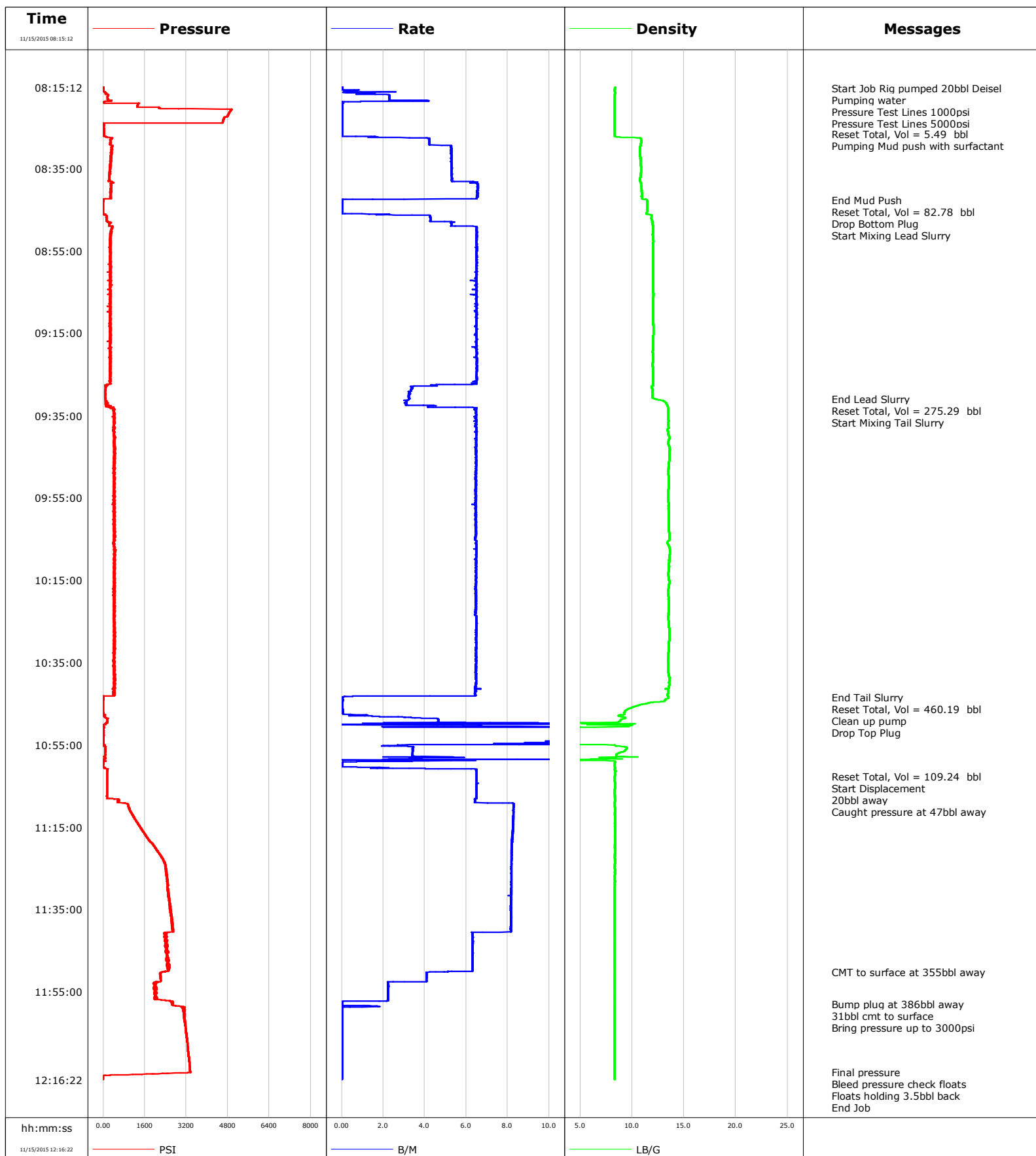


Well Wilson Ranch
Field Wattenberg
Engineer Chris Valerio/Taylor Baird
Country United States

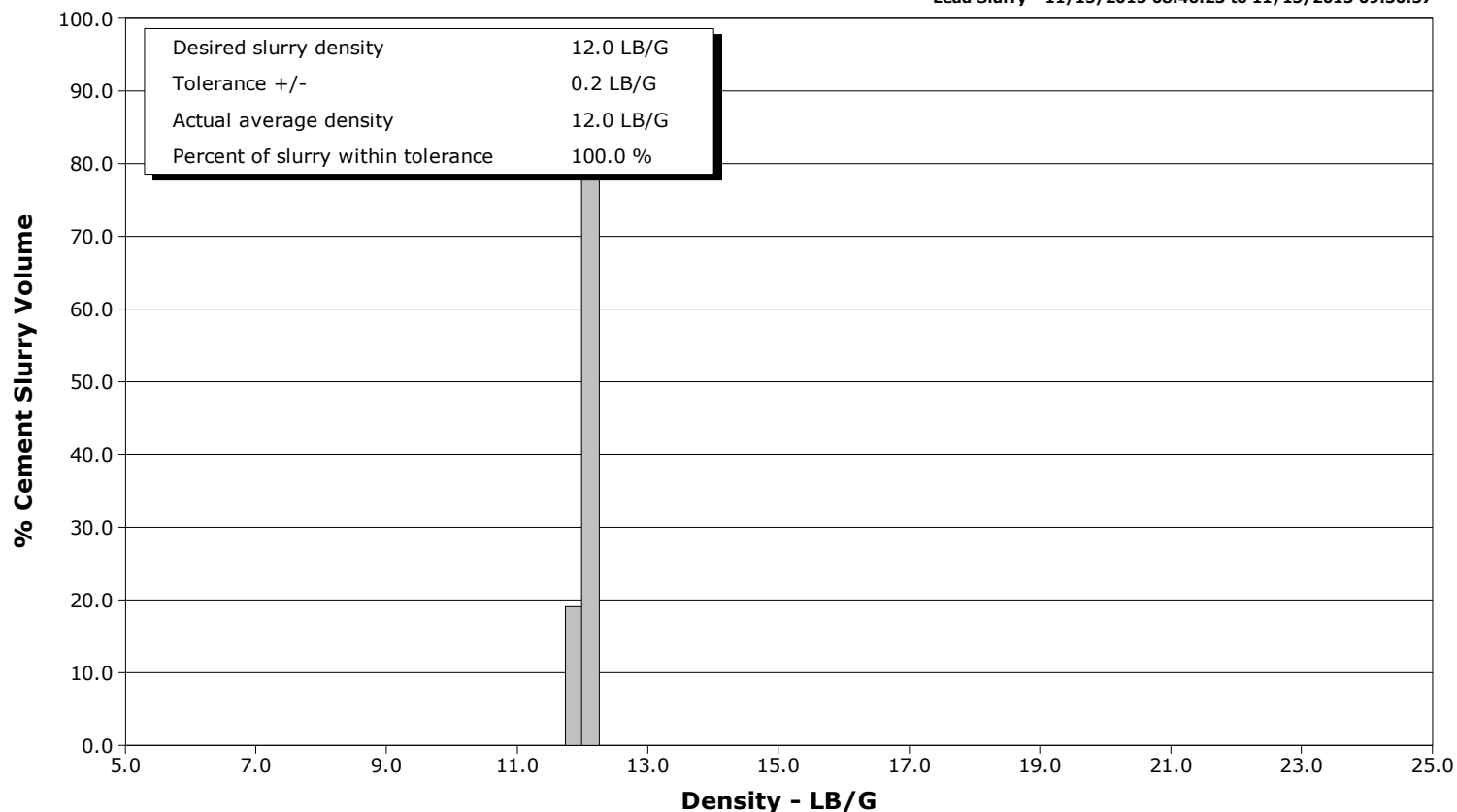
Client Anadarko
SIR No. CWJN-01496
Job Type Production
Job Date 11-15-2015



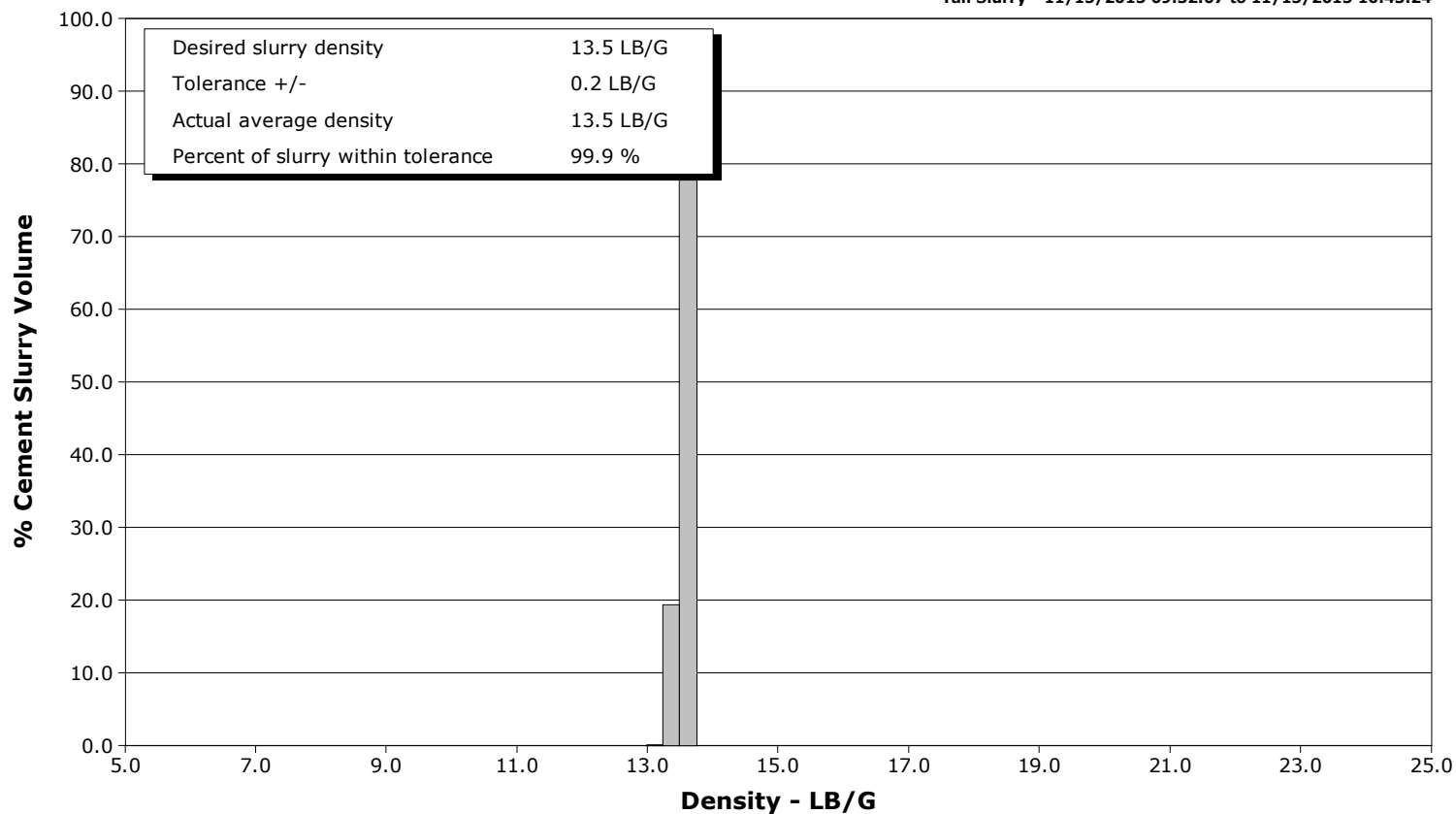
Well Wilson Ranch
Field Wattenberg
Engineer Chris Valerio/Taylor Baird
Country United States

Client Anadarko
SIR No. CWJN-01496
Job Type Production
Job Date 11-15-2015

Lead Slurry - 11/15/2015 08:46:23 to 11/15/2015 09:30:57



Tail Slurry - 11/15/2015 09:32:07 to 11/15/2015 10:43:24



Cementing Service Report

				Customer Anadarko			Job Number CWJN-01496				
Well Wilson Ranch 13N-27HZ			Location (legal)			Schlumberger Location			Job Start Nov/15/2015		
Field Wattenberg		Formation Name/Type Shale		Deviation 90 deg		Bit Size 8.5 in		Well MD 16731.0 ft		Well TVD 7220.0 ft	
County Weld		State/Province Colorado		BHP psi		BHST 233 degF		BHCT 230 degF		Pore Press. Gradient lb/gal	
Well Master 0631620720		API/UWI 05123410530000									
Rig Name Precision #460		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		1838.0		9.6		36.0	
						16731.0		5.5		17.0	
										J55	
										P110	
										8RD	
										8RD	
Drilling Fluid Type Oil Mud		Max. Density 9.50 lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe					
						T/D		Depth, ft		Size, in	
										Weight, lb/ft	
										Grade	
										Thread	
Service Line Cementing		Job Type Production									
Max. Allowed Tub. Press 4500 psi		Max. Allowed Ann. Press psi		WH Connection Double Cement head		Perforations/Open Hole					
						Top, ft		Bottom, ft		shot/ft	
										No. of Shots	
										Total Interval	
						ft		ft		ft	
						ft		ft		Diameter	
						ft		ft		in	
						Treat Down Casing		Displacement 386.0 bbl		Packer Type	
										Packer Depth	
						Tubing Vol. bbl		Casing Vol. 388.0 bbl		Annular Vol. 696.0 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 psi						Shoe Type Float		Squeeze Type			
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 16731.0 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 Nov/15/2015 03:00		Arrived on Location Nov/15/2015 03:00		Leave Location Nov/15/2015 13:30		Collar Type Float		Tail Pipe Depth ft			
						Collar Depth 16644.0 ft		Sqz. Total Vol. bbl			
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
11/15/2015	08:15:12	2	0.0	8.35	1.0	Started Acquisition					
11/15/2015	08:15:20	2	0.0	8.35	1.0	Start Job Rig pumped 20bbl Deisel					
11/15/2015	08:16:24	59	1.9	8.35	0.2	Pumping water					
11/15/2015	08:19:20	1336	0.0	8.35	5.3	Pressure Test Lines 1000psi					
11/15/2015	08:20:12	2151	0.0	8.35	5.3						
11/15/2015	08:21:20	4860	0.0	8.35	5.3	Pressure Test Lines 5000psi					
11/15/2015	08:25:12	18	0.0	8.35	5.3						
11/15/2015	08:26:34	22	0.0	8.35	5.3	Reset Total, Vol = 5.49 bbl					
11/15/2015	08:27:44	330	4.2	10.83	6.9	Pumping Mud push with surfactant					
11/15/2015	08:30:12	333	5.3	10.78	18.2						
11/15/2015	08:35:12	280	5.3	10.87	44.6						
11/15/2015	08:40:12	304	6.5	10.93	73.6						
11/15/2015	08:42:32	11	0.0	11.38	88.1	End Mud Push					
11/15/2015	08:42:37	9	0.0	11.41	88.1	Reset Total, Vol = 82.78 bbl					
11/15/2015	08:42:40	8	0.0	11.43	88.1	Drop Bottom Plug					
11/15/2015	08:45:12	-5	0.0	11.44	88.2						
11/15/2015	08:46:23	128	4.2	11.90	89.1	Start Mixing Lead Slurry					
11/15/2015	08:50:12	283	6.5	12.00	109.2						
11/15/2015	08:55:12	280	6.5	12.02	141.7						
11/15/2015	09:00:12	280	6.5	12.01	174.2						
11/15/2015	09:05:12	281	6.5	12.03	206.6						

Well			Field	Job Start		Customer		Job Number	
Wilson Ranch 13N-27HZ			Wattenberg		Nov/15/2015		Anadarko		CWJN-01496
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
11/15/2015	09:15:12	298	6.4	12.04	271.5				
11/15/2015	09:20:12	270	6.5	12.01	303.9				
11/15/2015	09:25:12	279	6.5	12.01	336.4				
11/15/2015	09:30:12	76	3.2	11.97	360.6				
11/15/2015	09:30:57	79	3.3	12.21	363.0	End Lead Slurry			
11/15/2015	09:31:03	83	3.2	12.35	363.4	Reset Total, Vol = 275.29 bbl			
11/15/2015	09:32:07	118	3.1	13.30	366.7	Start Mixing Tail Slurry			
11/15/2015	09:35:12	396	6.5	13.49	384.1				
11/15/2015	09:40:12	426	6.5	13.60	416.5				
11/15/2015	09:45:12	409	6.5	13.58	448.8				
11/15/2015	09:50:12	447	6.5	13.53	481.1				
11/15/2015	09:55:12	439	6.5	13.51	513.4				
11/15/2015	10:00:12	409	6.5	13.53	545.6				
11/15/2015	10:05:12	441	6.4	13.58	577.9				
11/15/2015	10:10:12	402	6.5	13.56	610.3				
11/15/2015	10:15:12	433	6.5	13.57	642.6				
11/15/2015	10:20:12	431	6.5	13.52	674.9				
11/15/2015	10:25:12	440	6.5	13.56	707.2				
11/15/2015	10:30:12	428	6.5	13.56	739.6				
11/15/2015	10:35:12	425	6.5	13.48	772.0				
11/15/2015	10:40:12	412	6.5	13.60	804.3				
11/15/2015	10:43:24	8	0.1	13.50	823.6	End Tail Slurry			
11/15/2015	10:43:30	7	0.1	13.48	823.6	Reset Total, Vol = 460.19 bbl			
11/15/2015	10:43:35	7	0.0	13.42	823.6	Drop Top Plug			
11/15/2015	10:45:12	-11	0.0	10.96	823.6				
11/15/2015	10:50:12	5	0.0	6.30	834.1				
11/15/2015	10:55:12	22	2.6	8.36	906.0				
11/15/2015	11:00:12	-2	0.0	8.34	919.9				
11/15/2015	11:02:42	137	6.5	8.34	932.7	Reset Total, Vol = 109.24 bbl			
11/15/2015	11:02:45	144	6.5	8.34	933.1	Start Displacement			
11/15/2015	11:04:06	148	6.5	8.36	941.8	20bbl away			
11/15/2015	11:05:12	148	6.5	8.36	949.0				
11/15/2015	11:08:55	602	6.4	8.35	973.1	Caught pressure at 47bbl away			
11/15/2015	11:10:12	977	8.3	8.35	983.3				
11/15/2015	11:15:12	1447	8.2	8.35	1024.6				
11/15/2015	11:20:12	2031	8.2	8.35	1065.6				
11/15/2015	11:25:12	2424	8.2	8.35	1106.5				
11/15/2015	11:30:12	2484	8.2	8.35	1147.3				
11/15/2015	11:35:12	2616	8.2	8.35	1188.1				
11/15/2015	11:40:12	2680	8.1	8.35	1228.8				
11/15/2015	11:45:12	2515	6.3	8.34	1261.0				
11/15/2015	11:50:12	2309	4.9	8.35	1292.4				
11/15/2015	11:50:15	2267	4.3	8.34	1292.6	CMT to surface at 355bbl away			
11/15/2015	11:55:12	2061	2.2	8.34	1308.1				
11/15/2015	11:57:58	2673	0.0	8.34	1312.8	Bump plug at 386bbl away			
11/15/2015	11:58:12	2695	0.0	8.34	1312.8	31bbl cmt to surface			
11/15/2015	11:58:44	3091	0.1	8.34	1313.3	Bring pressure up to 3000psi			
11/15/2015	12:00:12	3086	0.0	8.34	1313.4				
11/15/2015	12:05:12	3195	0.0	8.35	1313.4				
11/15/2015	12:10:12	3283	0.0	8.35	1313.5				
11/15/2015	12:14:27	3351	0.0	8.34	1313.5	Final pressure			
11/15/2015	12:14:46	2978	0.0	8.34	1313.5	Bleed pressure check floats			
11/15/2015	12:15:12	538	0.0	8.35	1313.6				
11/15/2015	12:15:44	-6	0.0	8.35	1313.6	Floats holding 3.5bbl back			

Well Wilson Ranch 13N-27HZ	Field Wattenberg	Job Start Nov/15/2015	Customer Anadarko	Job Number CWJN-01496
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl						
Slurry 5.5	N2	Mud	Maximum Rate 25.0		Total Slurry 720.0	Mud 0.0	Spacer 89.3	N2			
Treating Pressure Summary, psi					Breakdown Fluid						
Maximum 3351	Final 3351	Average 976	Bump Plug to 2673	Breakdown	Type		Volume bbl		Density lb/gal		
Avg. N2 Percent %		Designed Slurry Volume 720.0 bbl		Displacement 489.9 bbl		Mix Water Temp 60 degF		Cement Circulated to Surface? <input checked="" type="checkbox"/>		Volume 31.0 bbl	
								Washed Thru Perfs <input type="checkbox"/>		To ft	
Customer or Authorized Representative Luke Rains				Schlumberger Supervisor Chris Valerio/Taylor Baird				Circulation Lost <input type="checkbox"/>		Job Completed <input checked="" type="checkbox"/>	
								-		-	