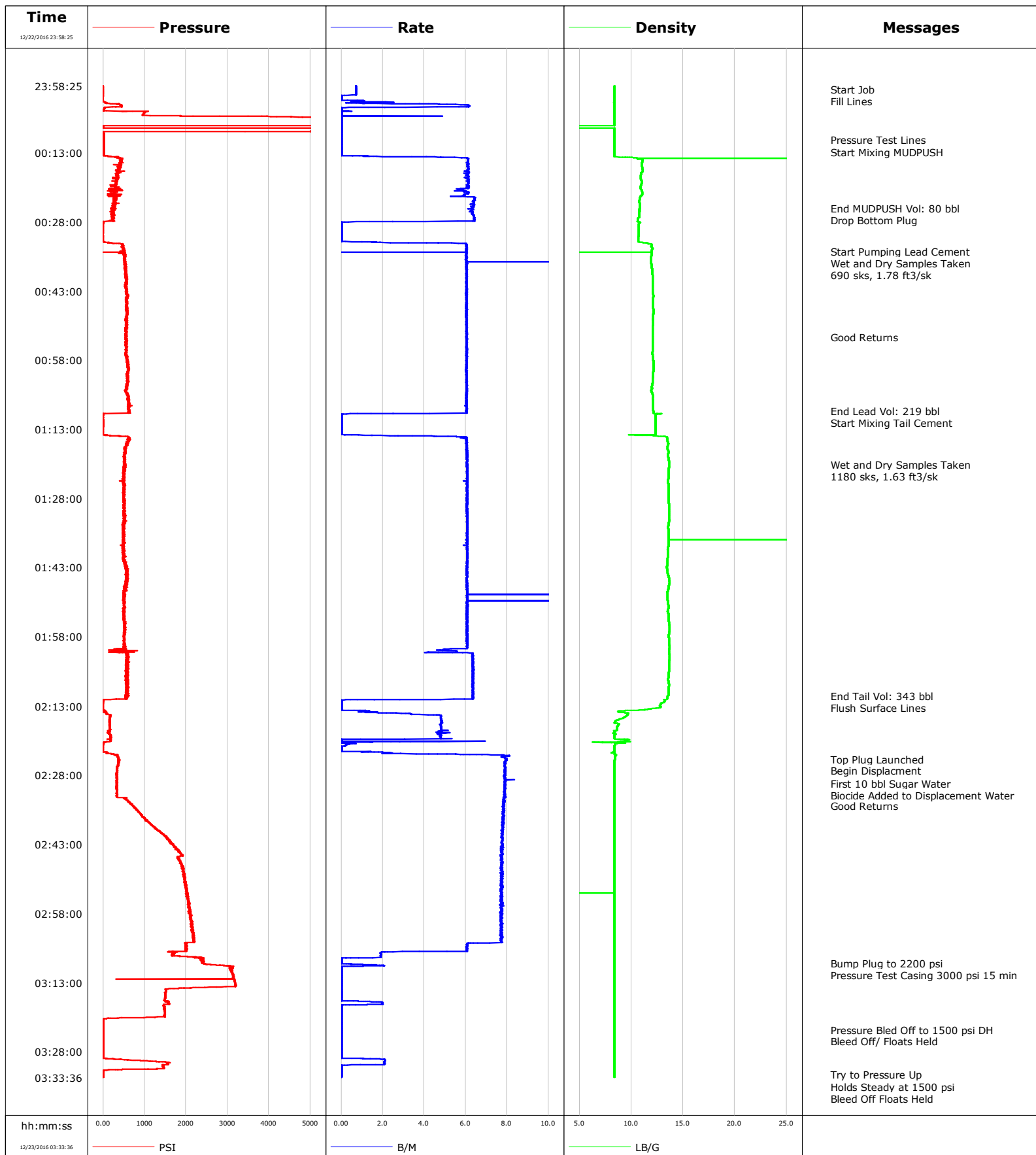


Well JAGUAR3N-14HZ
Field Wattenberg
Engineer Billy Barg
Country United States

Client ANADARKO PETROLEUM COMPANY (ED)
SIR No. DMBW-00575
Job Type Production
Job Date 12-22-2016



Cementing Service Report

				Customer ANADARKO PETROLEUM COMPANY (ED)				Job Number DMBW-00575									
Well JAGUAR3N-14HZ			Location (legal)			Schlumberger Location Cheyenne, WY			Job Start Dec/22/2016								
Field Wattenberg		Formation Name/Type			Deviation deg		Bit Size 8.5 in		Well MD 13940.0 ft		Well TVD 7447.0 ft						
County WELD		State/Province Colorado			BHP psi		BHST 230 degF		BHCT 229 degF		Pore Press. Gradient lb/gal						
Well Master 0631662913		API/UWI 05123426250000															
Rig Name Xtreme 24		Drilled For Oil		Service Via Land		Casing/ Liner											
						Depth, ft		Size, in		Weight, lb/ft		Grade		Thread			
Offshore Zone		Well Class New		Well Type Development		2290.0		9.6		37.0		J-55		LTC			
						13930.0		5.5		17.0		HCP-110		BTC			
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" 8RD		Perforations/Open Hole											
						Top, ft		Bottom, ft		shot/ft		No. of Shots		Total Interval ft			
Service Instructions 9 5/8" 36# Previous Casing: 2,290' 8 1/2" to TD // OH Excess: 4% Est. Top of Lead Cement: 1,000' Est. Top of Tail Cement: 6,000' TD: 13,940' (7,447')						ft		ft									
						ft		ft						Diameter in			
						ft		ft									
		Treat Down Casing		Displacement 322.0 bbl		Packer Type		Packer Depth ft									
		Tubing Vol. bbl		Casing Vol. 324.0 bbl		Annular Vol. 475.0 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 9968 psi						Shoe Type Float				Squeeze Type							
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 13930.0 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/22/2016 17:30		Arrived on Location Dec/22/2016 17:30		Leave Location Dec/23/2016 04:30		Collar Type Float				Tail Pipe Depth ft							
						Collar Depth 13838.0 ft				Sqz. Total Vol. bbl							
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message											
12/22/2016	23:58:25	-8	0.7	8.37	39.9	Started Acquisition											
12/22/2016	23:59:04	-8	0.7	8.37	40.3	Start Job											
12/22/2016	23:59:09	-9	0.7	8.37	40.4	Fill Lines											
12/23/2016	00:00:25	-9	0.7	8.37	41.3												
12/23/2016	00:02:25	364	4.7	8.36	0.9												
12/23/2016	00:04:25	980	0.0	8.37	4.9												
12/23/2016	00:06:25	5224	0.0	8.36	4.9												
12/23/2016	00:08:25	11	0.0	8.36	4.9												
12/23/2016	00:10:13	19	0.0	8.36	4.9	Pressure Test Lines											
12/23/2016	00:10:25	19	0.0	8.36	4.9												
12/23/2016	00:12:03	20	0.0	8.36	4.9	Start Mixing MUDPUSH											
12/23/2016	00:12:25	17	0.0	8.37	4.9												
12/23/2016	00:14:25	438	6.1	11.10	8.5												
12/23/2016	00:16:25	364	6.1	11.07	20.7												
12/23/2016	00:18:25	330	6.0	10.90	32.9												
12/23/2016	00:20:25	387	6.0	10.87	45.2												
12/23/2016	00:22:25	243	5.3	10.89	57.1												
12/23/2016	00:24:25	281	6.4	10.81	69.8												
12/23/2016	00:24:59	282	6.3	10.82	73.4	End MUDPUSH Vol: 80 bbl											
12/23/2016	00:25:20	247	6.4	10.79	75.6	Drop Bottom Plug											
12/23/2016	00:26:25	226	6.4	10.75	82.4												

Well			Field		Job Start		Customer	Job Number
JAGUAR3N-14HZ			Wattenberg		Dec/22/2016		ANADARKO PETROLEUM COMPANY (ED	DMBW-00575
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
12/23/2016	00:30:25	-10	0.0	10.72	91.9			
12/23/2016	00:32:25	26	1.9	11.00	92.2			
12/23/2016	00:34:21	508	6.0	11.97	103.4	Start Pumping Lead Cement		
12/23/2016	00:34:25	492	6.1	11.97	103.8			
12/23/2016	00:36:25	542	6.1	11.90	115.8			
12/23/2016	00:36:55	529	6.0	11.93	118.9	Wet and Dry Samples Taken		
12/23/2016	00:37:10	556	6.0	11.94	120.4	690 sks, 1.78 ft3/sk		
12/23/2016	00:38:25	546	6.0	12.00	127.9			
12/23/2016	00:40:25	556	6.0	12.06	140.0			
12/23/2016	00:42:25	555	6.0	12.07	152.1			
12/23/2016	00:44:25	580	6.0	12.10	164.2			
12/23/2016	00:46:25	583	6.0	12.11	176.3			
12/23/2016	00:48:25	578	6.1	12.11	188.3			
12/23/2016	00:50:25	542	6.0	12.08	200.4			
12/23/2016	00:52:25	561	6.1	12.04	212.5			
12/23/2016	00:53:03	542	6.0	12.05	216.3	Good Returns		
12/23/2016	00:54:25	548	6.1	12.06	224.6			
12/23/2016	00:56:25	548	6.1	12.03	236.7			
12/23/2016	00:58:25	588	6.1	12.14	248.8			
12/23/2016	01:00:25	609	6.0	12.13	260.9			
12/23/2016	01:02:25	570	6.0	12.07	272.9			
12/23/2016	01:04:25	542	6.1	11.94	285.0			
12/23/2016	01:06:25	608	6.1	12.07	297.1			
12/23/2016	01:08:25	617	6.0	12.10	309.2			
12/23/2016	01:09:03	626	6.0	12.13	313.0	End Lead Vol: 219 bbl		
12/23/2016	01:09:46	1	0.0	12.36	316.1	Start Mixing Tail Cement		
12/23/2016	01:10:25	-1	0.0	12.36	316.1			
12/23/2016	01:12:25	-5	0.0	12.36	316.1			
12/23/2016	01:14:25	382	4.0	12.37	316.5			
12/23/2016	01:16:25	564	6.1	13.54	328.3			
12/23/2016	01:18:25	500	6.1	13.54	340.4			
12/23/2016	01:20:25	521	6.1	13.65	352.6			
12/23/2016	01:20:40	511	6.1	13.66	354.1	Wet and Dry Samples Taken		
12/23/2016	01:21:04	524	6.1	13.65	356.5	1180 sks, 1.63 ft3/sk		
12/23/2016	01:22:25	476	6.1	13.59	364.7			
12/23/2016	01:24:25	512	6.1	13.54	376.8			
12/23/2016	01:26:25	537	6.1	13.59	389.0			
12/23/2016	01:28:25	487	6.1	13.59	401.1			
12/23/2016	01:30:25	506	6.1	13.63	413.2			
12/23/2016	01:32:25	547	6.1	13.65	425.4			
12/23/2016	01:34:25	504	6.1	13.56	437.5			
12/23/2016	01:36:25	488	6.1	13.60	449.7			
12/23/2016	01:38:25	512	6.1	13.57	461.8			
12/23/2016	01:40:25	479	6.1	13.55	473.9			
12/23/2016	01:42:25	538	6.1	13.48	486.1			
12/23/2016	01:44:25	580	6.1	13.54	498.2			
12/23/2016	01:46:25	593	6.1	13.67	510.3			
12/23/2016	01:48:25	507	6.1	13.47	522.4			
12/23/2016	01:50:25	501	6.1	13.53	534.6			
12/23/2016	01:52:25	519	6.1	13.52	546.7			
12/23/2016	01:54:25	529	6.1	13.59	558.9			
12/23/2016	01:56:25	516	6.1	13.69	571.0			
12/23/2016	01:58:25	507	6.1	13.62	583.1			
12/23/2016	02:00:25	545	6.1	13.69	595.3			

Well			Field		Job Start	Customer	Job Number
JAGUAR3N-14HZ			Wattenberg		Dec/22/2016	ANADARKO PETROLEUM COMPANY (ED	DMBW-00575
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
12/23/2016	02:04:25	613	6.4	13.63	619.5		
12/23/2016	02:06:25	565	6.3	13.59	632.2		
12/23/2016	02:08:25	565	6.3	13.62	644.9		
12/23/2016	02:10:25	583	6.3	13.58	657.6		
12/23/2016	02:10:49	557	6.4	13.51	660.1	End Tail Vol: 343 bbl	
12/23/2016	02:11:03	587	6.4	13.48	661.6	Flush Surface Lines	
12/23/2016	02:12:25	-1	0.0	12.86	665.1		
12/23/2016	02:14:25	17	1.6	9.17	665.7		
12/23/2016	02:16:25	157	4.8	8.43	674.3		
12/23/2016	02:18:25	169	4.8	8.32	684.0		
12/23/2016	02:20:25	171	0.0	9.53	692.6		
12/23/2016	02:22:25	-4	0.0	8.38	693.3		
12/23/2016	02:24:25	363	7.9	8.41	701.8		
12/23/2016	02:24:28	379	8.0	8.41	702.2	Top Plug Launched	
12/23/2016	02:24:35	372	8.0	8.41	703.2	Begin Displacment	
12/23/2016	02:26:25	330	7.9	8.37	717.7		
12/23/2016	02:28:25	342	7.9	8.37	733.4		
12/23/2016	02:29:48	332	7.9	8.37	744.4	First 10 bbl Sugar Water	
12/23/2016	02:30:07	336	7.9	8.37	746.7	Biocide Added to Displacement Water	
12/23/2016	02:30:25	336	7.9	8.37	749.2		
12/23/2016	02:32:25	321	7.9	8.37	765.0		
12/23/2016	02:34:25	674	7.8	8.37	780.7		
12/23/2016	02:34:40	722	7.8	8.37	782.6	Good Returns	
12/23/2016	02:36:25	902	7.8	8.37	796.3		
12/23/2016	02:38:25	1132	7.8	8.37	811.9		
12/23/2016	02:40:25	1384	7.8	8.37	827.5		
12/23/2016	02:42:25	1590	7.8	8.37	843.0		
12/23/2016	02:44:25	1821	7.7	8.37	858.5		
12/23/2016	02:46:25	1838	7.7	8.37	874.0		
12/23/2016	02:48:25	1933	7.7	8.37	889.5		
12/23/2016	02:50:25	1982	7.8	8.37	904.9		
12/23/2016	02:52:25	2014	7.8	8.37	920.4		
12/23/2016	02:54:25	2047	7.7	8.37	935.9		
12/23/2016	02:56:25	2077	7.8	8.37	951.3		
12/23/2016	02:58:25	2089	7.7	8.37	966.8		
12/23/2016	03:00:25	2158	7.7	8.37	982.2		
12/23/2016	03:02:25	2168	7.7	8.37	997.6		
12/23/2016	03:04:25	2020	6.6	8.37	1013.0		
12/23/2016	03:06:25	1729	2.0	8.37	1024.8		
12/23/2016	03:08:25	2393	0.0	8.36	1027.2		
12/23/2016	03:08:52	2418	0.0	8.37	1027.2	Bump Plug to 2200 psi	
12/23/2016	03:09:08	2616	1.0	8.37	1027.3	Pressure Test Casing 3000 psi 15 min	
12/23/2016	03:10:25	3084	0.0	8.37	1027.9		
12/23/2016	03:12:25	3164	0.0	8.37	1027.9		
12/23/2016	03:14:25	1507	0.0	8.37	1027.9		
12/23/2016	03:16:25	1495	0.0	8.37	1027.9		
12/23/2016	03:18:25	1464	0.0	8.37	1029.3		
12/23/2016	03:20:25	1486	0.0	8.37	1029.3		
12/23/2016	03:22:25	-11	0.0	8.37	1029.3		
12/23/2016	03:23:17	5	0.0	8.37	1029.3	Pressure Bled Off to 1500 psi DH	
12/23/2016	03:23:23	5	0.0	8.37	1029.3	Bleed Off/ Floats Held	
12/23/2016	03:24:25	5	0.0	8.37	1029.3		
12/23/2016	03:26:25	4	0.0	8.37	1029.3		
12/23/2016	03:28:25	4	0.0	8.37	1029.3		

Well			Field		Job Start	Customer		Job Number
JAGUAR3N-14HZ			Wattenberg		Dec/22/2016	ANADARKO PETROLEUM COMPANY (ED		DMBW-00575
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
12/23/2016	03:32:25	2	0.0	8.37	1032.1			
12/23/2016	03:33:00	4	0.0	8.37	1032.1	Try to Pressure Up		
12/23/2016	03:33:12	4	0.0	8.37	1032.1	Holds Steady at 1500 psi		
12/23/2016	03:33:25	4	0.0	8.37	1032.1	Bleed Off Floats Held		

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl					
Slurry 6.3	N2	Mud	Maximum Rate 533.3	Total Slurry 562.0	Mud 0.0	Spacer 80.0	N2			
Treating Pressure Summary, psi					Breakdown Fluid					
Maximum 5345	Final 4	Average 849	Bump Plug to 2200	Breakdown	Type	Volume bbl	Density lb/gal			
Avg. N2 Percent %	Designed Slurry Volume 562.0 bbl		Displacement 322.0 bbl	Mix Water Temp 84 degF	Cement Circulated to Surface? <input type="checkbox"/>	Volume bbl				
					Washed Thru Perfs <input type="checkbox"/>	To ft				
Customer or Authorized Representative Jason Laub			Schlumberger Supervisor Billy Barg			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>			
						-	-			