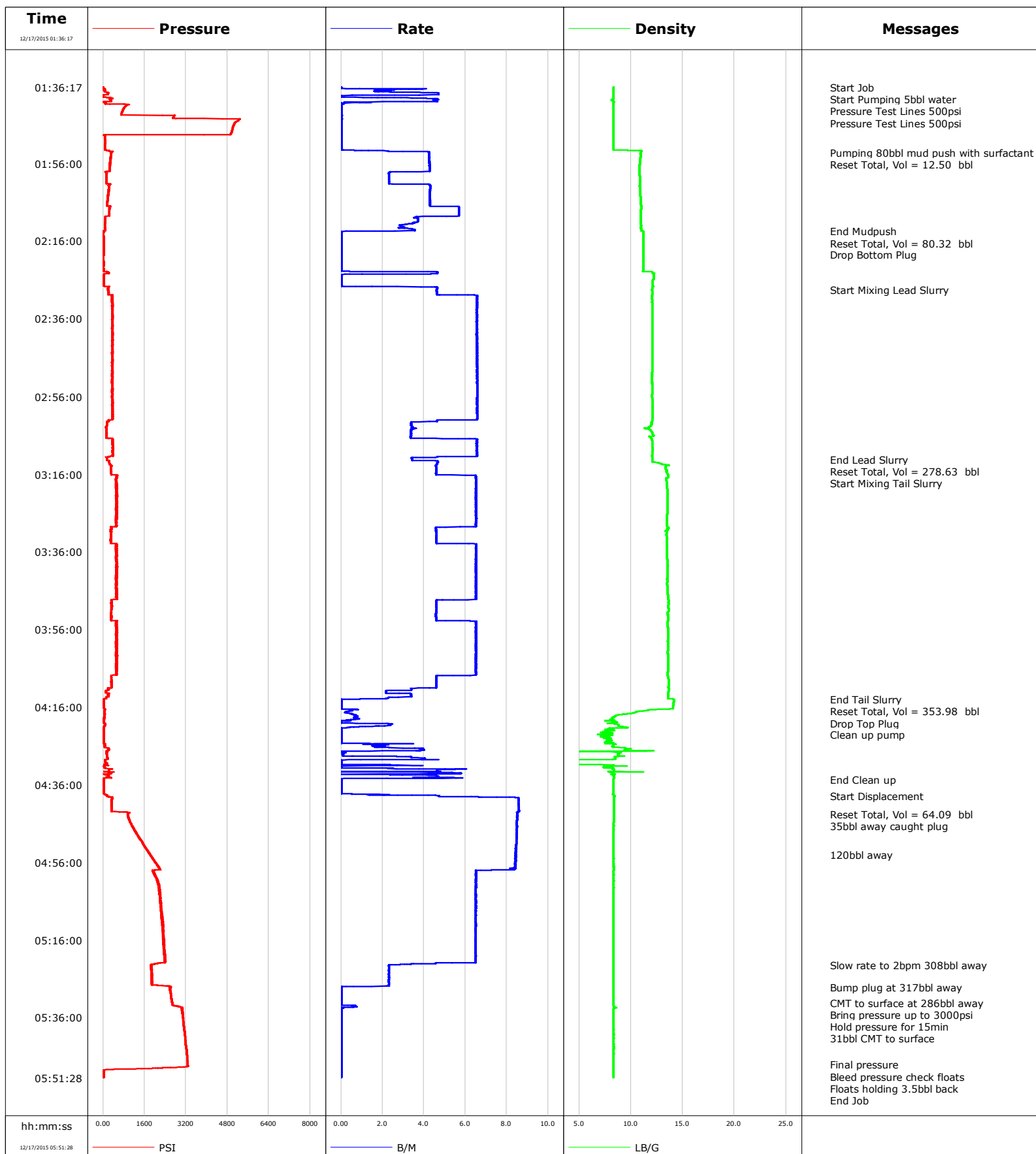


**Well** Whisper Rock  
**Field** Wattenberg  
**Engineer** Chris Valerio/Ken Sovereign  
**Country** United States

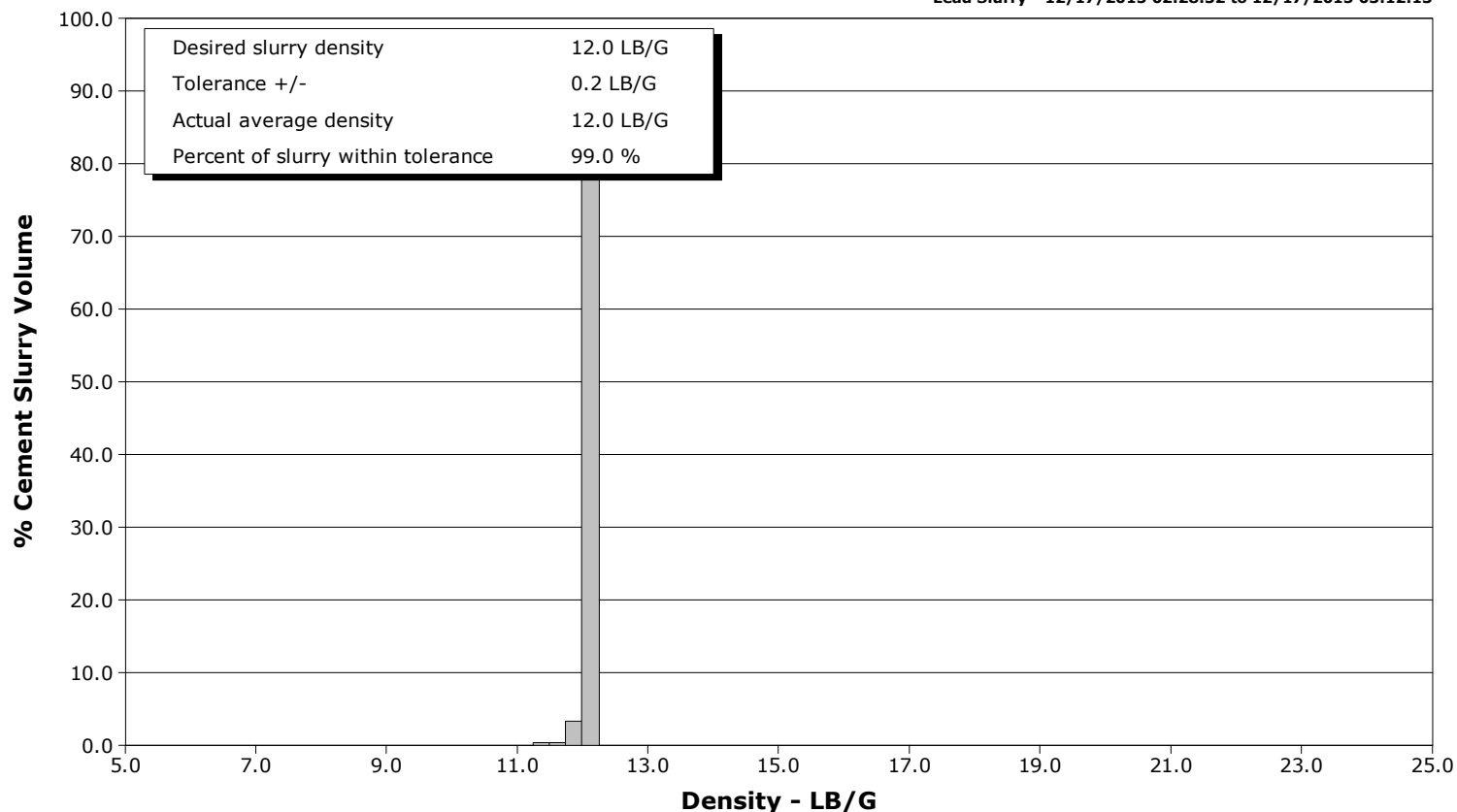
**Client** Anadarko  
**SIR No.** CYUT-00152  
**Job Type** Production  
**Job Date** 12-16-2015



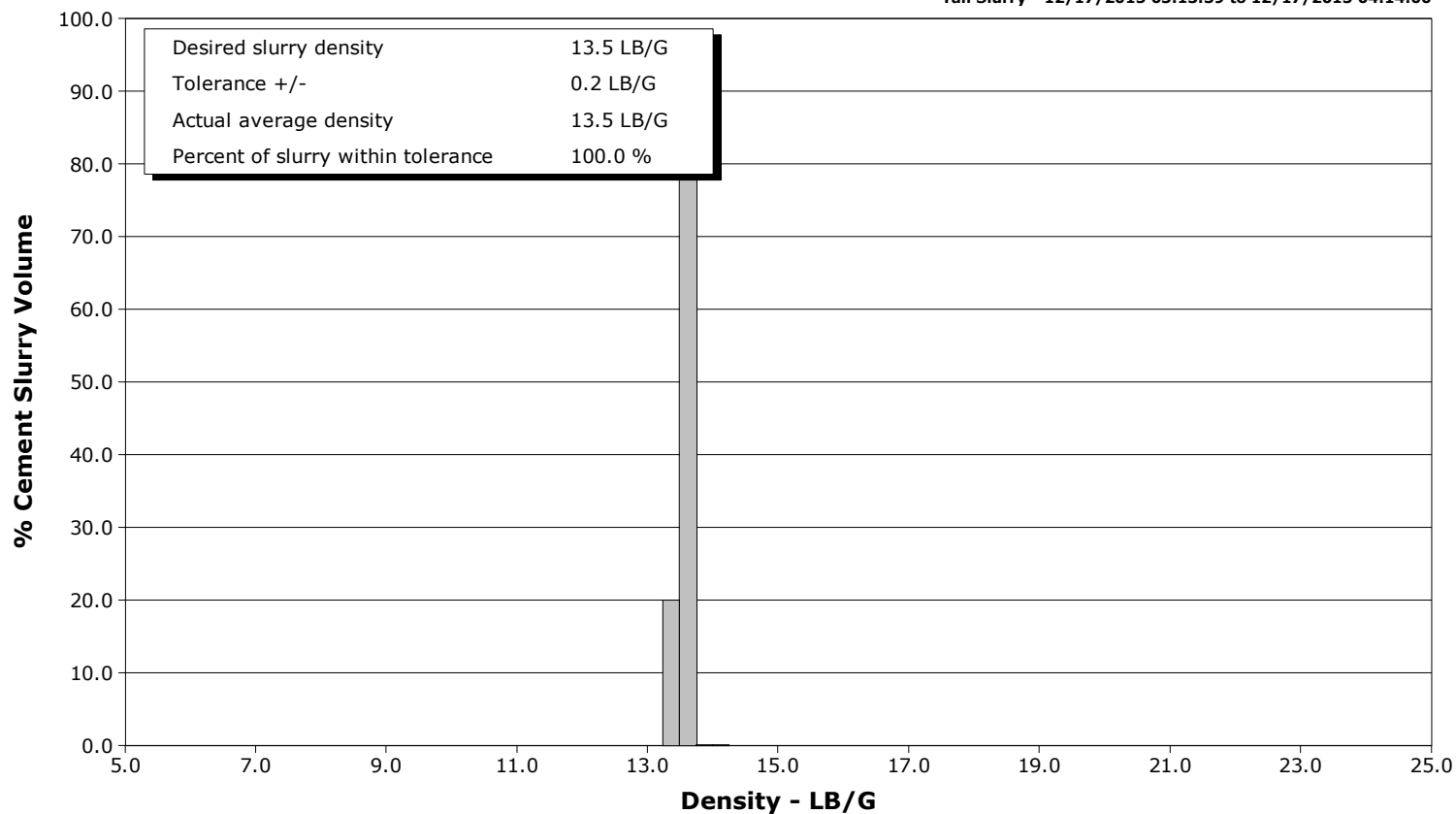
**Well** Whisper Rock  
**Field** Wattenberg  
**Engineer** Chris Valerio/Ken Sovereign  
**Country** United States

**Client** Anadarko  
**SIR No.** CYUT-00152  
**Job Type** Production  
**Job Date** 12-16-2015

**Lead Slurry - 12/17/2015 02:28:32 to 12/17/2015 03:12:13**



**Tail Slurry - 12/17/2015 03:13:39 to 12/17/2015 04:14:00**



# Cementing Service Report

				Customer Anadarko				Job Number CYUT-00152			
Well Whisper Rock 5N-25HZ			Location (legal)			Schlumberger Location			Job Start Dec/16/2015		
Field Wattenberg		Formation Name/Type Shale		Deviation 90 deg		Bit Size 8.5 in		Well MD 13765.0 ft		Well TVD 7188.0 ft	
County Weld		State/Province Colorado		BHP psi		BHST 233 degF		BHCT 230 degF		Pore Press. Gradient lb/gal	
Well Master 0631630652		API/UWI 05123413170000									
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		1852.0		9.6		36.0	
						13765.0		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 Single 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 317.2 bbl		Packer Type	
										Packer Depth	
						Tubing Vol. bbl		Casing Vol. 319.3 bbl		Annular Vol. 574.7 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 13765.0 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/16/2015 19:00		Arrived on Location Dec/16/2015 19:00		Leave Location Dec/17/2015 07:00		Collar Type Float		Tail Pipe Depth ft			
						Collar Depth 13672.0 ft		Sqz. Total Vol. bbl			
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
12/17/2015	01:36:17	6	0.0	8.34	0.0	Started Acquisition					
12/17/2015	01:36:24	6	0.0	8.34	0.0	Start Job					
12/17/2015	01:36:54	64	2.5	8.34	0.6	Start Pumping 5bbl water					
12/17/2015	01:41:08	883	0.0	8.34	10.6	Pressure Test Lines 500psi					
12/17/2015	01:41:17	857	0.0	8.34	10.6						
12/17/2015	01:44:56	5212	0.0	8.34	10.6	Pressure Test Lines 500psi					
12/17/2015	01:46:17	5033	0.0	8.34	0.0						
12/17/2015	01:51:17	72	0.0	8.33	0.0						
12/17/2015	01:53:07	322	4.2	10.95	1.6	Pumping 80bbl mud push with surfactant					
12/17/2015	01:53:12	298	4.2	10.94	1.9	Reset Total, Vol = 12.50 bbl					
12/17/2015	01:56:17	271	4.3	10.83	15.0						
12/17/2015	02:01:17	281	3.4	10.87	30.1						
12/17/2015	02:06:17	162	4.3	10.97	51.5						
12/17/2015	02:11:17	80	3.5	10.96	75.5						
12/17/2015	02:13:27	20	0.3	11.21	82.2	End Mudpush					
12/17/2015	02:13:29	21	0.0	11.20	82.2	Reset Total, Vol = 80.32 bbl					
12/17/2015	02:13:32	21	0.0	11.20	82.2	Drop Bottom Plug					
12/17/2015	02:16:17	15	0.0	11.18	82.2						
12/17/2015	02:21:17	21	0.0	11.19	82.2						
12/17/2015	02:26:17	34	0.0	12.13	85.2						
12/17/2015	02:28:32	203	4.6	12.03	89.1	Start Mixing Lead Slurry					

Well			Field	Job Start		Customer		Job Number	
Whisper Rock 5N-25HZ			Wattenberg		Dec/16/2015		Anadarko		CYUT-00152
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
12/17/2015	02:36:17	364	6.5	12.04	137.3				
12/17/2015	02:41:17	370	6.6	12.05	170.1				
12/17/2015	02:46:17	347	6.6	12.04	202.9				
12/17/2015	02:51:17	354	6.5	12.02	235.6				
12/17/2015	02:56:17	362	6.6	12.04	268.5				
12/17/2015	03:01:17	368	6.6	12.08	301.3				
12/17/2015	03:06:17	132	3.4	11.75	321.2				
12/17/2015	03:11:17	373	6.6	12.02	352.2				
12/17/2015	03:12:13	161	3.4	12.05	356.2	End Lead Slurry			
12/17/2015	03:13:17	253	4.6	12.88	360.9	Reset Total, Vol = 278.63 bbl			
12/17/2015	03:13:39	276	4.6	13.64	362.6	Start Mixing Tail Slurry			
12/17/2015	03:16:17	524	6.3	13.59	374.7				
12/17/2015	03:21:17	509	6.5	13.53	407.3				
12/17/2015	03:26:17	531	6.5	13.51	439.8				
12/17/2015	03:31:17	312	4.6	13.43	469.2				
12/17/2015	03:36:17	514	6.5	13.50	496.7				
12/17/2015	03:41:17	542	6.5	13.56	529.3				
12/17/2015	03:46:17	519	6.5	13.55	561.9				
12/17/2015	03:51:17	316	4.6	13.62	588.8				
12/17/2015	03:56:17	510	6.5	13.60	616.5				
12/17/2015	04:01:17	529	6.5	13.60	649.1				
12/17/2015	04:06:17	522	6.5	13.58	681.6				
12/17/2015	04:11:17	192	3.4	13.63	707.4				
12/17/2015	04:14:00	33	0.0	14.09	714.8	End Tail Slurry			
12/17/2015	04:14:03	40	0.0	14.13	714.8	Reset Total, Vol = 353.98 bbl			
12/17/2015	04:14:06	33	0.0	14.14	714.8	Drop Top Plug			
12/17/2015	04:14:22	32	0.0	14.15	714.8	Clean up pump			
12/17/2015	04:16:17	38	0.0	14.07	714.8				
12/17/2015	04:21:17	32	0.4	9.77	718.5				
12/17/2015	04:26:17	68	2.2	8.26	720.2				
12/17/2015	04:31:17	26	0.0	7.73	727.9				
12/17/2015	04:34:38	34	0.0	8.34	739.0	End Clean up			
12/17/2015	04:36:17	30	0.0	8.34	739.0				
12/17/2015	04:38:48	157	4.7	8.43	740.0	Start Displacement			
12/17/2015	04:41:17	324	8.6	8.38	759.9				
12/17/2015	04:43:30	951	8.5	8.35	778.9	Reset Total, Vol = 64.09 bbl			
12/17/2015	04:43:36	962	8.5	8.35	779.8	35bbl away caught plug			
12/17/2015	04:46:17	1093	8.5	8.35	802.6				
12/17/2015	04:51:17	1548	8.5	8.35	845.0				
12/17/2015	04:53:55	1799	8.4	8.35	867.2	120bbl away			
12/17/2015	04:56:17	2041	8.4	8.35	887.1				
12/17/2015	05:01:17	2111	6.5	8.35	922.8				
12/17/2015	05:06:17	2211	6.5	8.34	955.3				
12/17/2015	05:11:17	2305	6.5	8.34	987.8				
12/17/2015	05:16:17	2332	6.5	8.34	1020.3				
12/17/2015	05:21:17	2371	6.5	8.34	1052.8				
12/17/2015	05:22:29	1853	2.3	8.34	1058.7	Slow rate to 2bpm 308bbl away			
12/17/2015	05:26:17	1879	2.3	8.34	1067.5				
12/17/2015	05:28:09	2585	0.0	8.35	1071.3	Bump plug at 317bbl away			
12/17/2015	05:31:17	2640	0.0	8.35	1071.3				
12/17/2015	05:32:09	2666	0.0	8.35	1071.3	CMT to surface at 286bbl away			
12/17/2015	05:33:15	3002	0.6	8.36	1071.6	Bring pressure up to 3000psi			
12/17/2015	05:33:31	3019	0.0	8.45	1071.6	Hold pressure for 15min			
12/17/2015	05:33:58	3050	0.0	8.35	1071.7	31bbl CMT to surface			

Well			Field		Job Start	Customer		Job Number
Whisper Rock 5N-25HZ			Wattenberg		Dec/16/2015	Anadarko		CYUT-00152
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
12/17/2015	05:41:17	3168	0.0	8.35	1071.7			
12/17/2015	05:46:17	3243	0.0	8.35	1071.7			
12/17/2015	05:48:07	3270	0.0	8.35	1071.7	Final pressure		
12/17/2015	05:48:57	2261	0.0	8.35	1071.7	Bleed pressure check floats		
12/17/2015	05:49:51	25	0.0	8.34	1071.7	Floats holding 3.5bbl back		
12/17/2015	05:49:55	25	0.0	8.34	1071.7	End Job		

## Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl						
Slurry 5.6	N2	Mud	Maximum Rate 8.6	Total Slurry 601.0	Mud 0.0	Spacer 80.0	N2				
Treating Pressure Summary, psi					Breakdown Fluid						
Maximum 3270	Final 3270	Average 894	Bump Plug to 2585	Breakdown	Type	Volume bbl	Density lb/gal				
Avg. N2 Percent %	Designed Slurry Volume 601.0 bbl	Displacement 317.0 bbl	Mix Water Temp 75 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 Ian Ensell			Schlumberger Supervisor Chris Valerio/Ken Sovereign			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>				
						-	-				