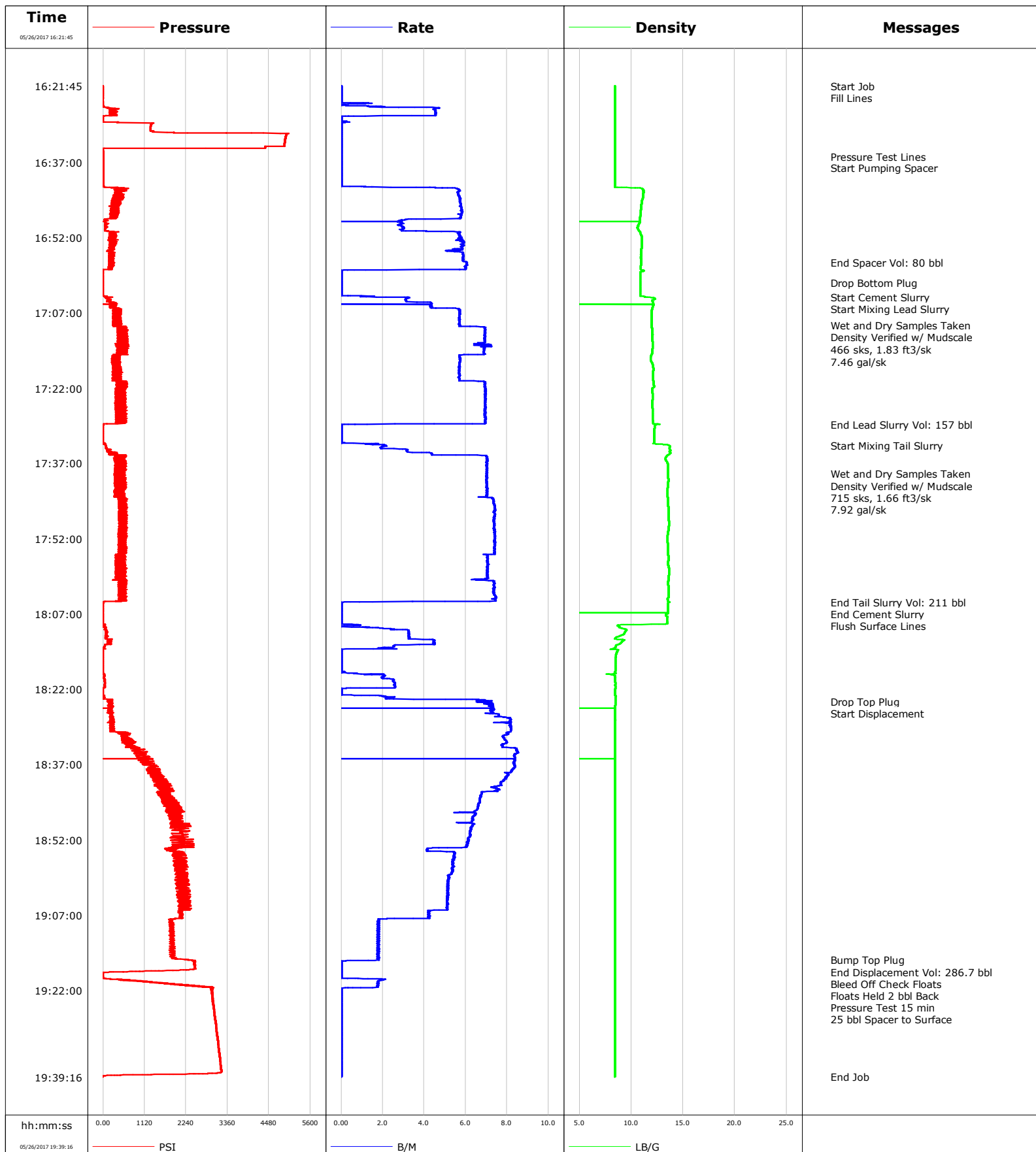


Well	HILGERS33N2-22HZ	Client	ANADARKO PETROLEUM CORPORATION
Field	Wattenberg	SIR No.	CSS9-00433
Engineer	Billy Barg	Job Type	Production
Country	United States	Job Date	05-26-2017



Cementing Service Report

				Customer ANADARKO PETROLEUM CORPORATION				Job Number CSS9-00433			
Well HILGERS33N2-22HZ 0631683211			Location (legal)			Schlumberger Location Cheyenne, WY			Job Start May/26/2017		
Field Wattenberg		Formation Name/Type		Deviation deg		Bit Size 7.9 in		Well MD 12438.0 ft		Well TVD 7187.0 ft	
County Weld		State/Province Colorado		BHP psi		BHST 225 degF		BHCT 218 degF		Pore Press. Gradient lb/gal	
Well Master 0631683211		API/UWI 05123432620000									
Rig Name Xtreme 24		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		1835.0		9.6		36.0	
						12423.0		5.5		17.0	
Drilling Fluid Type OBM		Max. Density 9.20 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 ft	
						ft		ft			
						ft		ft			
						ft		ft		Diameter in	
						Treat Down Casing		Displacement 287.6 bbl		Packer Type	
										Packer Depth ft	
						Tubing Vol. bbl		Casing Vol. 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 8890 psi						Shoe Type Float				Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 12423.0 ft				Tool Type	
No. Centralizers		Top Plugs 1		Bottom Plugs 1		Stage Tool Type				Tool Depth ft	
Cement Head Type						Stage Tool Depth ft				Tail Pipe Size in	
Job Scheduled For May/26/2017 12:30		Arrived on Location May/26/2017 02:00		Leave Location May/26/2017 21:00		Collar Type Float				Tail Pipe Depth ft	
						Collar Depth 12332.9 ft				Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
05/26/2017	16:21:45	-11	0.0	8.42	0.0	Started Acquisition					
05/26/2017	16:21:48	-11	0.0	8.42	0.0	Start Job					
05/26/2017	16:21:55	-11	0.0	8.42	0.0	Fill Lines					
05/26/2017	16:23:25	-11	0.0	8.42	0.0						
05/26/2017	16:25:05	-13	0.0	8.42	0.0						
05/26/2017	16:26:45	180	4.5	8.41	0.0						
05/26/2017	16:28:25	-10	0.0	8.42	4.5						
05/26/2017	16:30:05	1282	0.0	8.42	4.5						
05/26/2017	16:31:45	4935	0.0	8.42	4.5						
05/26/2017	16:33:25	4899	0.0	8.42	4.5						
05/26/2017	16:35:05	7	0.0	8.42	4.5						
05/26/2017	16:35:55	5	0.0	8.42	4.5	Pressure Test Lines					
05/26/2017	16:36:45	4	0.0	8.42	4.5						
05/26/2017	16:38:06	3	0.0	8.42	4.5	Start Pumping Spacer					
05/26/2017	16:38:25	3	0.0	8.42	4.5						
05/26/2017	16:40:05	2	0.0	8.42	4.5						
05/26/2017	16:41:45	3	0.0	8.42	4.5						
05/26/2017	16:43:25	559	5.7	11.16	8.1						
05/26/2017	16:45:05	228	5.7	11.00	17.6						
05/26/2017	16:46:45	204	5.8	10.92	27.3						
05/26/2017	16:48:25	39	3.2	10.80	36.6						

Well			Field		Job Start	Customer	Job Number
HILGERS33N2-22HZ 0631683211			Wattenberg		May/26/2017	ANADARKO PETROLEUM CORPORATION	CSS9-00433
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
05/26/2017	16:51:45	284	5.7	11.00	49.1		
05/26/2017	16:53:25	297	5.9	11.02	58.7		
05/26/2017	16:55:05	301	5.9	10.94	68.3		
05/26/2017	16:56:45	226	5.9	10.95	78.0		
05/26/2017	16:57:02	239	6.0	10.95	79.8	End Spacer Vol: 80 bbl	
05/26/2017	16:58:25	-1	2.2	10.98	88.0		
05/26/2017	17:00:05	-12	0.0	10.88	0.0		
05/26/2017	17:01:03	-11	0.0	10.88	0.0	Drop Bottom Plug	
05/26/2017	17:01:45	-11	0.0	10.88	0.0		
05/26/2017	17:03:25	-9	0.0	10.88	0.0		
05/26/2017	17:03:54	59	3.2	11.60	0.4	Start Cement Slurry	
05/26/2017	17:04:02	73	3.3	12.23	0.8	Start Mixing Lead Slurry	
05/26/2017	17:05:05	217	4.3	12.12	4.4		
05/26/2017	17:06:45	276	5.7	11.98	12.5		
05/26/2017	17:08:25	422	5.7	11.96	22.0		
05/26/2017	17:09:31	359	5.7	11.97	28.3	Wet and Dry Samples Taken	
05/26/2017	17:09:53	387	6.9	11.98	30.5	Density Verified w/ Mudscales	
05/26/2017	17:10:05	383	6.9	11.99	31.9		
05/26/2017	17:11:45	559	6.9	12.03	43.5		
05/26/2017	17:13:25	427	6.6	12.05	55.0		
05/26/2017	17:14:20	521	6.9	12.03	61.3	466 sks, 1.83 ft3/sk	
05/26/2017	17:14:28	627	6.9	12.02	62.3	7.46 gal/sk	
05/26/2017	17:15:05	641	6.9	12.01	66.5		
05/26/2017	17:16:45	421	5.7	11.94	76.3		
05/26/2017	17:18:25	399	5.7	12.13	85.8		
05/26/2017	17:20:05	296	5.7	12.12	95.3		
05/26/2017	17:21:45	535	6.9	12.19	106.2		
05/26/2017	17:23:25	355	6.9	12.05	117.8		
05/26/2017	17:25:05	372	6.9	12.02	129.4		
05/26/2017	17:26:45	453	6.9	12.05	140.9		
05/26/2017	17:28:25	637	6.9	12.07	152.5		
05/26/2017	17:29:12	7	0.7	12.72	0.0	End Lead Slurry Vol: 157 bbl	
05/26/2017	17:30:05	-7	0.0	12.23	0.0		
05/26/2017	17:31:45	-7	0.0	12.19	0.0		
05/26/2017	17:33:21	65	2.1	13.58	0.6	Start Mixing Tail Slurry	
05/26/2017	17:33:25	69	2.1	13.63	0.7		
05/26/2017	17:35:05	243	4.4	13.72	5.4		
05/26/2017	17:36:45	614	7.0	13.45	16.4		
05/26/2017	17:38:25	317	7.0	13.53	28.1		
05/26/2017	17:39:04	423	7.0	13.52	32.7	Wet and Dry Samples Taken	
05/26/2017	17:39:15	526	7.0	13.53	34.0	Density Verified w/ Mudscales	
05/26/2017	17:40:05	315	7.0	13.57	39.8		
05/26/2017	17:41:45	613	7.0	13.52	51.5		
05/26/2017	17:42:51	430	7.0	13.49	59.2	715 sks, 1.66 ft3/sk	
05/26/2017	17:43:00	313	7.0	13.49	60.3	7.92 gal/sk	
05/26/2017	17:43:25	313	7.0	13.50	63.2		
05/26/2017	17:45:05	609	7.4	13.56	75.3		
05/26/2017	17:46:45	430	7.4	13.58	87.6		
05/26/2017	17:48:25	556	7.4	13.61	99.9		
05/26/2017	17:50:05	518	7.4	13.59	112.2		
05/26/2017	17:51:45	621	7.4	13.51	124.5		
05/26/2017	17:53:25	425	7.4	13.53	136.9		
05/26/2017	17:55:05	429	7.4	13.56	149.2		
05/26/2017	17:56:45	382	7.1	13.53	160.9		

Well			Field		Job Start		Customer	Job Number
HILGERS33N2-22HZ 0631683211			Wattenberg		May/26/2017		ANADARKO PETROLEUM CORPORATION	CSS9-00433
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
05/26/2017	18:00:05	383	6.8	13.58	184.4			
05/26/2017	18:01:45	429	7.4	13.57	196.5			
05/26/2017	18:03:25	415	7.4	13.57	208.8			
05/26/2017	18:04:36	5	0.5	13.68	217.1	End Tail Slurry Vol: 211 bbl		
05/26/2017	18:04:37	5	0.3	13.68	0.0	End Cement Slurry		
05/26/2017	18:04:38	5	0.2	13.67	0.0	Flush Surface Lines		
05/26/2017	18:05:05	-2	0.0	13.53	0.0			
05/26/2017	18:06:45	-4	0.0	0.00	0.0			
05/26/2017	18:08:25	-3	0.0	13.47	0.0			
05/26/2017	18:10:05	31	2.6	9.48	1.2			
05/26/2017	18:11:45	82	3.3	8.49	6.5			
05/26/2017	18:13:25	43	2.5	8.51	13.1			
05/26/2017	18:15:05	-10	0.0	8.53	14.4			
05/26/2017	18:16:45	-11	0.0	8.47	14.4			
05/26/2017	18:18:25	-11	0.0	8.45	14.4			
05/26/2017	18:20:05	44	2.5	8.42	16.8			
05/26/2017	18:21:45	-6	0.9	8.45	21.0			
05/26/2017	18:23:25	26	2.1	8.51	0.4			
05/26/2017	18:24:25	118	7.1	8.45	4.5	Drop Top Plug		
05/26/2017	18:24:28	163	7.0	8.45	4.9	Start Displacement		
05/26/2017	18:25:05	226	7.3	8.45	9.3			
05/26/2017	18:26:45	186	7.3	8.41	21.4			
05/26/2017	18:28:25	262	8.2	8.42	34.5			
05/26/2017	18:30:05	252	8.2	8.42	48.0			
05/26/2017	18:31:45	707	7.9	8.41	61.3			
05/26/2017	18:33:25	625	7.8	8.42	74.4			
05/26/2017	18:35:05	999	8.3	8.42	88.4			
05/26/2017	18:36:45	1350	8.3	8.42	102.3			
05/26/2017	18:38:25	1518	8.2	8.42	116.1			
05/26/2017	18:40:05	1714	7.8	8.42	129.5			
05/26/2017	18:41:45	1805	7.5	8.41	142.2			
05/26/2017	18:43:25	1853	6.7	8.41	153.9			
05/26/2017	18:45:05	1839	6.6	8.41	165.1			
05/26/2017	18:46:45	2115	6.5	8.41	175.9			
05/26/2017	18:48:25	2126	6.3	8.41	186.5			
05/26/2017	18:50:05	1901	6.2	8.41	197.0			
05/26/2017	18:51:45	2157	6.1	8.41	207.3			
05/26/2017	18:53:25	2026	6.0	8.41	217.4			
05/26/2017	18:55:05	1991	5.4	8.41	225.7			
05/26/2017	18:56:45	2061	5.4	8.41	234.7			
05/26/2017	18:58:25	2186	5.4	8.41	243.6			
05/26/2017	19:00:05	2035	5.2	8.41	252.4			
05/26/2017	19:01:45	2076	5.1	8.41	260.9			
05/26/2017	19:03:25	2350	5.1	8.41	269.5			
05/26/2017	19:05:05	2041	5.1	8.41	278.0			
05/26/2017	19:06:45	2156	4.3	8.41	285.9			
05/26/2017	19:08:25	1816	1.8	8.41	291.2			
05/26/2017	19:10:05	1804	1.7	8.41	294.2			
05/26/2017	19:11:45	1859	1.8	8.41	297.2			
05/26/2017	19:13:25	1899	1.8	8.41	300.2			
05/26/2017	19:15:05	1907	1.8	8.41	303.1			
05/26/2017	19:15:59	2384	1.8	8.41	304.7	Bump Top Plug		
05/26/2017	19:16:00	2421	1.7	8.41	304.8	End Displacement Vol: 286.7 bbl		
05/26/2017	19:16:45	2459	0.0	8.41	304.9			

Well			Field		Job Start	Customer		Job Number
HILGERS33N2-22HZ 0631683211			Wattenberg		May/26/2017	ANADARKO PETROLEUM CORPORATION		CSS9-00433
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
05/26/2017	19:18:25	31	0.0	8.41	304.9			
05/26/2017	19:18:45	-7	0.0	8.41	304.9	Floats Held 2 bbl Back		
05/26/2017	19:20:05	699	1.8	8.41	305.7			
05/26/2017	19:21:45	2949	0.0	8.41	308.2			
05/26/2017	19:22:05	2945	0.0	8.41	308.2	Pressure Test 15 min		
05/26/2017	19:23:25	3011	0.0	8.41	308.2			
05/26/2017	19:25:05	3036	0.0	8.41	308.2			
05/26/2017	19:26:45	3066	0.0	8.41	308.2			
05/26/2017	19:27:15	3073	0.0	8.41	308.2	25 bbl Spacer to Surface		
05/26/2017	19:28:25	3095	0.0	8.41	308.2			
05/26/2017	19:30:05	3122	0.0	8.41	308.2			
05/26/2017	19:31:45	3150	0.0	8.41	308.2			
05/26/2017	19:33:25	3177	0.0	8.41	308.2			
05/26/2017	19:35:05	3204	0.0	8.41	308.2			
05/26/2017	19:36:45	3230	0.0	8.42	308.2			
05/26/2017	19:38:25	3227	0.0	8.41	308.2			

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 5.7	N2	Mud	Maximum Rate 8.5	Total Slurry 363.0	Mud 0.0	Spacer 80.0	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 5007	Final 54	Average 1123	Bump Plug to 2500	Breakdown	Type	Volume bbl	Density lb/gal	
Avg. N2 Percent %		Designed Slurry Volume 363.0 bbl	Displacement 286.7 bbl	Mix Water Temp 70 degF	Cement Circulated to Surface? <input type="checkbox"/>	Volume bbl		
					Washed Thru Perfs <input type="checkbox"/>	To ft		
Customer or Authorized Representative John Truett			Schlumberger Supervisor Billy Barg			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
						-	-	