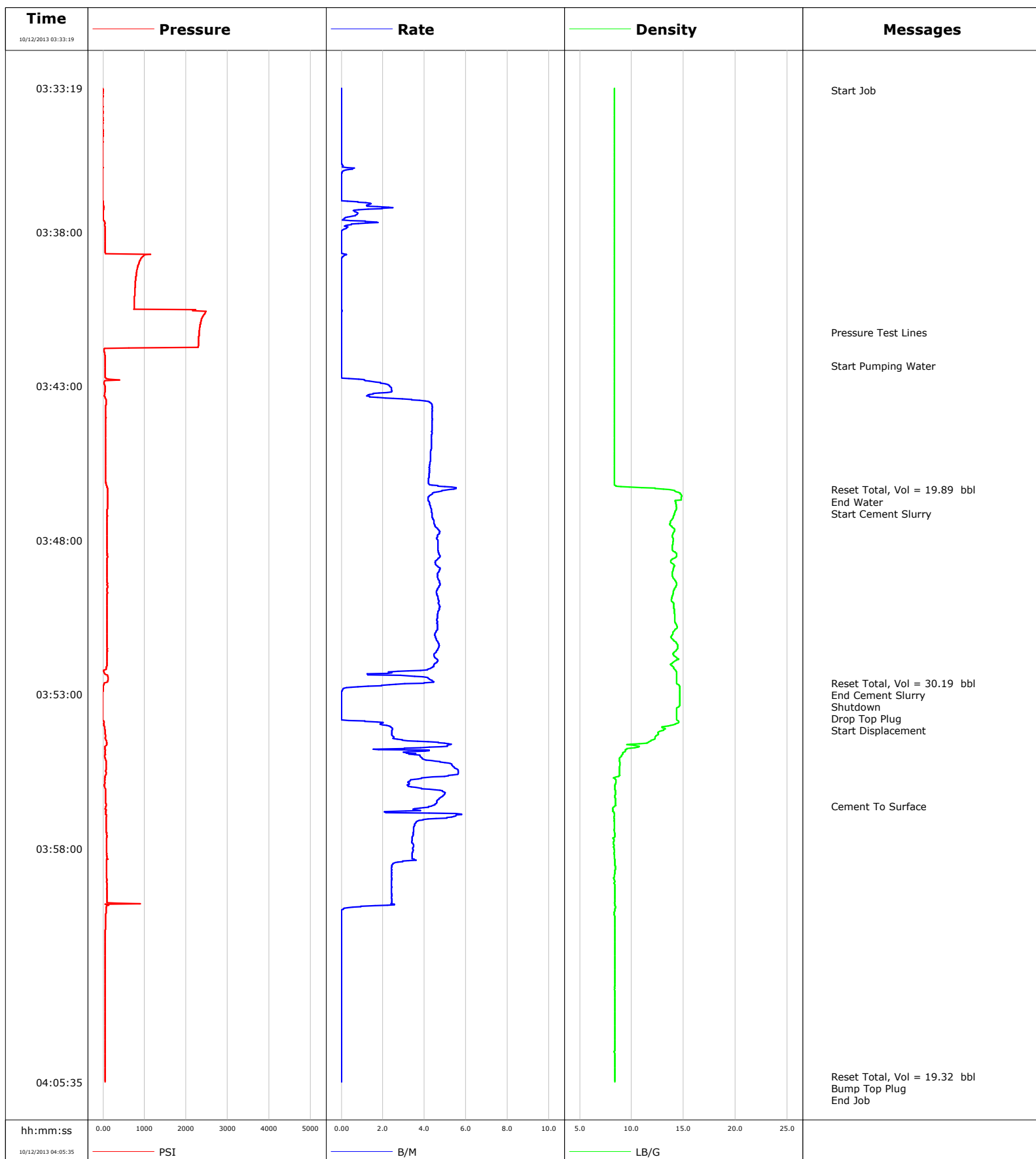


Well	BIG SKY 12-11	Client	NIGHTHAWK
Field	DJ	SIR No.	CPU7-00005
Engineer	MATT WHITE	Job Type	SURFACE
Country	United States	Job Date	10-11-2013





Cementing Service Report

				Customer NIGHTHAWK		Job Number CPU7-00005	
Well BIG SKY 12-11		Location (legal)		Schlumberger Location WORLAND		Job Start Oct/11/2013	
Field DJ		Formation Name/Type		Deviation	Bit Size 12.3 in	Well MD 337.0 ft	Well TVD 337.0 ft
County LINCOLN		State/Province Wyoming		BHP	BHST	BHCT	Pore Press. Gradient
Well Master		API/UWI					
Rig Name	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	337.0	8.630	24.0	J55	8RD
			0.0	0.000	0.0		
Drilling Fluid Type Water		Max. Density 8.34 lb/gal	Plastic Viscosity	Tubing/Drill Pipe			
				Depth,	Size,	Weight,	Grade
Service Line Cementing	Job Type SURFACE						
Max. Allowed Tub. Press 1000 psi	Max. Allowed Ann. Press	WH Connection Single Cement head	Perforations/Open Hole				
			Top,	Bottom,		No. of Shots	Total Interval
							Diameter
Service Instructions Cement Surface Casing				Treat Down Casing	Displacement 18.8 bbl	Packer Type	Packer Depth
				Tubing Vol.	Casing Vol. 21.5 bbl	Annular Vol. 24.8 bbl	Openhole Vol. 49.0 bbl
Casing/Tubing Secured ☒		1 Hole Vol. Circulated prior to Cement ☒		Casing Tools		Squeeze Job	
Lift Pressure 100 psi				Shoe Type Guide		Squeeze Type	
Pipe Rotated ☐		Pipe Reciprocated ☐		Shoe Depth 337.0 ft		Tool Type	
No. Centralizers		Top Plugs 1	Bottom Plugs	Stage Tool Type		Tool Depth	
Cement Head Type Single				Stage Tool Depth		Tail Pipe Size	
Job Scheduled For Oct/11/2013		Arrived on Location Oct/11/2013	Leave Location Oct/11/2013	Collar Type Float		Tail Pipe Depth	
				Collar Depth 295.0 ft		Sqz. Total Vol.	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
10/12/2013	03:18:40					Started Acquisition	
10/12/2013	03:33:19	-0	0.0	8.37	0.0		
10/12/2013	03:33:23					Start Job	
10/12/2013	03:33:23	-0	0.0	8.37	0.0		
10/12/2013	03:33:40	-0	0.0	8.37	0.0		
10/12/2013	03:38:40	52	0.0	8.36	0.8		
10/12/2013	03:41:15					Pressure Test Lines	
10/12/2013	03:41:15	2317	0.0	8.36	0.8		
10/12/2013	03:42:20					Start Pumping Water	
10/12/2013	03:42:20	49	0.0	8.36	0.8		
10/12/2013	03:43:40	71	4.4	8.36	3.1		
10/12/2013	03:46:22					Reset Total, Vol = 19.89 bbl	
10/12/2013	03:46:22	110	5.2	13.63	14.9		
10/12/2013	03:46:28					End Water	
10/12/2013	03:46:28	111	4.5	14.55	15.4		
10/12/2013	03:46:34					Start Cement Slurry	
10/12/2013	03:46:34	108	4.2	14.82	15.8		
10/12/2013	03:48:40	101	4.6	13.81	25.3		
10/12/2013	03:52:38					Reset Total, Vol = 30.19 bbl	
10/12/2013	03:52:38	42	4.0	14.34	43.1		
10/12/2013	03:52:42					End Cement Slurry	

Well			Field		Job Start	Customer	Job Number
BIG SKY 12-11			DJ		Oct/11/2013	NIGHTHAWK	CPU7-00005
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
10/12/2013	03:52:44					Shutdown	
10/12/2013	03:52:44	-4	1.9	14.62	43.4		
10/12/2013	03:52:47					Drop Top Plug	
10/12/2013	03:52:47	10	0.5	14.63	43.4		
10/12/2013	03:53:40	-3	0.0	14.34	43.4		
10/12/2013	03:54:01					Start Displacement	
10/12/2013	03:54:01	20	2.2	13.79	43.7		
10/12/2013	03:56:37					Cement To Surface	
10/12/2013	03:56:37	76	4.4	8.50	54.2		
10/12/2013	03:58:40	87	2.4	8.44	61.4		
10/12/2013	04:03:40	55	0.0	8.40	64.4		
10/12/2013	04:05:24					Reset Total, Vol = 19.32 bbl	
10/12/2013	04:05:24	54	0.0	8.40	64.4		
10/12/2013	04:05:29					Bump Top Plug	
10/12/2013	04:05:29	55	0.0	8.40	64.4		
10/12/2013	04:05:31					End Job	
10/12/2013	04:05:31	55	0.0	8.40	64.4		

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 3.0	N2	Mud	Maximum Rate 5.0	Total Slurry 31.0	Mud	Spacer 20.0	N2	
Treating Pressure Summary, psi				Breakdown Fluid				
Maximum 120	Final 0	Average 60	Bump Plug to 900	Breakdown	Type	Volume	Density	
Avg. N2 Percent		Designed Slurry Volume 31.0 bbl	Displacement 18.8 bbl	Mix Water Temp 68 degF	Cement Circulated to Surface? ☒	Volume		
					Washed Thru Perfs ☐	To		
Customer or Authorized Representative			Schlumberger Supervisor MATT WHITE			Circulation Lost ☐	Job Completed ☒	
						-	-	