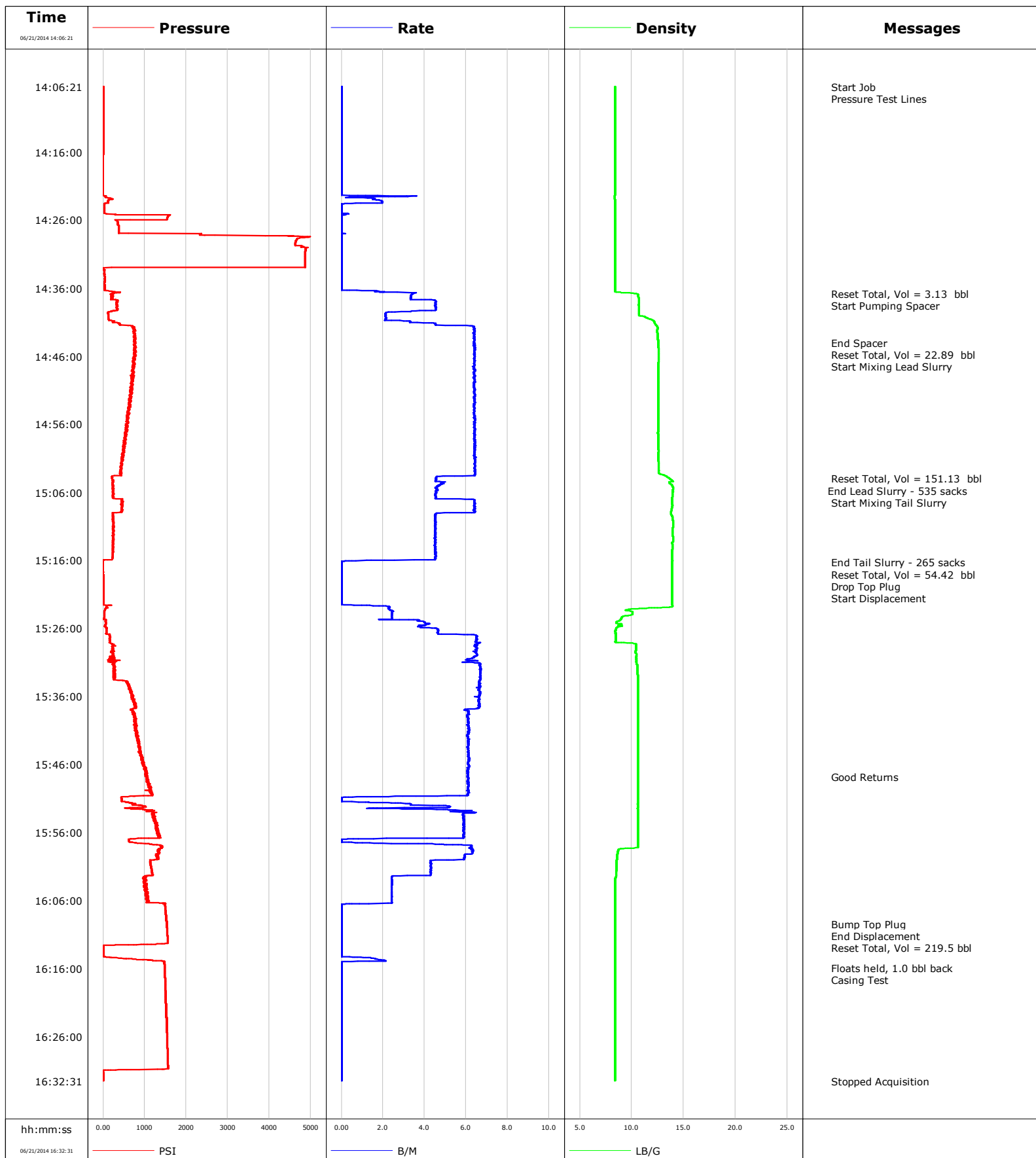


**Well** Horsetail 30F-3106  
**Field** Wildcat  
**Engineer** Michael Simon/T Morrow  
**Country** United States

**Client** Whiting  
**SIR No.** C4H5-00366  
**Job Type** 7 Intermediate  
**Job Date** 06-21-2014

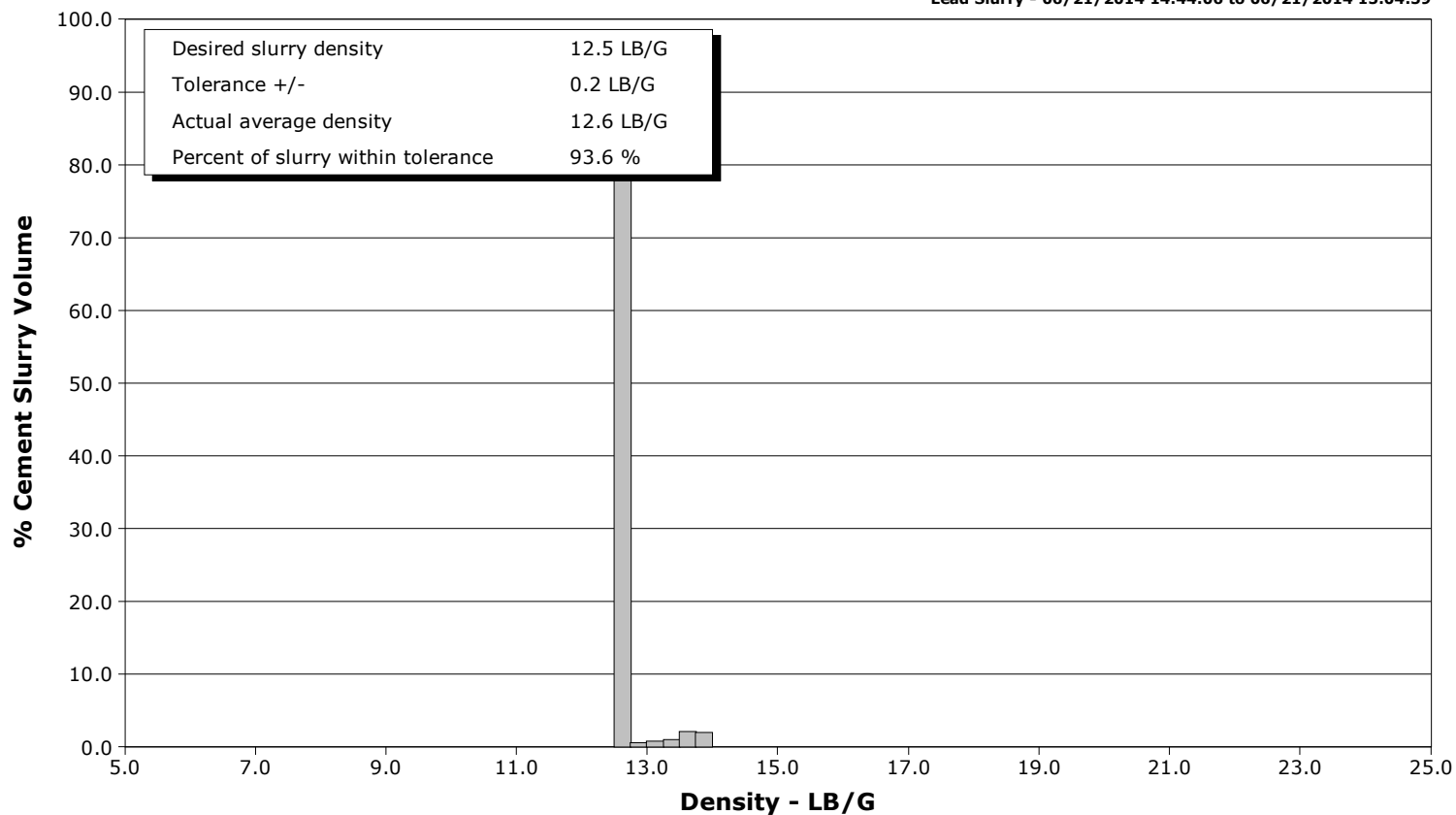


# Schlumberger Cementing Qa/Qc Density Report

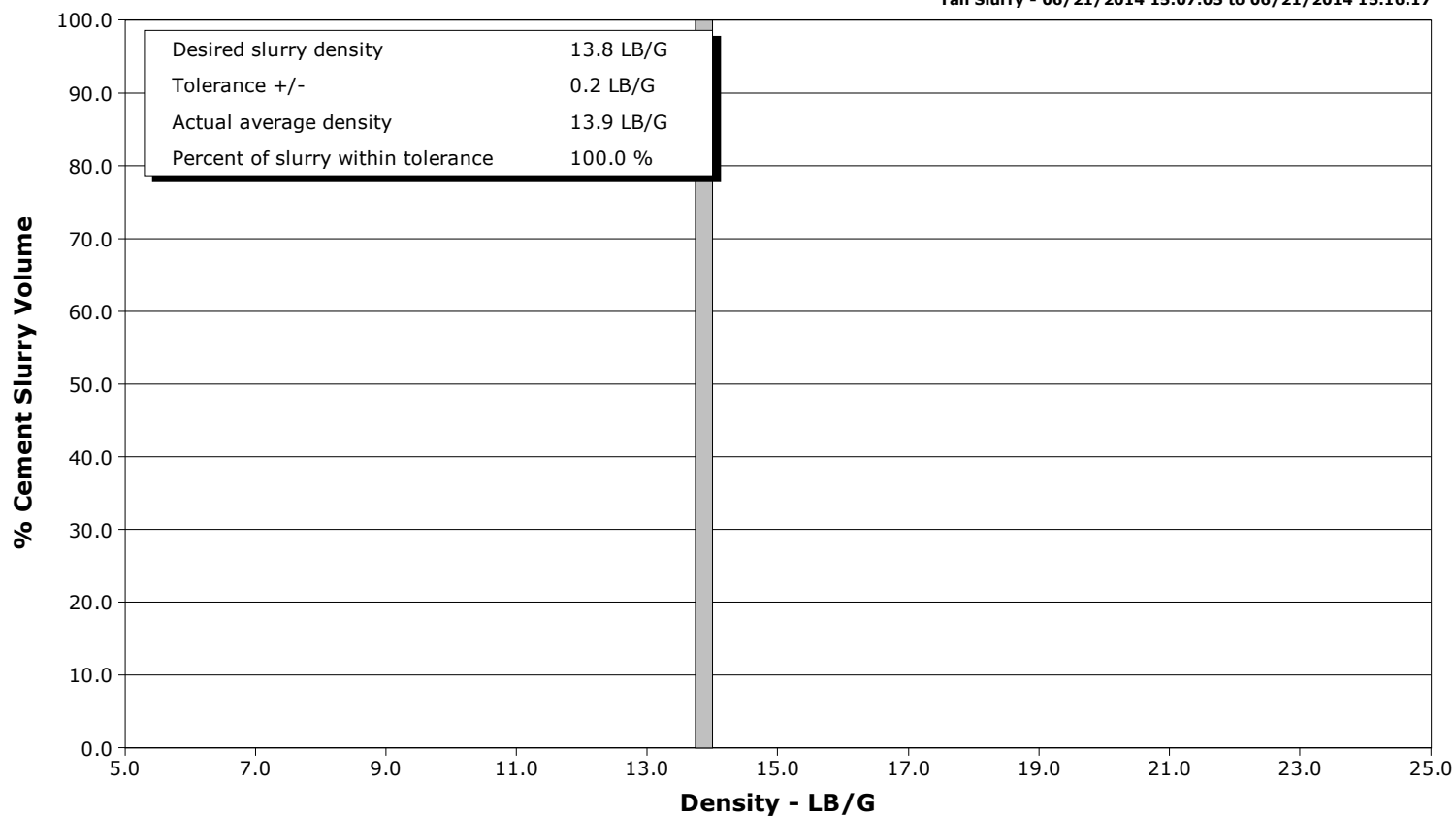
**Well** Horsetail 30F-3106  
**Field** Wildcat  
**Engineer** Michael Simon/T Morrow  
**Country** United States

**Client** Whiting  
**SIR No.** C4H5-00366  
**Job Type** 7 Intermediate  
**Job Date** 06-21-2014

Lead Slurry - 06/21/2014 14:44:06 to 06/21/2014 15:04:59



Tail Slurry - 06/21/2014 15:07:05 to 06/21/2014 15:16:17



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Well Horsetail 30F-3106 30F-3106			Field Wildcat		Job Start Jun/21/2014	Customer Whiting	Job Number C4H5-00366
Date	Time 24-hr clock	Treating Pressure PSI		Flow Rate B/M	Density LB/G	Volume BBL	Message
06/21/2014	14:42:26	740		6.4	12.47	25.7	
06/21/2014	14:44:01						End Spacer
06/21/2014	14:44:01	780		6.4	12.55	35.8	
06/21/2014	14:44:03						Reset Total, Vol = 22.89 bbl
06/21/2014	14:44:03	762		6.4	12.55	36.0	
06/21/2014	14:44:06						Start Mixing Lead Slurry
06/21/2014	14:44:06	774		6.4	12.55	36.3	
06/21/2014	14:45:26	800		6.4	12.59	44.9	
06/21/2014	14:48:26	738		6.4	12.55	64.1	
06/21/2014	14:51:26	682		6.4	12.55	83.3	
06/21/2014	14:54:26	621		6.4	12.55	102.5	
06/21/2014	14:57:26	522		6.4	12.53	121.7	
06/21/2014	15:00:26	447		6.4	12.56	141.0	
06/21/2014	15:03:26	428		6.4	13.00	160.3	
06/21/2014	15:04:01						Reset Total, Vol = 151.13 bbl
06/21/2014	15:04:01	211		4.5	13.66	163.3	
06/21/2014	15:04:59						End Lead Slurry
06/21/2014	15:04:59	247		4.8	13.85	167.8	
06/21/2014	15:06:26	227		4.5	13.93	174.5	
06/21/2014	15:07:05						Start Mixing Tail Slurry
06/21/2014	15:07:05	433		6.4	13.89	177.6	
06/21/2014	15:09:26	238		4.5	13.86	191.9	
06/21/2014	15:12:26	239		4.5	13.95	205.4	
06/21/2014	15:15:26	226		4.5	13.89	219.0	
06/21/2014	15:16:17						End Tail Slurry
06/21/2014	15:16:17	-1		0.0	13.88	221.6	
06/21/2014	15:16:39						Reset Total, Vol = 54.42 bbl
06/21/2014	15:16:39	-1		0.0	13.90	221.6	
06/21/2014	15:16:57						Drop Top Plug
06/21/2014	15:16:57	-1		0.0	13.90	221.6	
06/21/2014	15:16:59						Start Displacement
06/21/2014	15:16:59	-1		0.0	13.90	221.6	
06/21/2014	15:18:26	0		0.0	13.90	221.6	
06/21/2014	15:21:26	3		0.0	13.89	221.6	
06/21/2014	15:24:26	30		2.4	9.03	225.8	
06/21/2014	15:27:26	168		6.5	8.44	239.1	
06/21/2014	15:30:26	193		6.3	10.43	258.6	
06/21/2014	15:33:26	255		6.7	10.58	278.3	
06/21/2014	15:36:26	720		6.7	10.59	298.3	
06/21/2014	15:39:26	776		6.1	10.59	317.3	
06/21/2014	15:42:26	818		6.1	10.59	335.6	
06/21/2014	15:45:26	960		6.1	10.59	354.0	
06/21/2014	15:47:52						Good Returns
06/21/2014	15:47:52	1031		6.1	10.59	368.8	
06/21/2014	15:48:26	1094		6.1	10.59	372.3	
06/21/2014	15:51:26	450		0.0	10.58	386.1	
06/21/2014	15:54:26	1279		5.9	10.58	400.5	
06/21/2014	15:57:26	659		0.0	10.59	415.0	
06/21/2014	16:00:26	1132		4.3	8.55	431.4	
06/21/2014	16:03:26	993		2.4	8.42	442.3	
06/21/2014	16:06:26	1451		2.2	8.40	449.5	
06/21/2014	16:09:26	1529		0.0	8.40	449.6	
06/21/2014	16:09:28						Bump Top Plug
06/21/2014	16:09:28						End Displacement

Well Horsetail 30F-3106 30F-3106			Field Wildcat		Job Start Jun/21/2014	Customer Whiting		Job Number C4H5-00366
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
06/21/2014	16:09:53					Reset Total, Vol = 219.5 bbl		
06/21/2014	16:09:53	1534	0.0	8.40	449.6			
06/21/2014	16:12:26	1158	0.0	8.40	449.6			
06/21/2014	16:15:26	1477	0.0	8.40	450.7			
06/21/2014	16:15:59					Floats held, 1.0 bbl back		
06/21/2014	16:15:59	1479	0.0	8.41	450.7			
06/21/2014	16:16:27					Casing Test		
06/21/2014	16:16:27	1482	0.0	8.41	450.7			
06/21/2014	16:18:26	1495	0.0	8.40	450.7			
06/21/2014	16:21:26	1514	0.0	8.40	450.7			
06/21/2014	16:24:26	1531	0.0	8.40	450.7			
06/21/2014	16:27:26	1546	0.0	8.40	450.7			
06/21/2014	16:30:26	1561	0.0	8.40	450.7			
06/21/2014	16:32:31	0	0.0	8.40	450.7			

### Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl							
Slurry 5.3	N2	Mud 0.0	Maximum Rate 6.7	Total Slurry 205.0	Mud 0.0	Spacer 22.0	N2					
Treating Pressure Summary, psi					Breakdown Fluid							
Maximum 4998	Final 0	Average 814	Bump Plug to 1800	Breakdown	Type	Volume	Density					
Avg. N2 Percent		Designed Slurry Volume 207.0 bbl		Displacement 219.5 bbl		Mix Water Temp 70 degF		Cement Circulated to Surface?		<input checked="" type="checkbox"/>	Volume 50.0 bbl	
								Washed Thru Perfs		<input type="checkbox"/>	To	
Customer or Authorized Representative Kyle Renton				Schlumberger Supervisor Michael Simon/T Morrow				Circulation Lost		<input type="checkbox"/>	Job Completed	<input checked="" type="checkbox"/>
								-		-		