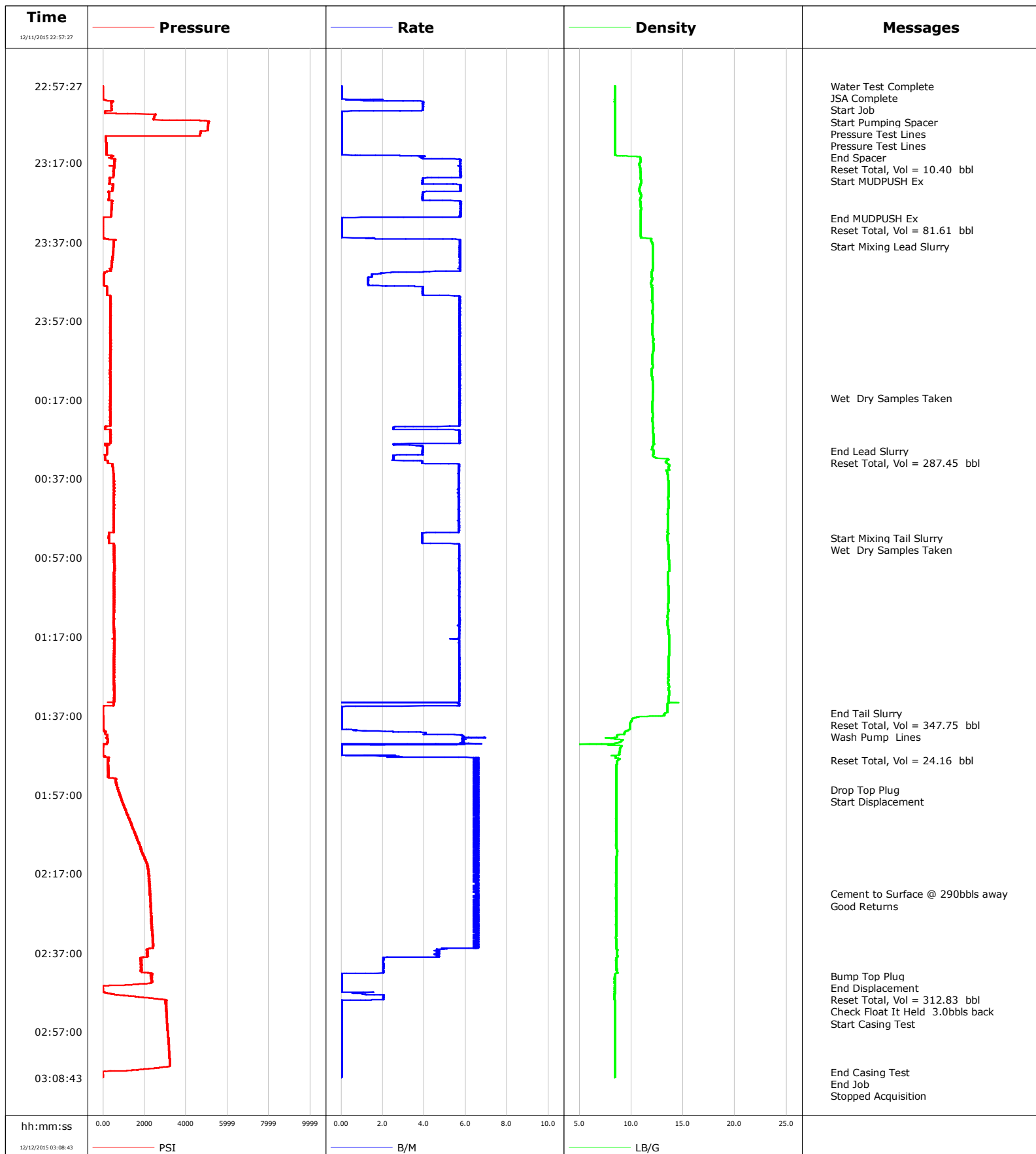


**Well** Whisper Rock  
**Field** Wattenberg  
**Engineer** Wayne Silvester/Justin Storey  
**Country** United States

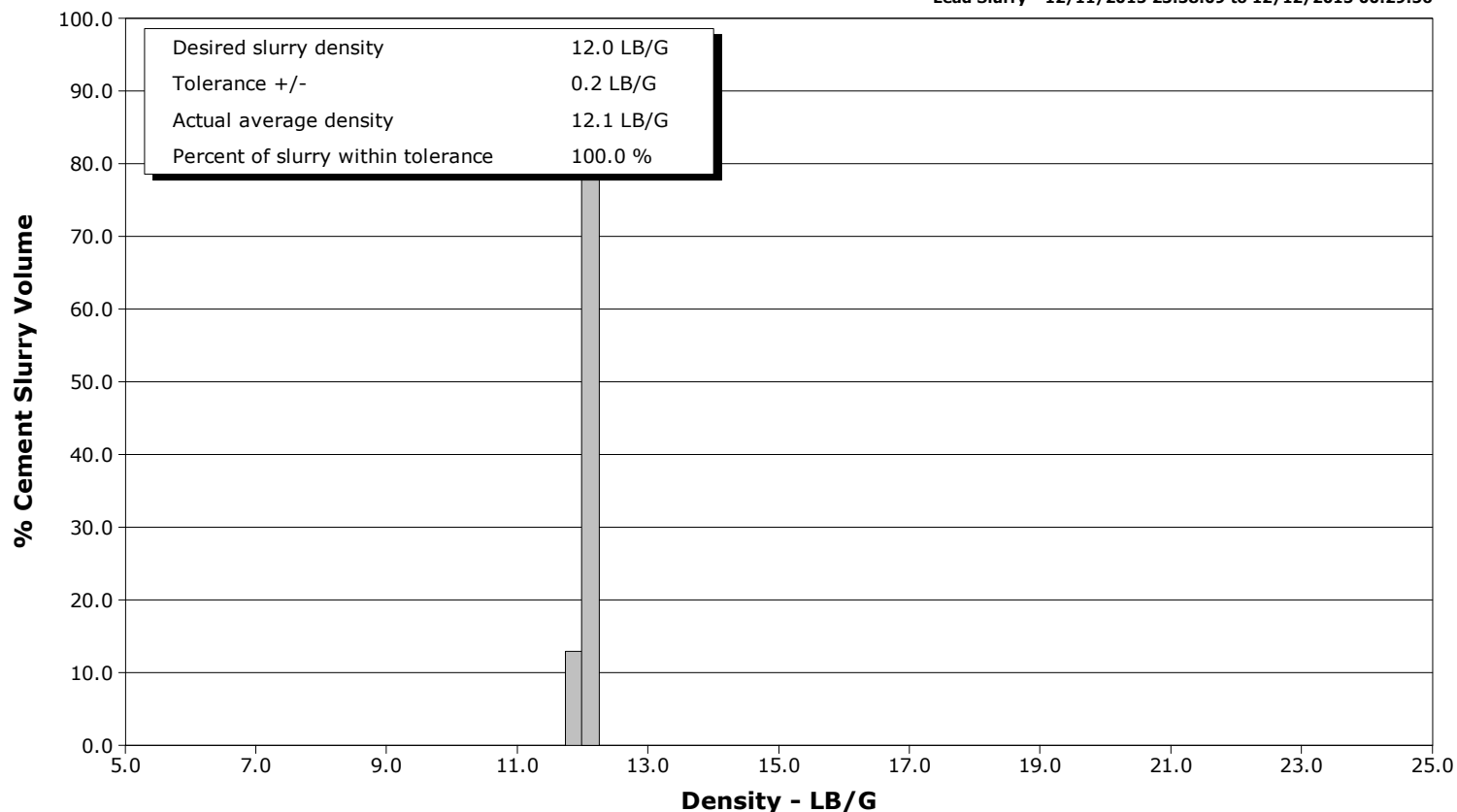
**Client** Anadarko  
**SIR No.** D2IK-01541  
**Job Type** Monobore  
**Job Date** 12-11-2015



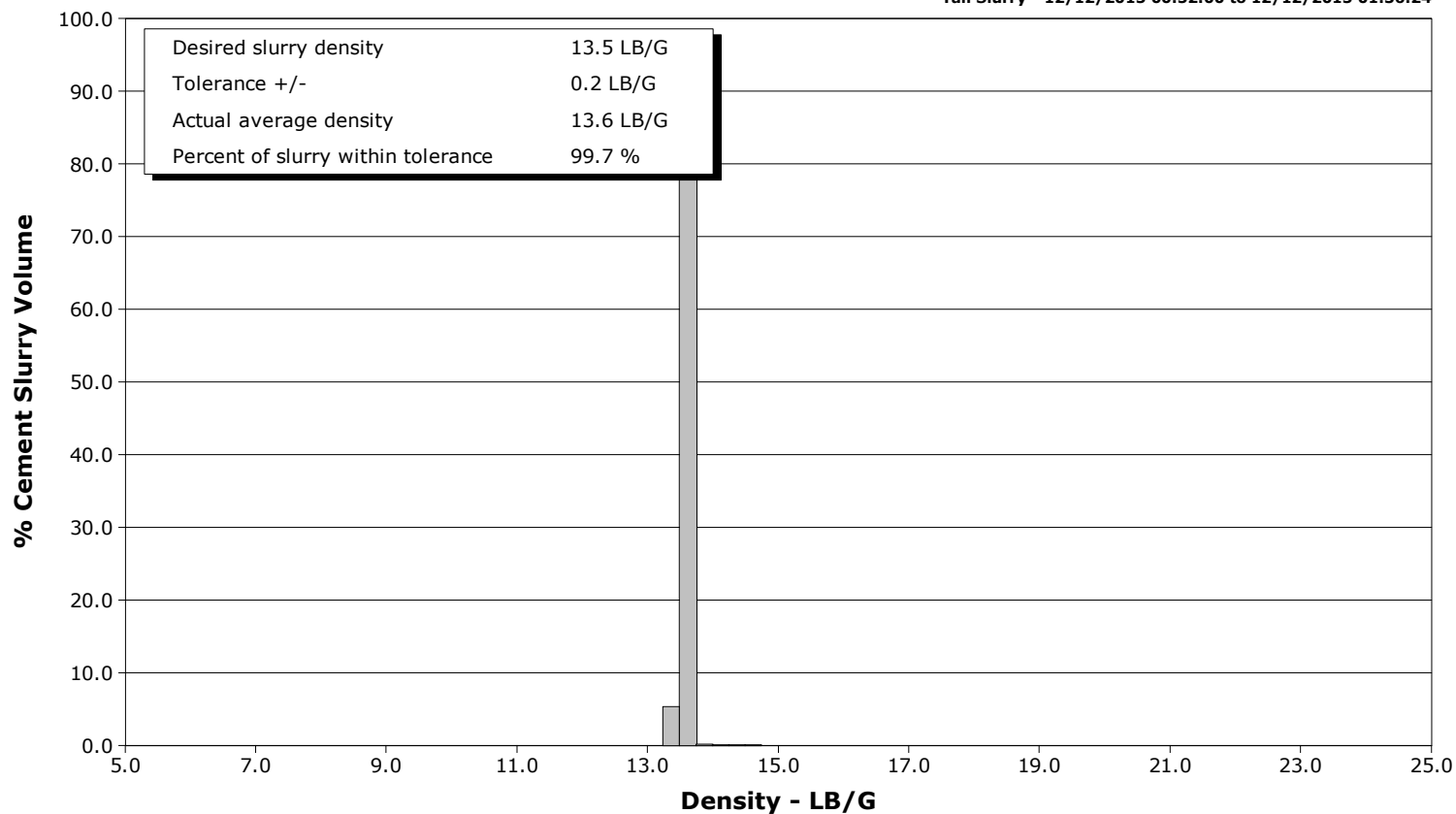
**Well** Whisper Rock  
**Field** Wattenberg  
**Engineer** Wayne Silvester/Justin Storey  
**Country** United States

**Client** Anadarko  
**SIR No.** D2IK-01541  
**Job Type** Monobore  
**Job Date** 12-11-2015

**Lead Slurry - 12/11/2015 23:38:09 to 12/12/2015 00:29:56**



**Tail Slurry - 12/12/2015 00:52:00 to 12/12/2015 01:36:24**



# Cementing Service Report

				Customer Anadarko			Job Number D2IK-01541	
Well Whisper Rock 4N-25HZ			Location (legal) 217304		Schlumberger Location Cheyenne		Job Start Dec/11/2015	
Field Wattenberg		Formation Name/Type shale		Deviation deg 3200 psi	Bit Size 8.5 in	Well MD 13534.0 ft	Well TVD 7206.0 ft	
County Weld		State/Province Colorado		BHP	BHST 233 degF	BHCT 230 degF	Pore Press. Gradient lb/gal	
Well Master 0631629522		API/UWI 05123412970000						
Rig Name P462	Drilled For Oil & Gas	Service Via Land	Casing/Liner					
			Depth, ft	Size, in	Weight, lb/ft	Grade	Thread	
Offshore Zone	Well Class New	Well Type Other	13534.0	5.5	17.0	N/A	8RD	
			0.0	0.0	0.0			
Drilling Fluid Type LT OBM		Max. Density 9.60 lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe				
				T/D	Depth, ft	Size, in	Weight, lb/ft	Grade
Service Line Cementing	Job Type Monobore							
Max. Allowed Tub. Press psi	Max. Allowed Ann. Press 3000 psi	WH Connection 5 1/2	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 312.0 bbl	Packer Type	Packer Depth ft		
			Tubing Vol. bbl	Casing Vol. 314.0 bbl	Annular Vol. 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 2550 psi				Shoe Type Float			Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 13534.0 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 Dec/11/2015		Arrived on Location Dec/11/2015	Leave Location Dec/11/2015	Collar Type Float			Tail Pipe Depth ft	
				Collar Depth 13442.0 ft			Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Flow Rate B/M	Density LB/G	Volume BBL	CPF1_PRESS PSI	Message		
12/11/2015	22:57:27	0.0	8.42	0.0	-0	Started Acquisition		
12/11/2015	22:57:31	0.0	8.42	0.0	0	Water Test Complete		
12/11/2015	22:57:33	0.0	8.42	0.0	1	Start Job		
12/11/2015	22:57:36	0.0	8.42	0.0	0	Start Pumping Spacer		
12/11/2015	23:02:28	3.9	8.42	5.1	421			
12/11/2015	23:05:37	0.0	8.42	10.4	2455	Pressure Test Lines		
12/11/2015	23:07:29	0.0	8.42	10.4	5089			
12/11/2015	23:07:36	0.0	8.42	10.4	5086	Pressure Test Lines		
12/11/2015	23:12:30	0.0	8.42	10.4	158			
12/11/2015	23:12:33	0.0	8.42	10.4	158	End Spacer		
12/11/2015	23:13:25	0.0	8.42	10.4	160	Reset Total, Vol = 10.40 bbl		
12/11/2015	23:13:26	0.0	8.42	10.4	161	Start MUDPUSH Ex		
12/11/2015	23:17:31	5.7	10.78	22.6	571			
12/11/2015	23:22:32	5.7	10.89	48.4	534			
12/11/2015	23:27:33	5.8	10.88	73.1	464			
12/11/2015	23:30:58	0.0	10.91	91.6	-2	End MUDPUSH Ex		
12/11/2015	23:31:02	0.0	10.91	91.6	-3	Reset Total, Vol = 81.61 bbl		
12/11/2015	23:32:34	0.0	10.91	91.6	-4			
12/11/2015	23:37:35	5.7	12.04	99.6	692			
12/11/2015	23:38:09	5.7	12.05	102.8	690	Start Mixing Lead Slurry		
12/11/2015	23:42:36	5.7	12.08	128.3	602			

Well			Field	Job Start		Customer		Job Number	
Whisper Rock 4N-25HZ			Wattenberg		Dec/11/2015		Anadarko		D2IK-01541
Date	Time 24-hr clock	Flow Rate B/M	Density LB/G	Volume BBL	CPF1_PRESS PSI	Message			
12/11/2015	23:52:38	5.7	12.05	165.9	480				
12/11/2015	23:57:39	5.7	12.04	194.6	484				
12/12/2015	00:02:40	5.7	12.13	223.2	515				
12/12/2015	00:07:41	5.7	12.01	251.8	472				
12/12/2015	00:12:42	5.7	12.08	280.4	485				
12/12/2015	00:16:33	5.7	12.04	302.4	501	Wet Dry Samples Taken			
12/12/2015	00:17:43	5.7	12.02	309.1	474				
12/12/2015	00:22:44	5.7	12.05	337.7	481				
12/12/2015	00:27:45	5.7	12.13	363.8	514				
12/12/2015	00:29:56	3.9	12.17	372.4	234	End Lead Slurry			
12/12/2015	00:31:59	2.5	13.51	379.0	123	Reset Total, Vol = 287.45 bbl			
12/12/2015	00:32:46	3.9	13.33	381.5	272				
12/12/2015	00:37:47	5.7	13.58	409.2	795				
12/12/2015	00:42:48	5.7	13.58	437.6	766				
12/12/2015	00:47:49	5.7	13.55	466.1	720				
12/12/2015	00:52:00	3.9	13.50	487.4	340	Start Mixing Tail Slurry			
12/12/2015	00:52:07	3.9	13.50	487.8	345	Wet Dry Samples Taken			
12/12/2015	00:52:50	3.9	13.51	490.6	328				
12/12/2015	00:57:51	5.7	13.62	518.1	806				
12/12/2015	01:02:52	5.7	13.56	546.6	791				
12/12/2015	01:07:53	5.7	13.59	575.1	781				
12/12/2015	01:12:54	5.7	13.50	603.7	742				
12/12/2015	01:17:55	5.7	13.65	632.2	738				
12/12/2015	01:22:56	5.7	13.58	660.7	772				
12/12/2015	01:27:57	5.7	13.57	689.3	737				
12/12/2015	01:32:58	5.7	13.60	717.9	772				
12/12/2015	01:36:24	0.0	13.25	726.8	3	End Tail Slurry			
12/12/2015	01:36:51	0.0	13.12	726.8	6	Reset Total, Vol = 347.75 bbl			
12/12/2015	01:37:08	0.0	12.62	726.8	8	Wash Pump Lines			
12/12/2015	01:37:59	0.0	10.06	726.8	11				
12/12/2015	01:43:00	6.0	8.47	737.4	248				
12/12/2015	01:48:01	6.6	8.86	749.2	222				
12/12/2015	01:48:16	6.5	8.74	750.8	223	Reset Total, Vol = 24.16 bbl			
12/12/2015	01:53:02	6.5	8.55	782.0	613				
12/12/2015	01:55:47	6.6	8.57	800.0	724	Drop Top Plug			
12/12/2015	01:55:48	6.6	8.57	800.1	724	Start Displacement			
12/12/2015	01:58:03	6.5	8.55	814.8	881				
12/12/2015	02:03:04	6.6	8.54	847.6	1266				
12/12/2015	02:08:05	6.6	8.55	880.4	1639				
12/12/2015	02:13:06	6.5	8.56	913.3	2030				
12/12/2015	02:18:07	6.6	8.54	946.1	2264				
12/12/2015	02:22:07	6.6	8.55	972.2	2275	Cement to Surface @ 290bbls away			
12/12/2015	02:22:47	6.6	8.54	976.6	2287	Good Returns			
12/12/2015	02:23:08	6.5	8.54	978.9	2283				
12/12/2015	02:28:09	6.6	8.55	1011.7	2383				
12/12/2015	02:33:10	6.4	8.53	1044.5	2410				
12/12/2015	02:38:11	4.7	8.65	1073.2	2117				
12/12/2015	02:42:54	0.0	8.40	1081.6	2392	Bump Top Plug			
12/12/2015	02:42:56	0.0	8.40	1081.6	2326	End Displacement			
12/12/2015	02:42:59	0.0	8.40	1081.6	2378	Reset Total, Vol = 312.83 bbl			
12/12/2015	02:43:12	0.0	8.40	1081.6	2379				
12/12/2015	02:45:42	0.0	8.40	1081.6	-15	Check Float It Held 3.0bbls back			
12/12/2015	02:48:13	2.0	8.39	1083.3	1592				
12/12/2015	02:49:09	0.0	8.40	1085.0	3057	Start Casing Test			

Well			Field		Job Start	Customer		Job Number	
Whisper Rock 4N-25HZ			Wattenberg		Dec/11/2015	Anadarko		D2IK-01541	
Date	Time 24-hr clock	Flow Rate B/M	Density LB/G	Volume BBL	CPF1_PRESS PSI	Message			
12/12/2015	02:58:15	0.0	8.40	1085.0	3158				
12/12/2015	03:03:16	0.0	8.40	1085.0	3226				
12/12/2015	03:07:20	0.0	8.40	1085.0	-19	End Casing Test			
12/12/2015	03:07:40	0.0	8.40	1085.0	-13	End Job			
12/12/2015	03:08:17	0.0	8.40	1085.0	-6				

## Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl							
Slurry 5.5	N2	Mud	Maximum Rate 7.0	Total Slurry 634.1	Mud 0.0	Spacer 10.3	N2					
Treating Pressure Summary, psi					Breakdown Fluid							
Maximum 5138	Final -5	Average 1070	Bump Plug to 3050	Breakdown	Type	Volume bbl	Density lb/gal					
Avg. N2 Percent %	Designed Slurry Volume 591.0 bbl	Displacement 312.4 bbl	Mix Water Temp 67 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>		Volume 30.0 bbl						
				Washed Thru Perfs <input type="checkbox"/>		To ft						
Customer or Authorized Representative			Schlumberger Supervisor Wayne Silvester/Justin Storey			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>					
						-	-					