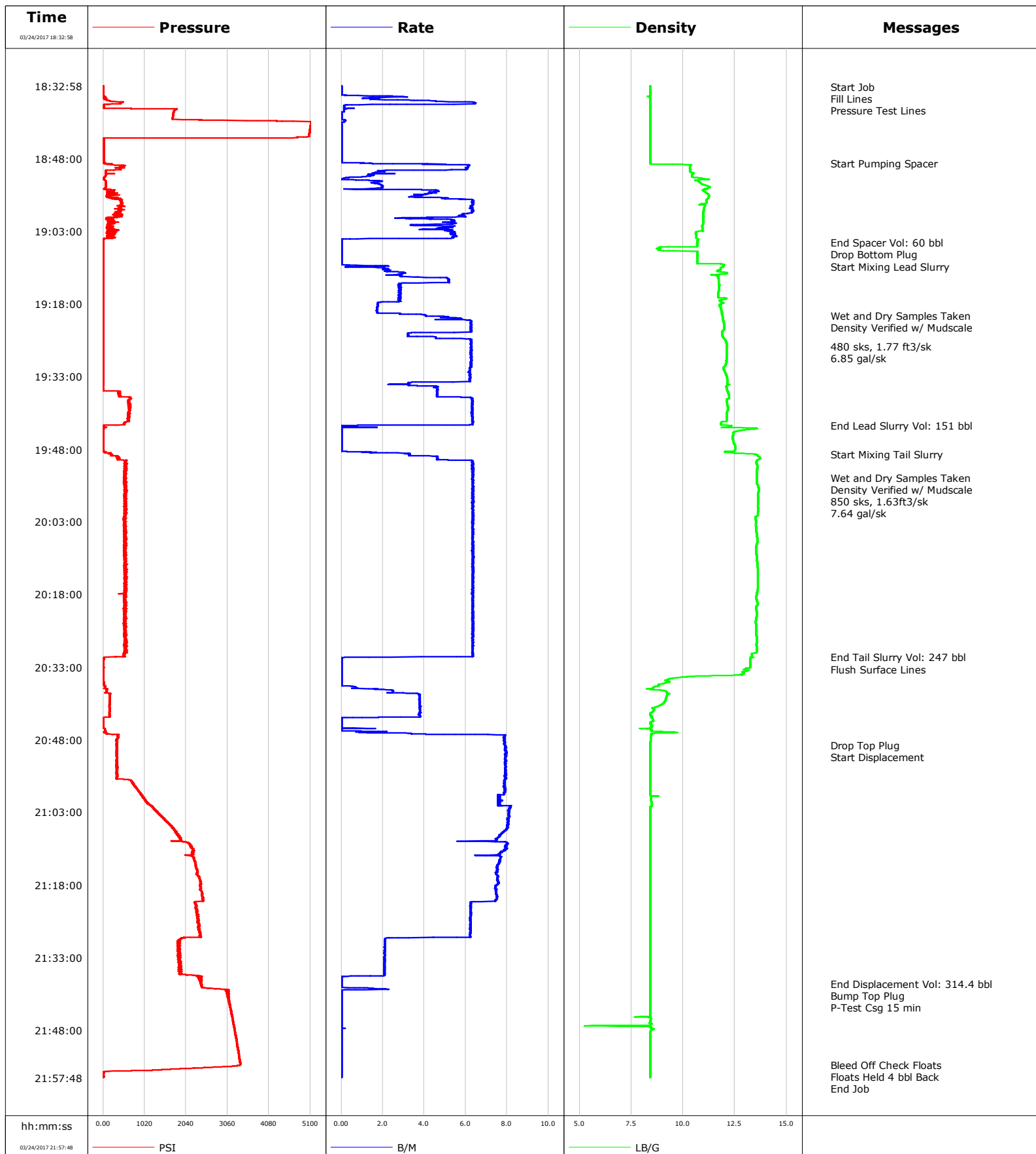


Well WHISTON39C-33HZ
Field WATTENBERG
Engineer Billy Barg
Country United States

Client ANADARKO PETROLEUM COMPANY
SIR No. CSS9-00283
Job Type PRODUCTION
Job Date 03-24-2017



Cementing Service Report

				Customer ANADARKO PETROLEUM COMPANY				Job Number CSS9-00283							
Well WHISTON39C-33HZ 0631705002			Location (legal)			Schlumberger Location Cheyenne, WY			Job Start Mar/24/2017						
Field WATTENBERG		Formation Name/Type			Deviation deg		Bit Size 7.9 in		Well MD 13625.0 ft		Well TVD 7400.0 ft				
County WELD		State/Province Colorado			BHP psi		BHST 230 degF		BHCT 226 degF		Pore Press. Gradient lb/gal				
Well Master 0631705002		API/UWI 05123440290000													
Rig Name PD 461		Drilled For Oil and Gas		Service Via Land		Casing/ Liner									
						Depth, ft		Size, in		Weight, lb/ft		Grade	Thread		
Offshore Zone		Well Class New		Well Type Development		1855.0		9.6		36.0		J-55	LTC		
						13615.0		5.5		17.0		HCP-110	LTC		
Drilling Fluid Type OBM		Max. Density 9.10 lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe									
						T/D		Depth, ft		Size, in		Weight, lb/ft		Grade	Thread
Service Line Cementing		Job Type PRODUCTION													
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection 5.5" LTC		Perforations/Open Hole									
						Top, ft		Bottom, ft		shot/ft		No. of Shots		Total Interval	
Service Instructions 9 5/8" 36# Previous Casing: 1,855' 7 7/8" to TD // OH Excess: 4% Top of Lead Cement: 1,500' Top of Tail Cement: 6,000' TD: 13,625' (7,400')						ft		ft						ft	
						ft		ft						Diameter	
						ft		ft						in	
		Treat Down Casing		Displacement 314.4 bbl		Packer Type		Packer Depth ft							
		Tubing Vol. bbl		Casing Vol. bbl		Annular Vol. 452.0 bbl		Openhole Vol. bbl							
Casing/Tubing Secured <input type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input type="checkbox"/>		Casing Tools				Squeeze Job							
Lift Pressure 9735 psi		Shoe Type Float				Squeeze Type									
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 13615.0 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 Mar/24/2017 13:00		Arrived on Location Mar/24/2017 13:00		Leave Location Mar/24/2017 23:00		Collar Type Float				Tail Pipe Depth ft					
						Collar Depth 13523.0 ft				Sqz. Total Vol. bbl					
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message									
03/24/2017	18:32:58	9	0.0	8.41	0.0	Started Acquisition									
03/24/2017	18:33:07	10	0.0	8.41	0.0	Start Job									
03/24/2017	18:33:16	9	0.0	8.41	0.0	Fill Lines									
03/24/2017	18:34:38	6	0.0	8.41	0.0										
03/24/2017	18:36:18	478	6.0	8.41	0.0										
03/24/2017	18:37:19	21	0.1	8.41	0.0	Pressure Test Lines									
03/24/2017	18:37:58	1763	0.1	8.41	0.1										
03/24/2017	18:39:38	1707	0.0	8.41	0.2										
03/24/2017	18:41:18	5098	0.0	8.41	0.3										
03/24/2017	18:42:58	5072	0.0	8.41	0.3										
03/24/2017	18:44:38	18	0.0	8.41	0.3										
03/24/2017	18:46:18	14	0.0	8.41	0.3										
03/24/2017	18:47:58	12	0.0	8.41	0.3										
03/24/2017	18:49:00	21	1.5	8.42	0.4	Start Pumping Spacer									
03/24/2017	18:49:38	434	6.1	10.32	3.6										
03/24/2017	18:51:18	66	1.5	10.43	9.8										
03/24/2017	18:52:58	66	1.5	10.81	11.5										
03/24/2017	18:54:38	248	4.7	10.98	15.0										
03/24/2017	18:56:18	231	5.0	11.18	22.0										
03/24/2017	18:57:58	421	6.3	11.02	32.5										
03/24/2017	18:59:38	405	5.9	10.98	42.9										

Well			Field	Job Start		Customer	Job Number
WHISTON39C-33HZ 0631705002			WATTENBERG	Mar/24/2017		ANADARKO PETROLEUM COMPANY	CSS9-00283
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
03/24/2017	19:02:58	243	5.1	10.97	59.4		
03/24/2017	19:04:38	17	0.1	10.69	67.9		
03/24/2017	19:05:18	4	0.0	10.69	67.9	End Spacer Vol: 60 bbl	
03/24/2017	19:05:19	3	0.0	10.69	67.9	Drop Bottom Plug	
03/24/2017	19:06:18	2	0.0	8.83	67.9		
03/24/2017	19:07:58	2	0.0	10.69	67.9		
03/24/2017	19:09:38	3	0.0	10.69	67.9		
03/24/2017	19:10:17	6	0.7	11.94	68.3	Start Mixing Lead Slurry	
03/24/2017	19:11:18	4	2.2	11.69	70.2		
03/24/2017	19:12:58	5	5.1	11.70	75.9		
03/24/2017	19:14:38	5	2.9	11.74	82.3		
03/24/2017	19:16:18	5	2.8	11.70	87.0		
03/24/2017	19:17:58	4	1.8	11.86	91.4		
03/24/2017	19:19:38	4	1.7	11.87	94.2		
03/24/2017	19:20:28	3	4.1	11.89	96.6	Wet and Dry Samples Taken	
03/24/2017	19:20:41	3	5.1	11.90	97.6	Density Verified w/ Mudscale	
03/24/2017	19:21:18	3	5.9	11.93	100.9		
03/24/2017	19:22:58	4	6.2	11.97	111.3		
03/24/2017	19:24:38	3	3.2	11.89	119.6		
03/24/2017	19:26:18	2	6.3	12.09	129.0		
03/24/2017	19:26:46	3	6.3	12.09	131.9	480 sks, 1.77 ft3/sk	
03/24/2017	19:26:57	3	6.3	12.10	133.0	6.85 gal/sk	
03/24/2017	19:27:58	2	6.3	12.09	139.4		
03/24/2017	19:29:38	2	6.3	12.08	149.8		
03/24/2017	19:31:18	3	6.2	11.95	160.3		
03/24/2017	19:32:58	3	6.2	12.10	170.6		
03/24/2017	19:34:38	4	2.6	12.23	179.5		
03/24/2017	19:36:18	398	4.6	12.16	186.7		
03/24/2017	19:37:58	631	6.3	12.09	195.6		
03/24/2017	19:39:38	671	6.3	12.16	206.1		
03/24/2017	19:41:18	639	6.3	12.10	216.7		
03/24/2017	19:42:58	521	6.2	11.84	227.2		
03/24/2017	19:43:06	20	0.8	12.19	227.8	End Lead Slurry Vol: 151 bbl	
03/24/2017	19:44:38	9	0.0	12.41	227.9		
03/24/2017	19:46:18	12	0.0	12.41	227.9		
03/24/2017	19:47:58	11	0.0	12.53	227.9		
03/24/2017	19:49:01	176	3.2	13.42	229.0	Start Mixing Tail Slurry	
03/24/2017	19:49:38	372	4.6	13.67	231.3		
03/24/2017	19:51:18	542	6.3	13.57	240.7		
03/24/2017	19:52:58	571	6.3	13.56	251.3		
03/24/2017	19:53:49	511	6.3	13.56	256.7	Wet and Dry Samples Taken	
03/24/2017	19:54:01	538	6.3	13.55	257.9	Density Verified w/ Mudscale	
03/24/2017	19:54:38	527	6.4	13.55	261.9		
03/24/2017	19:56:18	563	6.3	13.65	272.4		
03/24/2017	19:57:08	549	6.4	13.62	277.7	850 sks, 1.63ft3/sk	
03/24/2017	19:57:15	538	6.4	13.62	278.5	7.64 gal/sk	
03/24/2017	19:57:58	538	6.3	13.62	283.0		
03/24/2017	19:59:38	562	6.4	13.61	293.6		
03/24/2017	20:01:18	536	6.3	13.60	304.2		
03/24/2017	20:02:58	514	6.4	13.52	314.7		
03/24/2017	20:04:38	532	6.3	13.53	325.3		
03/24/2017	20:06:18	521	6.4	13.57	335.9		
03/24/2017	20:07:58	529	6.4	13.54	346.4		
03/24/2017	20:09:38	538	6.3	13.54	357.0		

Well WHISTON39C-33HZ 0631705002			Field WATTENBERG		Job Start Mar/24/2017	Customer ANADARKO PETROLEUM COMPANY	Job Number CSS9-00283
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
03/24/2017	20:12:58	541	6.4	13.60	378.2		
03/24/2017	20:14:38	526	6.4	13.59	388.8		
03/24/2017	20:16:18	538	6.4	13.60	399.3		
03/24/2017	20:17:58	524	6.4	13.55	409.9		
03/24/2017	20:19:38	509	6.3	13.57	420.5		
03/24/2017	20:21:18	552	6.3	13.53	431.0		
03/24/2017	20:22:58	575	6.4	13.53	441.6		
03/24/2017	20:24:38	528	6.3	13.54	452.2		
03/24/2017	20:26:18	556	6.3	13.52	462.8		
03/24/2017	20:27:58	518	6.3	13.55	473.3		
03/24/2017	20:29:38	558	6.3	13.55	483.9		
03/24/2017	20:30:56	39	2.4	13.25	492.1	End Tail Slurry Vol: 247 bbl	
03/24/2017	20:31:06	23	0.0	13.31	492.2	Flush Surface Lines	
03/24/2017	20:31:18	15	0.0	13.24	492.2		
03/24/2017	20:32:58	12	0.0	13.25	492.2		
03/24/2017	20:34:38	11	0.0	12.86	492.2		
03/24/2017	20:36:18	15	0.0	9.14	492.2		
03/24/2017	20:37:58	80	2.5	9.13	493.6		
03/24/2017	20:39:38	163	3.8	9.17	499.4		
03/24/2017	20:41:18	164	3.8	8.68	505.7		
03/24/2017	20:42:58	158	3.8	8.42	512.0		
03/24/2017	20:44:38	1	0.0	8.45	513.7		
03/24/2017	20:46:18	77	1.8	8.82	513.8		
03/24/2017	20:47:58	337	7.9	8.44	523.6		
03/24/2017	20:49:08	334	7.9	8.42	532.8	Drop Top Plug	
03/24/2017	20:49:09	343	7.9	8.42	532.9	Start Displacement	
03/24/2017	20:49:38	351	8.0	8.42	536.7		
03/24/2017	20:51:18	336	7.9	8.41	549.9		
03/24/2017	20:52:58	344	7.9	8.41	563.1		
03/24/2017	20:54:38	347	7.9	8.41	576.3		
03/24/2017	20:56:18	657	7.9	8.41	589.5		
03/24/2017	20:57:58	816	7.9	8.41	602.6		
03/24/2017	20:59:38	944	7.6	8.78	615.7		
03/24/2017	21:01:18	1117	7.7	8.48	628.3		
03/24/2017	21:02:58	1359	8.1	8.41	641.7		
03/24/2017	21:04:38	1536	8.0	8.41	655.1		
03/24/2017	21:06:18	1725	8.0	8.41	668.5		
03/24/2017	21:07:58	1852	7.6	8.41	681.5		
03/24/2017	21:09:38	2149	8.0	8.41	694.2		
03/24/2017	21:11:18	2226	7.7	8.41	707.3		
03/24/2017	21:12:58	2249	7.6	8.41	719.9		
03/24/2017	21:14:38	2302	7.5	8.41	732.5		
03/24/2017	21:16:18	2356	7.6	8.41	745.1		
03/24/2017	21:17:58	2378	7.5	8.41	757.6		
03/24/2017	21:19:38	2430	7.5	8.41	770.1		
03/24/2017	21:21:18	2469	7.4	8.41	782.5		
03/24/2017	21:22:58	2297	6.2	8.41	793.1		
03/24/2017	21:24:38	2346	6.2	8.41	803.5		
03/24/2017	21:26:18	2366	6.2	8.41	813.9		
03/24/2017	21:27:58	2383	6.2	8.41	824.3		
03/24/2017	21:29:38	1824	2.1	8.41	831.5		
03/24/2017	21:31:18	1867	2.1	8.41	835.0		
03/24/2017	21:32:58	1854	2.1	8.41	838.4		
03/24/2017	21:34:38	1921	2.1	8.41	841.9		

Well			Field		Job Start	Customer		Job Number
WHISTON39C-33HZ 0631705002			WATTENBERG		Mar/24/2017	ANADARKO PETROLEUM COMPANY		CSS9-00283
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
03/24/2017	21:37:58	2403	0.0	8.41	846.4			
03/24/2017	21:38:23	2422	0.0	8.41	846.4	End Displacement Vol: 314.4 bbl		
03/24/2017	21:39:28	2798	1.9	8.41	846.8	P-Test Csg 15 min		
03/24/2017	21:39:38	3036	0.7	8.41	847.1			
03/24/2017	21:41:18	3079	0.0	8.41	847.1			
03/24/2017	21:42:58	3119	0.0	8.41	847.1			
03/24/2017	21:44:38	3157	0.0	8.41	847.1			
03/24/2017	21:46:18	3198	0.0	8.43	847.1			
03/24/2017	21:47:58	3234	0.0	8.48	847.2			
03/24/2017	21:49:38	3270	0.0	8.41	847.2			
03/24/2017	21:51:18	3302	0.0	8.41	847.2			
03/24/2017	21:52:58	3335	0.0	8.41	847.2			
03/24/2017	21:54:38	3367	0.0	8.41	847.2			
03/24/2017	21:55:12	3362	0.0	8.41	847.2	Bleed Off Check Floats		
03/24/2017	21:56:18	1184	0.0	8.41	847.2			

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl				
Slurry 5.6	N2	Mud	Maximum Rate 8.2	Total Slurry 398.0	Mud 0.0	Spacer 60.0	N2		
Treating Pressure Summary, psi					Breakdown Fluid				
Maximum 5150	Final 11	Average 954	Bump Plug to 2400	Breakdown	Type	Volume bbl	Density lb/gal		
Avg. N2 Percent %		Designed Slurry Volume 398.0 bbl		Displacement 314.4 bbl		Mix Water Temp 60 degF			
						Cement Circulated to Surface? <input type="checkbox"/>			
						Washed Thru Perfs <input type="checkbox"/>			
Customer or Authorized Representative Mark Kitrell			Schlumberger Supervisor Billy Barg			Circulation Lost <input type="checkbox"/>			
						Job Completed <input checked="" type="checkbox"/>			
						-			