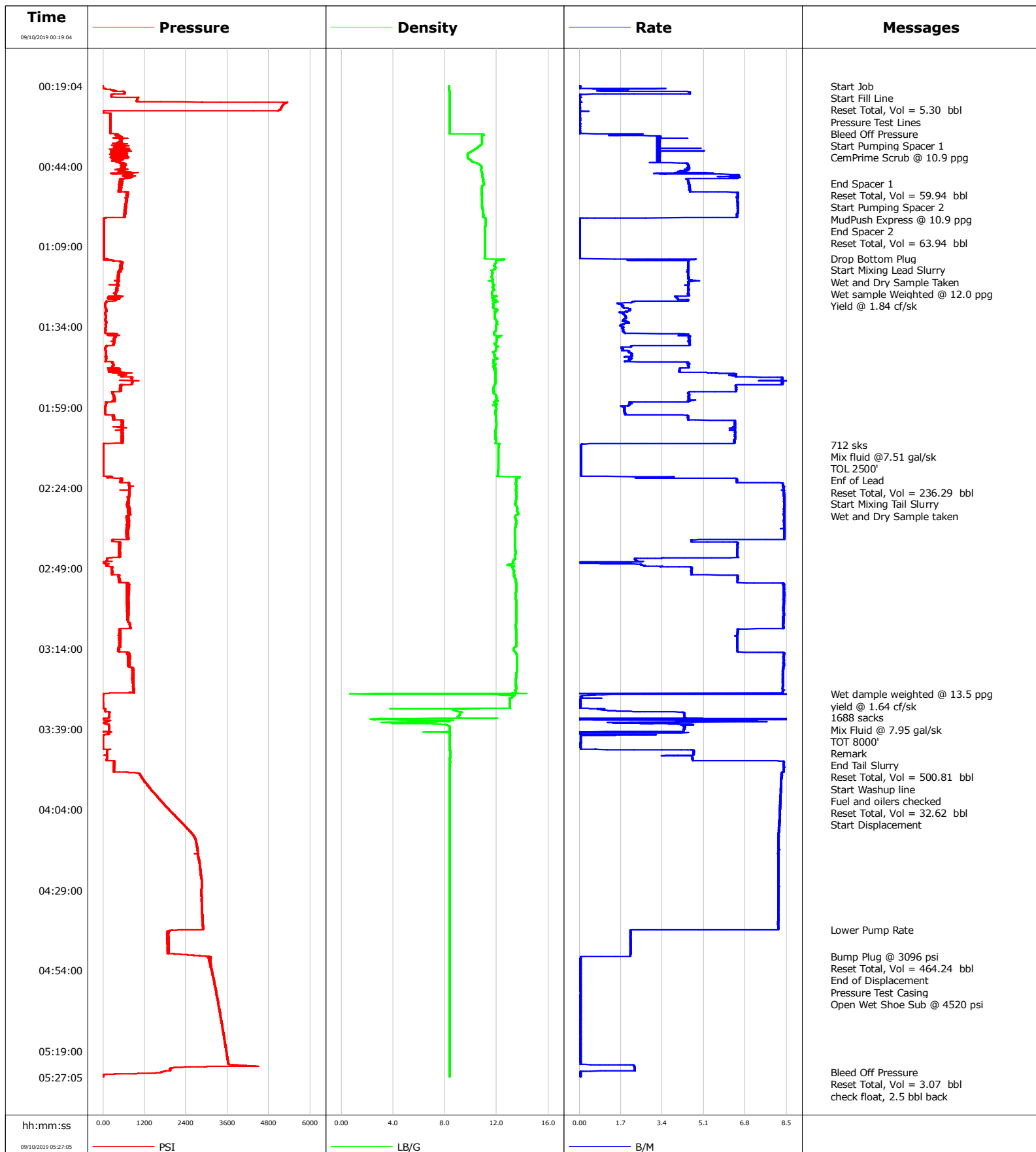


Well	MJOLNIR 3-5HZ	Client	ANADARKO
Field		SIR No.	3050288
Engineer	LAN PHAM	Job Type	PRODUCTION
Country	United States	Job Date	09-10-2019



Cementing Service Report

				Customer ANADARKO			Job Number 3050288						
Well MJOLNIR 3-5HZ 3-5HZ			Location (legal)			Schlumberger Location			Job Start Sep/10/2019				
Field		Formation Name/Type			Deviation deg		Bit Size in		Well MD 19549.9 ft		Well TVD 7792.0 ft		
County		State/Province CO			BHP psi		BHST 230 degF		BHCT 230 degF		Pore Press. Gradient lb/gal		
Well Master 0065871368		API/UWI 05-123-49766-00											
Rig Name PD 564		Drilled For Oil and Gas		Service Via Land		Casing/ Liner							
						Depth, ft		Size, in		Weight, lb/ft		Grade	
Offshore Zone		Well Class New		Well Type Exploration		1920.0		9.6		36.0		J-55	
						19549.9		5.5		17.0		P-110	
Drilling Fluid Type		Max. Density lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe							
						T/D		Depth, ft		Size, in		Weight, lb/ft	
Service Line Cementing		Job Type PRODUCTION											
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection 5 1/2 8rd		Perforations/Open Hole							
						Top, ft		Bottom, ft		shot/ft		No. of Shots	
						ft		ft					
						ft		ft				Diameter in	
						ft		ft					
						Treat Down Casing		Displacement 454.0 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 1900 psi						Shoe Type FLOAT				Squeeze Type			
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 19549.9 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/09/2019 17:00		Arrived on Location Sep/09/2019 19:30		Leave Location Sep/10/2019 07:00		Collar Type Float				Tail Pipe Depth ft			
						Collar Depth 19537.0 ft				Sqz. Total Vol. bbl			
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Pressure PSI	Message							
09/10/2019	00:19:04	-1	0.0	8.34	-1	Started Acquisition							
09/10/2019	00:19:05	-1	0.0	8.34	-2	Start Job							
09/10/2019	00:19:06	-1	0.0	8.34	-1	Start Fill Line							
09/10/2019	00:25:17	5188	0.0	8.36	5187	Reset Total, Vol = 5.30 bbl							
09/10/2019	00:25:25	5180	0.0	8.36	5179	Pressure Test Lines							
09/10/2019	00:26:44	5075	0.0	8.36	5076	Bleed Off Pressure							
09/10/2019	00:34:51	513	3.3	10.85	533	Start Pumping Spacer 1							
09/10/2019	00:34:52	518	3.3	10.85	510	CemPrime Scrub @ 10.9 ppg							
09/10/2019	00:49:24	569	4.5	10.99	524	End Spacer 1							
09/10/2019	00:49:26	461	4.5	10.99	537	Reset Total, Vol = 59.94 bbl							
09/10/2019	00:49:27	541	4.5	10.99	507	Start Pumping Spacer 2							
09/10/2019	00:49:30	478	4.5	10.99	545	MudPush Express @ 10.9 ppg							
09/10/2019	01:00:17	22	0.0	11.13	25	End Spacer 2							
09/10/2019	01:00:20	20	0.0	11.12	23	Reset Total, Vol = 63.94 bbl							
09/10/2019	01:12:34	17	0.0	11.08	9	Drop Bottom Plug							
09/10/2019	01:13:22	315	3.5	11.98	330	Start Mixing Lead Slurry							
09/10/2019	01:13:23	316	3.9	11.95	318	Wet and Dry Sample Taken							
09/10/2019	01:13:24	292	4.3	11.94	310	Wet sample Weighted @ 12.0 ppg							
09/10/2019	02:10:38	9	0.1	12.16	10	712 sks							
09/10/2019	02:10:39	8	0.1	12.16	9	Mix fluid @7.51 gal/sk							
09/10/2019	02:10:40	8	0.1	12.15	10	TOL 2500'							

Well			Field		Job Start	Customer		Job Number
MJOLNIR 3-5HZ 3-5HZ					Sep/10/2019	ANADARKO		3050288
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Pressure PSI	Message		
09/10/2019	02:20:14	7	0.1	12.10	13	Reset Total, Vol = 236.29 bbl		
09/10/2019	02:20:30	238	2.2	12.75	237	Start Mixing Tail Slurry		
09/10/2019	02:20:34	219	3.8	13.68	234	Wet and Dry Sample taken		
09/10/2019	03:27:59	5	3.1	1.21	6	Wet dample weighted @ 13.5 ppg		
09/10/2019	03:28:00	5	3.1	0.98	6	TOT 8000'		
09/10/2019	03:28:01	4	2.9	0.85	5	End Tail Slurry		
09/10/2019	03:28:04	3	2.7	0.69	5	Reset Total, Vol = 500.81 bbl		
09/10/2019	03:32:37	62	1.0	5.47	63	Start Washup line		
09/10/2019	03:32:38	58	1.0	8.74	61	Fuel and oilers checked		
09/10/2019	03:44:55	-2	0.1	8.36	1	Reset Total, Vol = 32.62 bbl		
09/10/2019	03:45:03	-3	0.1	8.36	0	Start Displacement		
09/10/2019	04:41:20	2513	7.1	8.36	2517	Lower Pump Rate		
09/10/2019	04:49:41	3064	0.5	8.36	3060	Bump Plug @ 3096 psi		
09/10/2019	04:50:09	3110	0.0	8.36	3085	Reset Total, Vol = 464.24 bbl		
09/10/2019	04:50:10	3046	0.0	8.36	3048	End of Displacement		
09/10/2019	04:50:18	3050	0.0	8.36	3056	Pressure Test Casing		
09/10/2019	04:50:19	3053	0.0	8.36	3055	Open Wet Shoe Sub @ 4520 psi		
09/10/2019	05:25:42	1657	0.0	8.36	1656	Bleed Off Pressure		
09/10/2019	05:26:49	-3	0.0	8.36	-0	Reset Total, Vol = 3.07 bbl		

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate		Total Slurry 736.0	Mud	Spacer 117.0	N2
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum	Final 0	Average	Bump Plug to 3096	Breakdown	Type	Volume bbl		Density lb/gal
Avg. N2 Percent %		Designed Slurry Volume 726.0 bbl	Displacement 454.0 bbl	Mix Water Temp 68 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 LAN PHAM			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
						-	-	