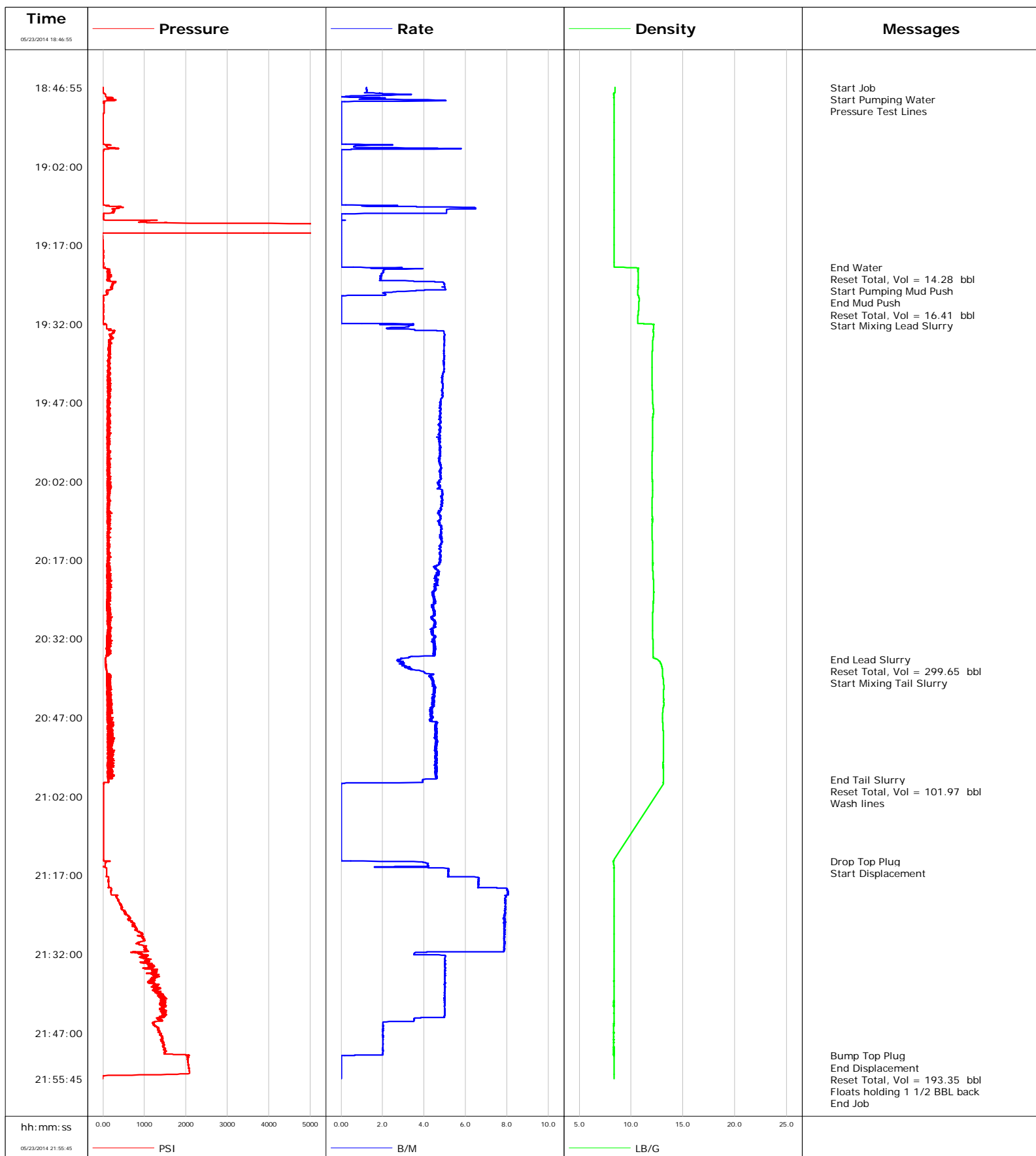


Well John Craig 10-10
Field Old 10
Engineer Anthony Fowler
Country United States

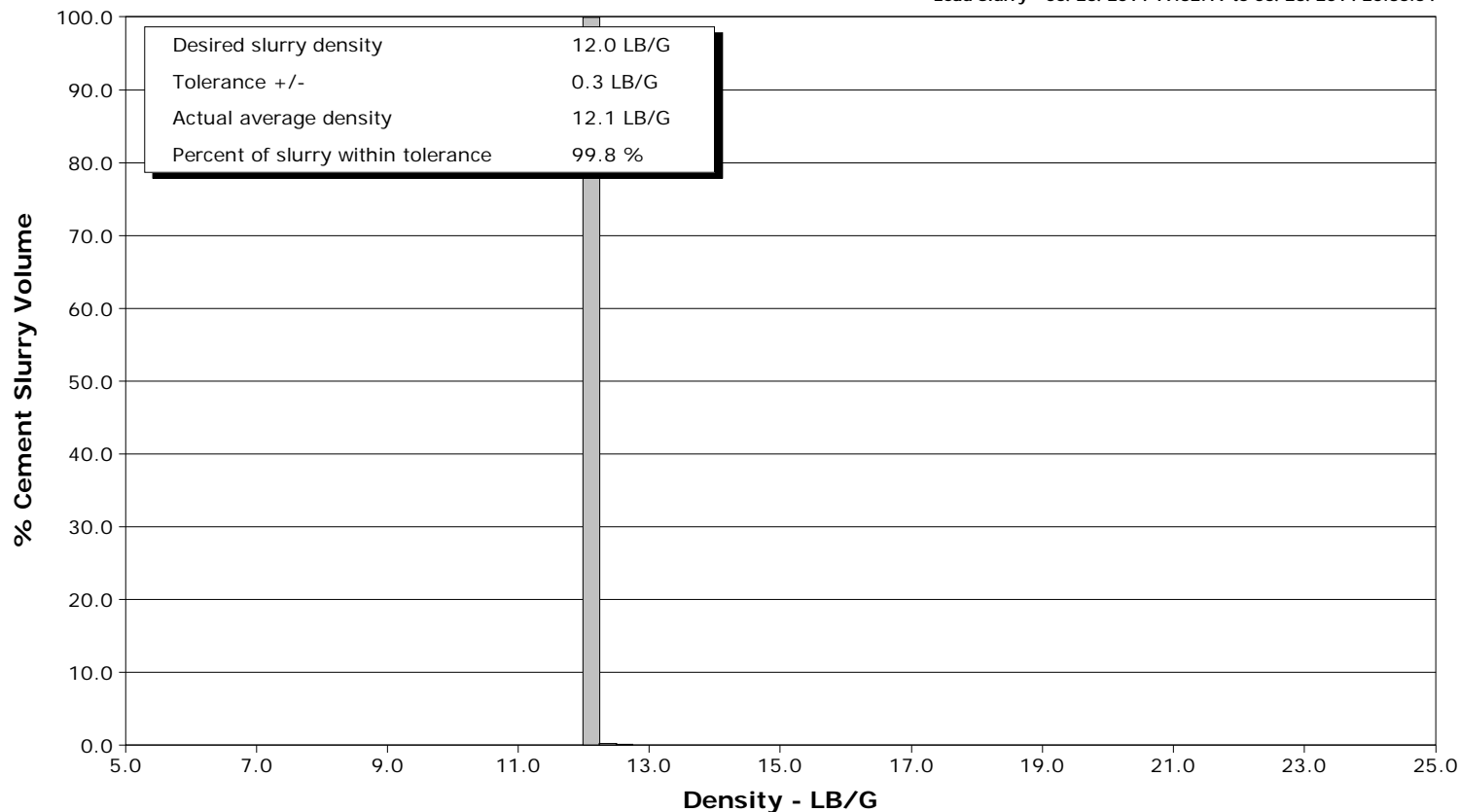
Client Nighthawk
SIR No. C459-02695
Job Type 5 1/2 LS
Job Date 05-23-2014



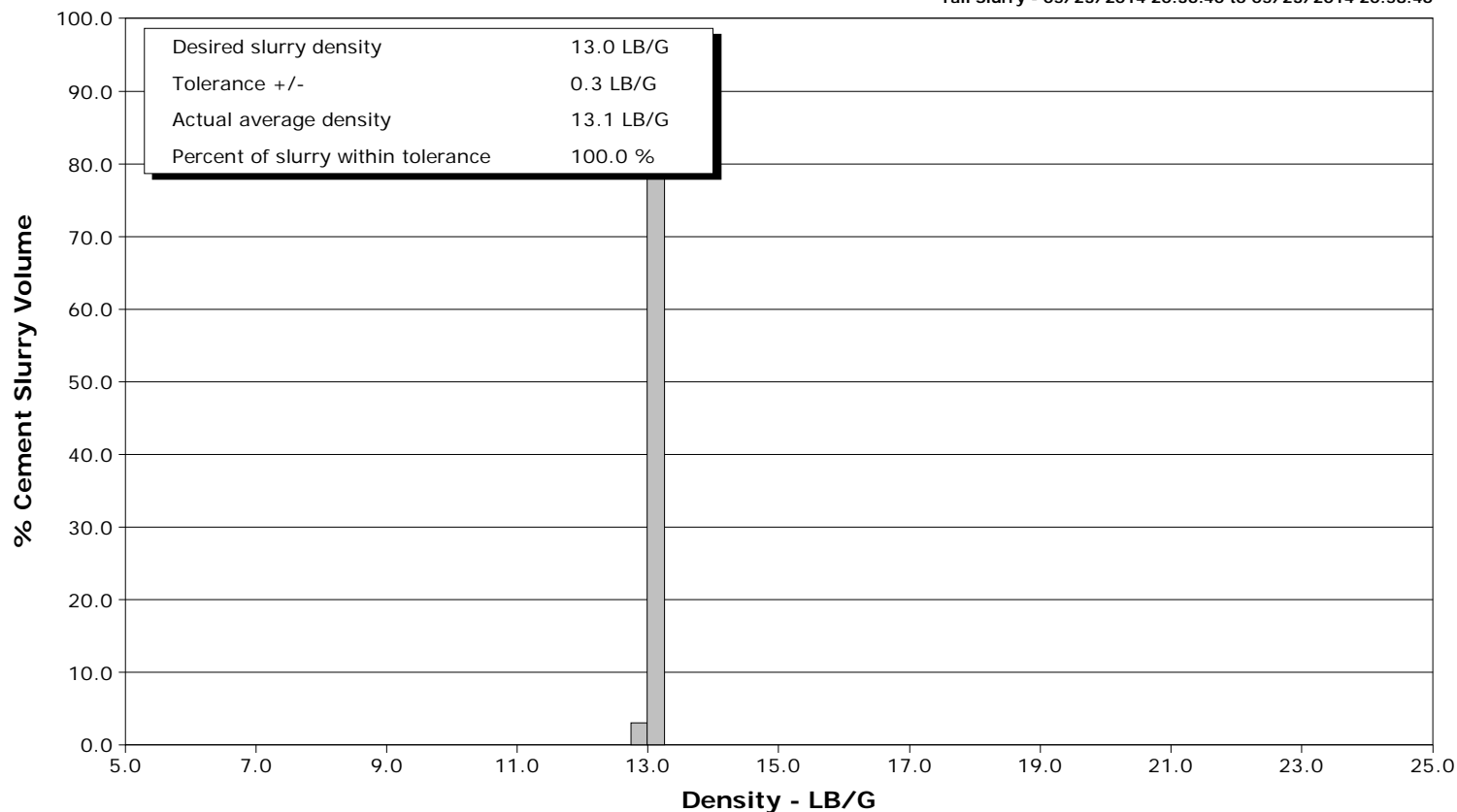
Well John Craig 10-10
Field Old 10
Engineer Anthony Fowler
Country United States

Client Nighthawk
SIR No. C459-02695
Job Type 5 1/2 LS
Job Date 05-23-2014

Lead Slurry - 05/23/2014 19:32:19 to 05/23/2014 20:35:54



Tail Slurry - 05/23/2014 20:36:40 to 05/23/2014 20:58:46





Cementing Service Report

				Customer Nighthawk		Job Number C459-02695		
Well John Craig 10-10			Location (legal)		Schlumberger Location Rock Springs		Job Start May/23/2014	
Field Old 10		Formation Name/Type Dirty-Sandstone		Deviation	Bit Size	Well MD 8400.0 ft		Well TVD
County Lincoln		State/Province Colorado		BHP	BHST	BHCT	Pore Press. Gradient	
Well Master		API/UWI						
Rig Name Xtreme 11	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	8400.0	5.500	17.0	P110	8RD	
			0.0	0.000	0.0			
Drilling Fluid Type		Max. Density	Plastic Viscosity	Tubing/Drill Pipe				
				Depth,	Size,	Weight,	Grade	Thread
Service Line Cementing	Job Type 5 1/2 LS							
Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection Single Cement head	Perforations/Open Hole					
			Top,	Bottom,		No. of Shots	Total Interval	
							Diameter	
Treat Down Casing		Displacement 193.0 bbl		Packer Type		Packer Depth		
Tubing Vol.		Casing Vol.		Annular Vol.		Openhole Vol.		
Casing/Tubing Secured <input checked="" type="checkbox"/>	1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>	Casing Tools				Squeeze Job		
Lift Pressure			Shoe Type Guide			Squeeze Type		
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 8400.0 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 May/23/2014		Arrived on Location May/23/2014	Leave Location May/23/2014	Collar Type Float		Tail Pipe Depth		
				Collar Depth 8306.0 ft		Sqz. Total Vol.		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
05/23/2014	14:48:36					Started Acquisition		
05/23/2014	18:46:55					Start Job		
05/23/2014	18:46:55	4	1.2	8.45	0.0			
05/23/2014	18:46:58					Start Pumping Water		
05/23/2014	18:46:58	4	1.2	8.45	0.1			
05/23/2014	18:47:03					Pressure Test Lines		
05/23/2014	18:47:03	4	1.2	8.46	0.2			
05/23/2014	18:48:36	64	0.5	8.33	2.6			
05/23/2014	18:51:16	26	0.0	8.34	4.9			
05/23/2014	18:53:56	7	0.0	8.34	4.9			
05/23/2014	18:56:36	7	0.0	8.34	4.9			
05/23/2014	18:59:16	8	0.0	8.34	6.8			
05/23/2014	19:01:56	6	0.0	8.34	6.8			
05/23/2014	19:04:36	7	0.0	8.34	6.8			
05/23/2014	19:07:16	7	0.0	8.34	6.8			
05/23/2014	19:09:56	396	6.5	8.34	8.7			
05/23/2014	19:12:36	898	0.0	8.34	14.3			
05/23/2014	19:15:16	-10	0.0	8.34	14.3			
05/23/2014	19:17:56	11	0.0	8.34	14.3			
05/23/2014	19:21:12					End Water		
05/23/2014	19:21:12	9	0.0	8.38	14.3			

Well			Field		Job Start		Customer		Job Number	
John Craig 10-10			Old 10		May/23/2014		Nighthawk		C459-02695	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
05/23/2014	19:21:13	11	0.6	8.82	14.3					
05/23/2014	19:21:21					Start Pumping Mud Push				
05/23/2014	19:21:21	23	2.9	10.51	0.2					
05/23/2014	19:23:16	147	1.9	10.69	4.2					
05/23/2014	19:25:56	81	2.6	10.64	15.0					
05/23/2014	19:26:38					End Mud Push				
05/23/2014	19:26:38					Reset Total, Vol = 16.41 bbl				
05/23/2014	19:26:38	13	0.2	10.71	16.4					
05/23/2014	19:28:36	15	0.0	10.74	0.0					
05/23/2014	19:31:16	11	0.0	10.64	0.0					
05/23/2014	19:32:19					Start Mixing Lead Slurry				
05/23/2014	19:32:19	89	3.3	12.16	1.1					
05/23/2014	19:33:56	215	5.0	12.16	7.2					
05/23/2014	19:36:36	139	5.0	12.08	20.5					
05/23/2014	19:39:16	126	4.9	12.03	33.7					
05/23/2014	19:41:56	129	4.9	12.04	46.9					
05/23/2014	19:44:36	152	4.9	12.05	59.9					
05/23/2014	19:47:16	145	4.8	12.09	72.9					
05/23/2014	19:49:56	116	4.8	12.09	85.6					
05/23/2014	19:52:36	141	4.8	12.06	98.3					
05/23/2014	19:55:16	122	4.8	12.07	111.0					
05/23/2014	19:57:56	145	4.8	12.03	123.7					
05/23/2014	20:00:36	149	4.8	12.03	136.4					
05/23/2014	20:03:16	155	4.7	12.07	149.1					
05/23/2014	20:05:56	124	4.9	12.03	162.1					
05/23/2014	20:08:36	132	4.8	12.04	174.9					
05/23/2014	20:11:16	131	4.8	12.03	187.6					
05/23/2014	20:13:56	128	4.8	12.06	200.5					
05/23/2014	20:16:36	114	4.8	12.08	213.2					
05/23/2014	20:19:16	156	4.7	12.11	225.7					
05/23/2014	20:21:56	105	4.5	12.16	238.0					
05/23/2014	20:24:36	164	4.5	12.15	249.9					
05/23/2014	20:27:16	196	4.5	12.09	261.8					
05/23/2014	20:29:56	128	4.5	12.06	273.8					
05/23/2014	20:32:36	195	4.4	12.12	285.6					
05/23/2014	20:35:16	78	4.5	12.14	297.6					
05/23/2014	20:35:54					End Lead Slurry				
05/23/2014	20:35:54	59	2.8	12.51	299.6					
05/23/2014	20:35:55					Reset Total, Vol = 299.65 bbl				
05/23/2014	20:35:55	54	2.8	12.54	299.7					
05/23/2014	20:36:40					Start Mixing Tail Slurry				
05/23/2014	20:36:40	67	2.9	12.85	2.1					
05/23/2014	20:37:56	89	3.5	13.02	6.1					
05/23/2014	20:40:36	93	4.4	13.14	17.5					
05/23/2014	20:43:16	177	4.5	13.14	29.4					
05/23/2014	20:45:56	171	4.4	13.05	41.2					
05/23/2014	20:48:36	113	4.6	13.07	53.0					
05/23/2014	20:51:16	135	4.6	13.10	65.2					
05/23/2014	20:53:56	215	4.6	13.10	77.4					
05/23/2014	20:56:36	146	4.5	13.10	89.6					
05/23/2014	20:58:46					End Tail Slurry				
05/23/2014	20:58:46	127	4.0	13.12	99.5					
05/23/2014	20:59:16	137	3.9	13.11	101.4					
05/23/2014	20:59:25					Reset Total, Vol = 101.97 bbl				

Well			Field		Job Start		Customer		Job Number	
John Craig 10-10			Old 10		May/23/2014		Nighthawk		C459-02695	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
05/23/2014	20:59:28					Wash lines				
05/23/2014	20:59:28	18	0.5	13.14	0.1					
05/23/2014	21:14:18					Drop Top Plug				
05/23/2014	21:14:18	14	0.0	8.34	0.1					
05/23/2014	21:14:19					Start Displacement				
05/23/2014	21:14:19	19	0.0	8.34	0.1					
05/23/2014	21:15:16	55	4.2	8.34	3.7					
05/23/2014	21:17:56	132	6.6	8.34	17.7					
05/23/2014	21:20:36	195	8.0	8.35	37.0					
05/23/2014	21:23:16	435	7.9	8.34	58.2					
05/23/2014	21:25:56	705	7.9	8.34	79.2					
05/23/2014	21:28:36	877	7.8	8.34	100.2					
05/23/2014	21:31:16	1025	7.9	8.34	121.2					
05/23/2014	21:33:56	1162	5.0	8.34	134.7					
05/23/2014	21:36:36	1235	5.0	8.33	148.0					
05/23/2014	21:39:16	1314	5.0	8.33	161.4					
05/23/2014	21:41:56	1466	5.0	8.33	174.7					
05/23/2014	21:44:36	1348	3.5	8.33	187.4					
05/23/2014	21:47:16	1398	2.0	8.33	193.2					
05/23/2014	21:49:56	1466	2.0	8.33	198.6					
05/23/2014	21:51:20					Bump Top Plug				
05/23/2014	21:51:20	2027	0.6	8.33	201.3					
05/23/2014	21:51:21					End Displacement				
05/23/2014	21:51:21	2051	0.3	8.33	201.3					
05/23/2014	21:51:23					Reset Total, Vol = 193.35 bbl				
05/23/2014	21:51:23	2010	0.0	8.33	201.4					
05/23/2014	21:52:36	2045	0.0	8.34	0.0					
05/23/2014	21:55:15					Floats holding 1 1/2 BBL back				
05/23/2014	21:55:15	-5	0.0	8.34	0.0					
05/23/2014	21:55:16	-7	0.0	8.34	0.0					
05/23/2014	21:55:43					End Job				
05/23/2014	21:55:43	-2	0.0	8.34	0.0					

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 4.7	N2	Mud 3.1	Maximum Rate 14.3	Total Slurry 400.0	Mud 0.0	Spacer 0.0	N2	
Treating Pressure Summary, psi				Breakdown Fluid				
Maximum 5494	Final -2	Average 360	Bump Plug to	Breakdown	Type	Volume	Density	
Avg. N2 Percent		Designed Slurry Volume 393.0 bbl	Displacement 193.0 bbl	Mix Water Temp	Cement Circulated to Surface? <input type="checkbox"/>	Volume		
					Washed Thru Perfs <input type="checkbox"/>	To		
Customer or Authorized Representative			Schlumberger Supervisor Anthony Fowler			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
						-	-	