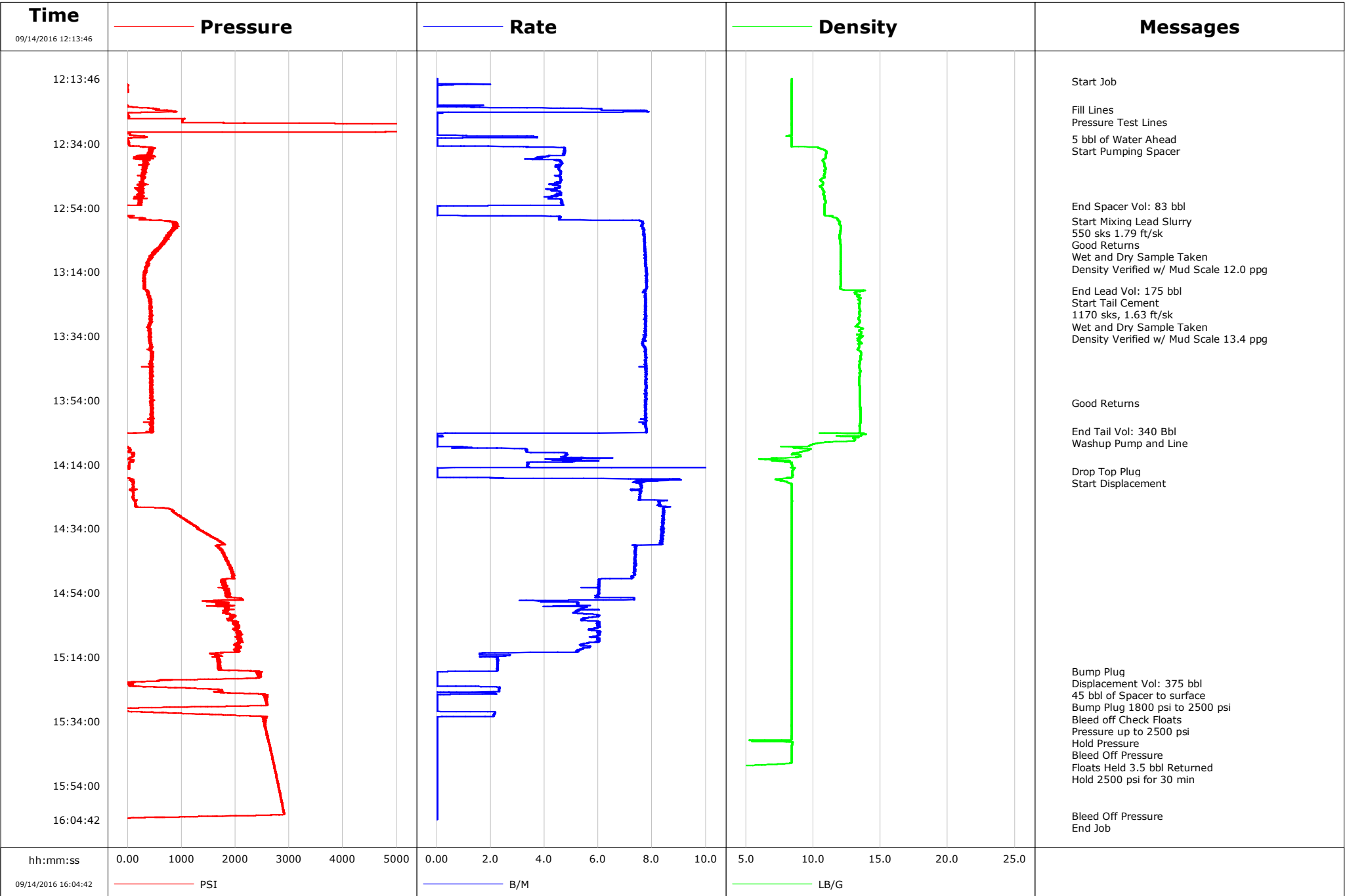


Well	WILSON RANCH4C-27HZ	Client	ANADARKO PETROLEUM COMPANY
Field	WATTENBERG	SIR No.	DMBW-00341
Engineer	Billy Barg	Job Type	MONOBORE PRODUCTION
Country	United States	Job Date	09-14-2016



Cementing Service Report

				Customer ANADARKO PETROLEUM COMPANY				Job Number DMBW-00341					
Well WILSON RANCH4C-27HZ			Location (legal)			Schlumberger Location Cheyenne			Job Start Sep/14/2016				
Field WATTENBERG		Formation Name/Type			Deviation deg		Bit Size 7.9 in		Well MD 16445.9 ft		Well TVD 7242.3 ft		
County WELD		State/Province Colorado			BHP psi		BHST 227 degF		BHCT 225 degF		Pore Press. Gradient lb/gal		
Well Master 0631630657		API/UWI											
Rig Name PRECISION #461		Drilled For OIL		Service Via Land		Casing/ Liner							
						Depth, ft		Size, in		Weight, lb/ft		Grade	
Offshore Zone		Well Class New		Well Type Development		1868.0		9.6		36.0		J55	
						16445.9		5.5		17.0		P-110	
Drilling Fluid Type OBM		Max. Density 9.40 lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe							
						T/D		Depth, ft		Size, in		Weight, lb/ft	
Service Line Cementing		Job Type MONOBORE PRODUCTION											
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection 5.5" DOUBLE PLUG		Perforations/Open Hole							
						Top, ft		Bottom, ft		shot/ft		No. of Shots	
						ft		ft					
						ft		ft				Diameter in	
						ft		ft					
						Treat Down Casing		Displacement 379.4 bbl		Packer Type		Packer Depth ft	
						Tubing Vol. bbl		Casing Vol. bbl		Annular Vol. bbl		Openhole Vol. bbl	
Casing/Tubing Secured <input type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>				Casing Tools				Squeeze Job			
Lift Pressure 1800 psi						Shoe Type Float				Squeeze Type			
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 16445.9 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 Sep/14/2016 05:00		Arrived on Location Sep/14/2016 05:00		Leave Location Sep/14/2016 17:00		Collar Type Float				Tail Pipe Depth ft			
						Collar Depth 16443.7 ft				Sqz. Total Vol. bbl			
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message							
09/14/2016	12:13:46	-46	0.0	8.40	0.0	Stopped Acquisition							
09/14/2016	12:14:30	-46	0.0	8.40	0.0	Start Job							
09/14/2016	12:15:46	8	0.3	8.40	0.2								
09/14/2016	12:17:46	2	0.0	8.39	0.2								
09/14/2016	12:19:46	-51	0.0	8.39	0.2								
09/14/2016	12:21:46	-49	0.0	8.39	0.2								
09/14/2016	12:23:25	508	6.1	8.39	3.9	Fill Lines							
09/14/2016	12:23:46	788	7.8	8.39	6.3								
09/14/2016	12:25:46	19	0.0	8.39	9.8								
09/14/2016	12:26:10	17	0.0	8.39	9.8	Pressure Test Lines							
09/14/2016	12:27:46	4010	0.0	8.39	9.8								
09/14/2016	12:29:46	5070	0.0	8.40	9.8								
09/14/2016	12:31:46	307	3.6	8.26	0.6								
09/14/2016	12:32:41	-1	0.0	8.38	2.3	5 bbl of Water Ahead							
09/14/2016	12:33:46	21	0.0	8.38	2.3								
09/14/2016	12:35:28	522	4.8	10.47	4.7	Start Pumping Spacer							
09/14/2016	12:35:46	419	4.7	10.67	6.2								
09/14/2016	12:37:46	331	4.2	10.92	15.6								
09/14/2016	12:39:46	313	4.6	10.77	23.9								
09/14/2016	12:41:46	300	4.5	10.92	33.0								
09/14/2016	12:43:46	280	4.6	10.82	42.2								

Well			Field	Job Start		Customer	Job Number
WILSON RANCH4C-27HZ			WATTENBERG	Sep/14/2016		ANADARKO PETROLEUM COMPANY	DMBW-00341
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/14/2016	12:47:46	245	4.6	10.64	60.3		
09/14/2016	12:49:46	260	4.6	10.75	69.2		
09/14/2016	12:51:46	223	4.6	10.89	78.1		
09/14/2016	12:53:29	-49	0.1	10.83	85.5	End Spacer Vol: 83 bbl	
09/14/2016	12:53:46	-51	0.0	10.83	0.0		
09/14/2016	12:55:46	-47	0.0	10.84	0.0		
09/14/2016	12:57:46	257	4.6	11.81	5.6		
09/14/2016	12:58:04	739	7.6	11.87	7.5	Start Mixing Lead Slurry	
09/14/2016	12:58:09	785	7.6	11.91	8.1	550 sks 1.79 ft/sk	
09/14/2016	12:59:46	904	7.6	12.06	20.4		
09/14/2016	13:00:22	828	7.7	12.04	25.0	Density Verified w/ Mud Scale 12.0 ppg	
09/14/2016	13:01:46	809	7.7	12.00	35.8		
09/14/2016	13:03:46	700	7.7	11.97	51.2		
09/14/2016	13:05:46	626	7.7	12.02	66.6		
09/14/2016	13:07:46	494	7.7	12.02	82.1		
09/14/2016	13:09:46	427	7.7	12.03	97.6		
09/14/2016	13:11:46	358	7.8	12.03	113.1		
09/14/2016	13:13:46	310	7.8	12.01	128.6		
09/14/2016	13:15:46	311	7.8	12.02	144.2		
09/14/2016	13:17:46	304	7.8	12.05	159.7		
09/14/2016	13:19:46	357	7.7	13.78	175.3		
09/14/2016	13:19:54	373	7.7	13.81	176.3	End Lead Vol: 175 bbl	
09/14/2016	13:21:21	402	7.7	13.44	187.5	Start Tail Cement	
09/14/2016	13:21:46	393	7.8	13.31	190.8	1170 sks, 1.63 ft/sk	
09/14/2016	13:22:05	393	7.8	13.51	193.2	Wet and Dry Sample Taken	
09/14/2016	13:23:05	390	7.8	13.45	200.9	Density Verified w/ Mud Scale 13.4 ppg	
09/14/2016	13:23:46	441	7.8	13.48	206.2		
09/14/2016	13:25:46	417	7.7	13.46	221.7		
09/14/2016	13:27:46	451	7.7	13.45	237.2		
09/14/2016	13:29:46	431	7.8	13.42	252.7		
09/14/2016	13:31:46	391	7.8	13.70	268.2		
09/14/2016	13:33:46	399	7.8	13.61	283.7		
09/14/2016	13:35:46	413	7.6	13.40	299.1		
09/14/2016	13:37:46	416	7.7	13.37	314.5		
09/14/2016	13:39:46	464	7.8	13.53	330.0		
09/14/2016	13:41:46	445	7.7	13.46	345.5		
09/14/2016	13:43:46	404	7.8	13.42	361.0		
09/14/2016	13:45:46	460	7.8	13.46	376.5		
09/14/2016	13:47:46	453	7.8	13.44	392.1		
09/14/2016	13:49:46	436	7.8	13.45	407.6		
09/14/2016	13:51:46	446	7.8	13.46	423.1		
09/14/2016	13:53:46	465	7.8	13.46	438.7		
09/14/2016	13:54:47	455	7.7	13.47	446.5	Good Returns	
09/14/2016	13:55:46	443	7.8	13.48	454.2		
09/14/2016	13:57:46	458	7.7	13.50	469.7		
09/14/2016	13:59:46	445	7.7	13.51	485.2		
09/14/2016	14:01:46	435	7.8	13.48	500.6		
09/14/2016	14:03:34	417	7.8	13.47	514.6	End Tail Vol: 340 Bbl	
09/14/2016	14:03:46	471	7.8	13.48	516.2		
09/14/2016	14:04:15	1	0.7	13.78	519.7	Washup Pump and Line	
09/14/2016	14:05:46	-27	0.0	13.15	0.0		
09/14/2016	14:07:46	-29	0.0	9.93	0.0		
09/14/2016	14:09:46	35	3.3	9.44	3.2		
09/14/2016	14:11:46	90	4.7	8.75	12.0		

Well			Field	Job Start		Customer	Job Number
WILSON RANCH4C-27HZ			WATTENBERG	Sep/14/2016		ANADARKO PETROLEUM COMPANY	DMBW-00341
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/14/2016	14:15:46	-45	0.0	8.50	26.2		
09/14/2016	14:16:04	-42	0.0	8.46	0.0	Drop Top Plug	
09/14/2016	14:16:05	-42	0.0	8.46	0.0	Start Displacement	
09/14/2016	14:17:46	-40	0.0	8.45	0.0		
09/14/2016	14:19:46	114	7.6	8.18	11.4		
09/14/2016	14:21:46	88	7.4	8.40	26.5		
09/14/2016	14:23:46	102	7.6	8.40	41.5		
09/14/2016	14:25:46	146	8.3	8.41	57.1		
09/14/2016	14:27:46	747	8.4	8.41	73.7		
09/14/2016	14:29:46	954	8.4	8.41	90.6		
09/14/2016	14:31:46	1106	8.4	8.41	107.4		
09/14/2016	14:33:46	1298	8.4	8.41	124.2		
09/14/2016	14:35:46	1489	8.4	8.41	140.9		
09/14/2016	14:37:46	1704	8.3	8.41	157.6		
09/14/2016	14:39:46	1667	7.4	8.41	173.7		
09/14/2016	14:41:46	1780	7.4	8.40	188.4		
09/14/2016	14:43:46	1827	7.4	8.41	203.2		
09/14/2016	14:45:46	1908	7.4	8.40	217.9		
09/14/2016	14:47:46	1945	7.3	8.40	232.6		
09/14/2016	14:49:46	1829	6.0	8.40	247.1		
09/14/2016	14:51:46	1853	6.0	8.40	259.1		
09/14/2016	14:53:46	1843	6.0	8.40	271.1		
09/14/2016	14:55:46	2089	7.3	8.40	283.4		
09/14/2016	14:57:46	1774	5.3	8.40	294.2		
09/14/2016	14:59:46	1830	5.2	8.40	304.7		
09/14/2016	15:01:46	1954	5.7	8.40	316.0		
09/14/2016	15:03:46	1983	6.0	8.40	327.4		
09/14/2016	15:05:46	1995	5.9	8.40	339.2		
09/14/2016	15:07:46	2068	5.7	8.40	351.2		
09/14/2016	15:09:46	2076	5.6	8.40	363.1		
09/14/2016	15:11:46	2059	5.3	8.40	374.0		
09/14/2016	15:13:46	1649	2.5	8.40	381.0		
09/14/2016	15:15:46	1673	2.3	8.40	385.4		
09/14/2016	15:17:46	1737	2.3	8.40	389.9		
09/14/2016	15:18:28	2439	2.2	8.40	391.5	Bump Plug	
09/14/2016	15:19:46	2421	0.0	8.40	391.7		
09/14/2016	15:19:56	2434	0.0	8.40	391.7	Displacement Vol: 375 bbl	
09/14/2016	15:20:34	2411	0.0	8.40	391.7	45 bbl of Spacer to surface	
09/14/2016	15:20:55	1734	0.0	8.40	391.7	Bump Plug 1800 psi to 2500 psi	
09/14/2016	15:21:18	599	0.0	8.40	391.7	Bleed off Check Floats	
09/14/2016	15:21:46	254	0.0	8.40	391.7		
09/14/2016	15:23:42	1084	2.3	8.40	392.8	Pressure up to 2500 psi	
09/14/2016	15:23:46	1154	2.3	8.40	393.0		
09/14/2016	15:25:46	2608	0.2	8.40	396.8		
09/14/2016	15:26:29	2542	0.0	8.40	396.8	Hold Pressure	
09/14/2016	15:27:46	2559	0.0	8.40	396.8		
09/14/2016	15:29:28	1695	0.0	8.40	396.8	Bleed Off Pressure	
09/14/2016	15:29:46	621	0.0	8.40	396.8		
09/14/2016	15:30:51	-34	0.0	8.40	396.8	Floats Held 3.5 bbl Returned	
09/14/2016	15:31:05	170	1.9	8.40	396.9	Hold 2500 psi for 30 min	
09/14/2016	15:31:46	1200	2.1	8.40	398.4		
09/14/2016	15:33:46	2525	0.0	8.40	400.2		
09/14/2016	15:35:46	2559	0.0	8.40	400.2		
09/14/2016	15:37:46	2579	0.0	8.40	400.2		

Well WILSON RANCH4C-27HZ			Field WATTENBERG		Job Start Sep/14/2016	Customer ANADARKO PETROLEUM COMPANY	Job Number DMBW-00341
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/14/2016	15:41:46	2635	0.0	8.42	400.2		
09/14/2016	15:43:46	2662	0.0	8.41	400.2		
09/14/2016	15:45:46	2689	0.0	8.42	400.2		
09/14/2016	15:47:46	2714	0.0	5.72	400.2		
09/14/2016	15:49:46	2741	0.0	0.33	400.2		
09/14/2016	15:51:46	2766	0.0	0.26	400.2		
09/14/2016	15:53:46	2791	0.0	0.54	400.2		
09/14/2016	15:55:46	2816	0.0	1.01	400.2		
09/14/2016	15:57:46	2840	0.0	1.43	400.2		
09/14/2016	15:59:46	2865	0.0	1.75	400.2		
09/14/2016	16:01:46	2889	0.0	1.82	400.2		
09/14/2016	16:03:31	2029	0.0	1.73	400.2	Bleed Off Pressure	
09/14/2016	16:03:46	1324	0.0	1.68	400.2		

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl							
Slurry 6.4	N2	Mud	Maximum Rate 13.2	Total Slurry 258.0	Mud 0.0	Spacer 83.0	N2					
Treating Pressure Summary, psi					Breakdown Fluid							
Maximum 5197	Final -39	Average 1186	Bump Plug to 2500	Breakdown	Type	Volume bbl	Density lb/gal					
Avg. N2 Percent %	Designed Slurry Volume 0.0 bbl	Displacement 175.0 bbl	Mix Water Temp 67 degF	Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl						
				Washed Thru Perfs <input type="checkbox"/>		To ft						
Customer or Authorized Representative			Schlumberger Supervisor Billy Barg			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>					
						-	-					