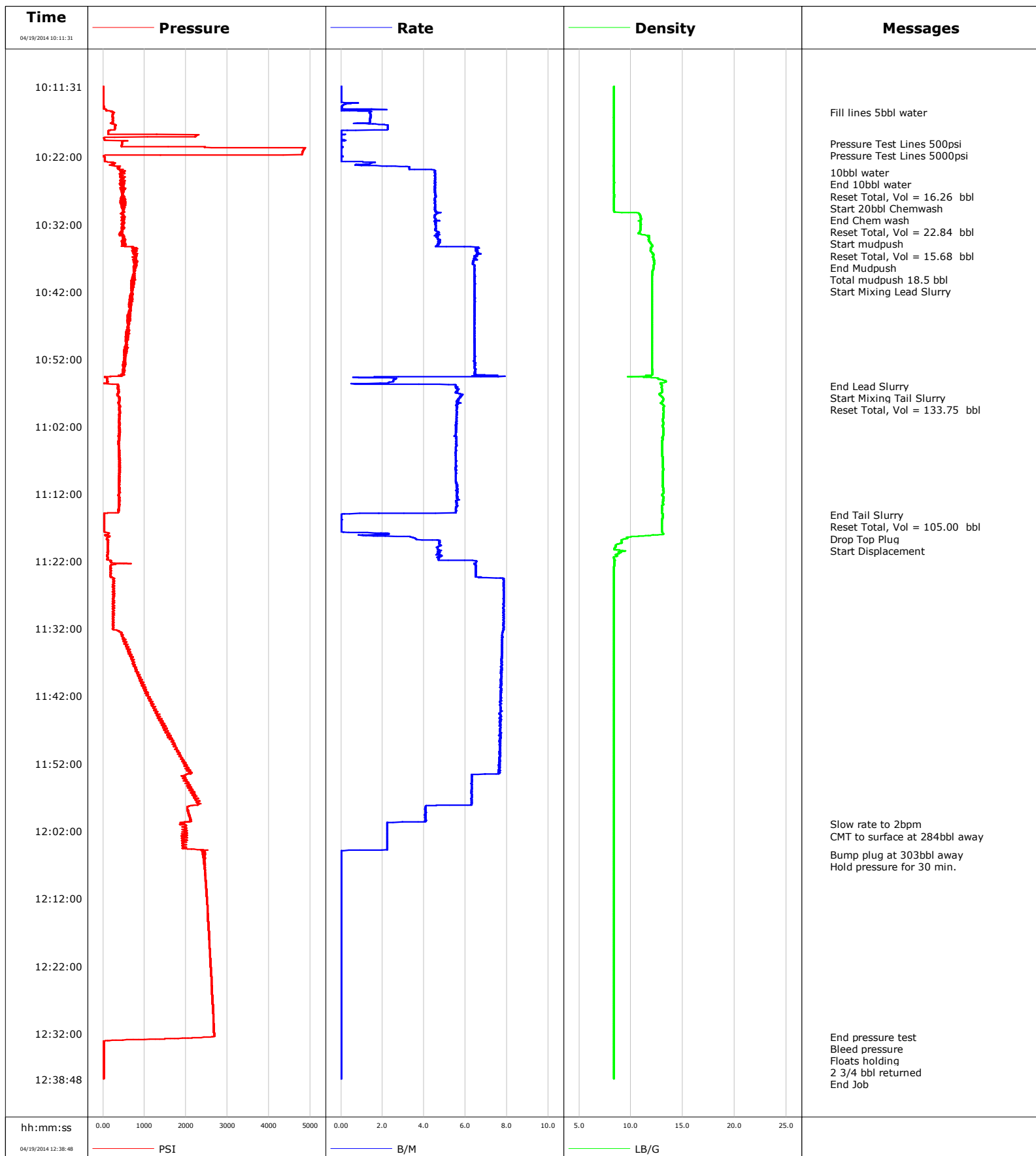


**Well** NRC  
**Field** DJ  
**Engineer** Chris Valerio  
**Country** United States

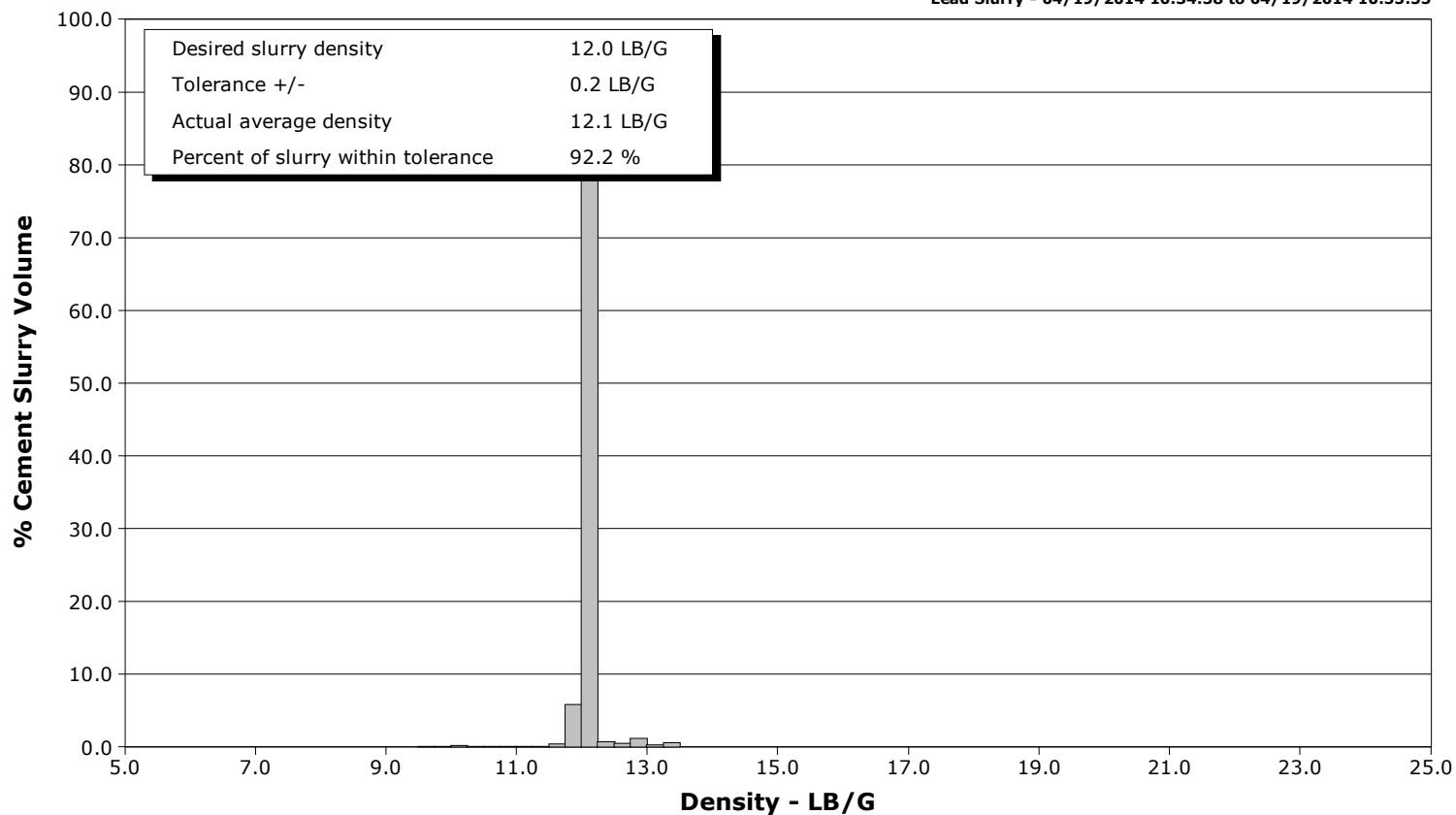
**Client** Anadarko  
**SIR No.** C4H5-00133  
**Job Type** Intermediate  
**Job Date** 04-19-2014



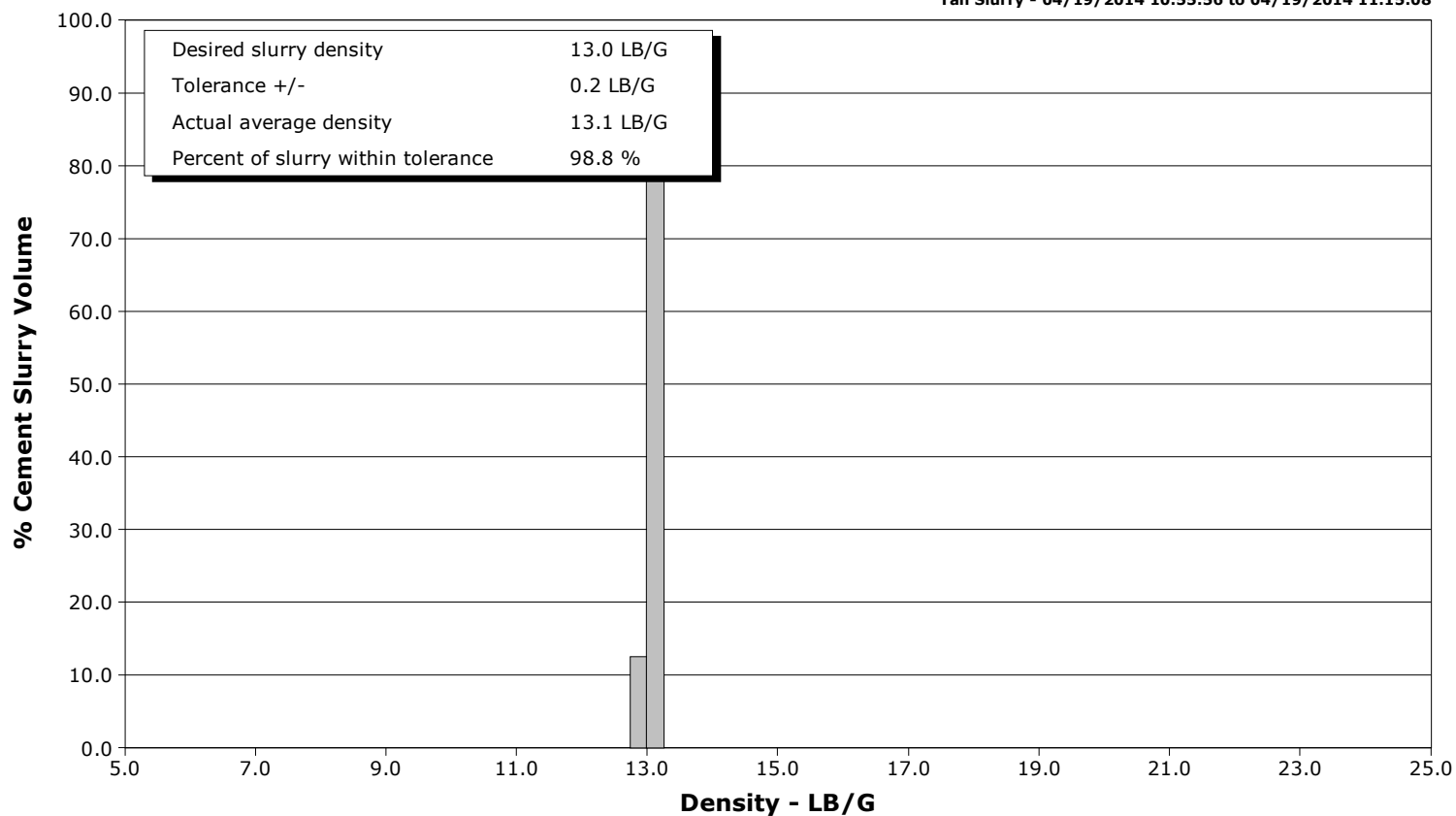
**Well** NRC  
**Field** DJ  
**Engineer** Chris Valerio  
**Country** United States

**Client** Anadarko  
**SIR No.** C4H5-00133  
**Job Type** Intermediate  
**Job Date** 04-19-2014

**Lead Slurry - 04/19/2014 10:34:38 to 04/19/2014 10:55:55**



**Tail Slurry - 04/19/2014 10:55:56 to 04/19/2014 11:15:08**



# Cementing Service Report

				Customer Anadarko			Job Number C4H5-00133						
Well NRC 2C-4HZ			Location (legal)			Schlumberger Location			Job Start Apr/19/2014				
Field DJ		Formation Name/Type Shale			Deviation 90 deg		Bit Size 8.8 in		Well MD 8008.0 ft		Well TVD 8008.0 ft		
County Weld		State/Province Colorado			BHP psi		BHST 220 degF		BHCT 183 degF		Pore Press. Gradient lb/gal		
Well Master 0631536437		API/UWI 05123389950000											
Rig Name H&P #308		Drilled For Oil		Service Via Land		Casing/Liner							
						Depth, ft		Size, in		Weight, lb/ft		Grade	
Offshore Zone		Well Class New		Well Type Development		1075.0		9.6		36.0		J55	
						8008.0		7.0		26.0		P110	
Drilling Fluid Type Oil Mud		Max. Density 9.60 lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe							
						T/D		Depth, ft		Size, in		Weight, lb/ft	
Service Line Cementing		Job Type Intermediate											
Max. Allowed Tub. Press 4500 psi		Max. Allowed Ann. Press psi		WH Connection Single Cement head		Perforations/Open Hole							
						Top, ft		Bottom, ft		shot/ft		No. of Shots	
						ft		ft					
						ft		ft					
						ft		ft					
						Treat Down Casing		Displacement 303.3 bbl		Packer Type		Packer Depth ft	
						Tubing Vol. bbl		Casing Vol. 306.7 bbl		Annular Vol. 218.0 bbl		Openhole Vol. bbl	
Service Instructions 10bbl water 20bbl chemwash 20bbl Mudpush @ 11# 134bbl 420sks Lead CMT @ 12# 1.79 Yield 10 gal/sk water 110bbl 330sks Tail CMT @ 13# 1.88 Yield 9.49 gal/sk water													
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>				Casing Tools				Squeeze Job			
Lift Pressure 5410 psi						Shoe Type Float				Squeeze Type			
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 8008.0 ft				Tool Type			
No. Centralizers		Top Plugs 1		Bottom Plugs 1		Stage Tool Type				Tool Depth ft			
Cement Head Type Single						Stage Tool Depth ft				Tail Pipe Size in			
Job Scheduled For Apr/19/2014 06:00		Arrived on Location Apr/19/2014 05:00		Leave Location Apr/19/2014 12:30		Collar Type Float				Tail Pipe Depth ft			
						Collar Depth 7920.0 ft				Sqz. Total Vol. bbl			
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message							
04/19/2014	10:11:31	7	0.0	8.35	0.0	Started Acquisition							
04/19/2014	10:15:24	259	1.4	8.36	0.7	Fill lines 5bbl water							
04/19/2014	10:16:31	239	1.4	8.35	2.2								
04/19/2014	10:20:00	456	0.0	8.35	5.1	Pressure Test Lines 500psi							
04/19/2014	10:21:11	4818	0.0	8.35	5.1	Pressure Test Lines 5000psi							
04/19/2014	10:21:31	4800	0.0	8.35	5.1								
04/19/2014	10:24:20	471	4.5	8.35	9.6	10bbl water							
04/19/2014	10:24:21	485	4.5	8.35	9.7	End 10bbl water							
04/19/2014	10:25:48	478	4.6	8.40	16.3	Reset Total, Vol = 16.26 bbl							
04/19/2014	10:26:01	401	4.5	8.34	17.2	Start 20bbl Chemwash							
04/19/2014	10:26:31	439	4.5	8.34	19.5								
04/19/2014	10:30:48	497	4.5	10.93	39.0	End Chem wash							
04/19/2014	10:30:50	469	4.5	10.93	39.1	Reset Total, Vol = 22.84 bbl							
04/19/2014	10:31:00	452	4.5	10.94	39.9	Start mudpush							
04/19/2014	10:31:31	481	4.7	10.74	42.2								
04/19/2014	10:34:15	524	4.7	11.72	54.8	Reset Total, Vol = 15.68 bbl							
04/19/2014	10:34:34	525	4.8	11.76	56.3	End Mudpush							
04/19/2014	10:34:35	526	4.8	11.76	56.4	Total mudpush 18.5 bbl							
04/19/2014	10:34:38	497	4.7	11.84	56.6	Start Mixing Lead Slurry							
04/19/2014	10:36:31	772	6.5	12.20	67.6								
04/19/2014	10:41:31	728	6.4	12.02	99.8								

Well			Field		Job Start	Customer		Job Number
NRC 2C-4HZ			DJ		Apr/19/2014	Anadarko		C4H5-00133
Date	Time 24-hr clock	Treating Pressure PSI		Flow Rate B/M	Density LB/G	Volume BBL	Message	
04/19/2014	10:51:31	533		6.5	12.01	164.2		
04/19/2014	10:55:55	361		5.6	12.97	187.9	End Lead Slurry	
04/19/2014	10:55:56	356		5.5	12.97	188.0	Start Mixing Tail Slurry	
04/19/2014	10:56:02	377		5.5	12.96	188.5	Reset Total, Vol = 133.75 bbl	
04/19/2014	10:56:31	369		5.7	12.98	191.2		
04/19/2014	11:01:31	383		5.6	13.11	219.3		
04/19/2014	11:06:31	393		5.5	13.05	247.0		
04/19/2014	11:11:31	395		5.6	13.12	274.8		
04/19/2014	11:15:08	31		0.0	13.07	293.5	End Tail Slurry	
04/19/2014	11:15:23	31		0.0	13.06	293.5	Reset Total, Vol = 105.00 bbl	
04/19/2014	11:15:35	31		0.0	13.05	293.5	Drop Top Plug	
04/19/2014	11:15:36	32		0.0	13.05	293.5	Start Displacement	
04/19/2014	11:16:31	32		0.0	12.98	293.5		
04/19/2014	11:21:31	116		4.7	8.36	309.1		
04/19/2014	11:26:31	235		7.8	8.35	343.8		
04/19/2014	11:31:31	244		7.8	8.35	382.9		
04/19/2014	11:36:31	697		7.7	8.35	421.8		
04/19/2014	11:41:31	1029		7.7	8.35	460.4		
04/19/2014	11:46:31	1502		7.7	8.35	498.9		
04/19/2014	11:51:31	1941		7.7	8.35	537.2		
04/19/2014	11:56:31	2196		6.3	8.35	571.5		
04/19/2014	12:00:58	1868		2.2	8.35	592.8	Slow rate to 2bpm	
04/19/2014	12:01:13	2004		2.2	8.35	593.4	CMT to surface at 284bbl away	
04/19/2014	12:01:31	2001		2.2	8.35	594.0		
04/19/2014	12:05:30	2474		0.0	8.35	601.5	Bump plug at 303bbl away	
04/19/2014	12:05:49	2447		0.0	8.35	601.5	Hold pressure for 30 min.	
04/19/2014	12:06:31	2442		0.0	8.35	601.5		
04/19/2014	12:11:31	2497		0.0	8.35	601.5		
04/19/2014	12:16:31	2545		0.0	8.35	601.5		
04/19/2014	12:21:31	2589		0.0	8.35	601.5		
04/19/2014	12:26:31	2632		0.0	8.35	601.5		
04/19/2014	12:31:31	2675		0.0	8.35	601.5		
04/19/2014	12:32:30	2682		0.0	8.35	601.5	End pressure test	
04/19/2014	12:32:59	738		0.0	8.35	601.5	Bleed pressure	
04/19/2014	12:34:06	18		0.0	8.35	601.5	Floats holding	
04/19/2014	12:34:19	19		0.0	8.35	601.5	2 3/4 bbl returned	
04/19/2014	12:36:31	18		0.0	8.35	601.5		

## Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 5.7	N2	Mud	Maximum Rate 7.9		Total Slurry 244.0	Mud 20.0	Spacer 20.0	N2
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 2682	Final 17	Average 1068	Bump Plug to 2200	Breakdown	Type	Volume bbl	Density lb/gal	
Avg. N2 Percent %		Designed Slurry Volume 244.0 bbl		Displacement 308.0 bbl	Mix Water Temp 60 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 19.0 bbl	
						Washed Thru Perfs <input type="checkbox"/>	To ft	
Customer or Authorized Representative Rick Oman			Schlumberger Supervisor Chris Valerio			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
						-	-	