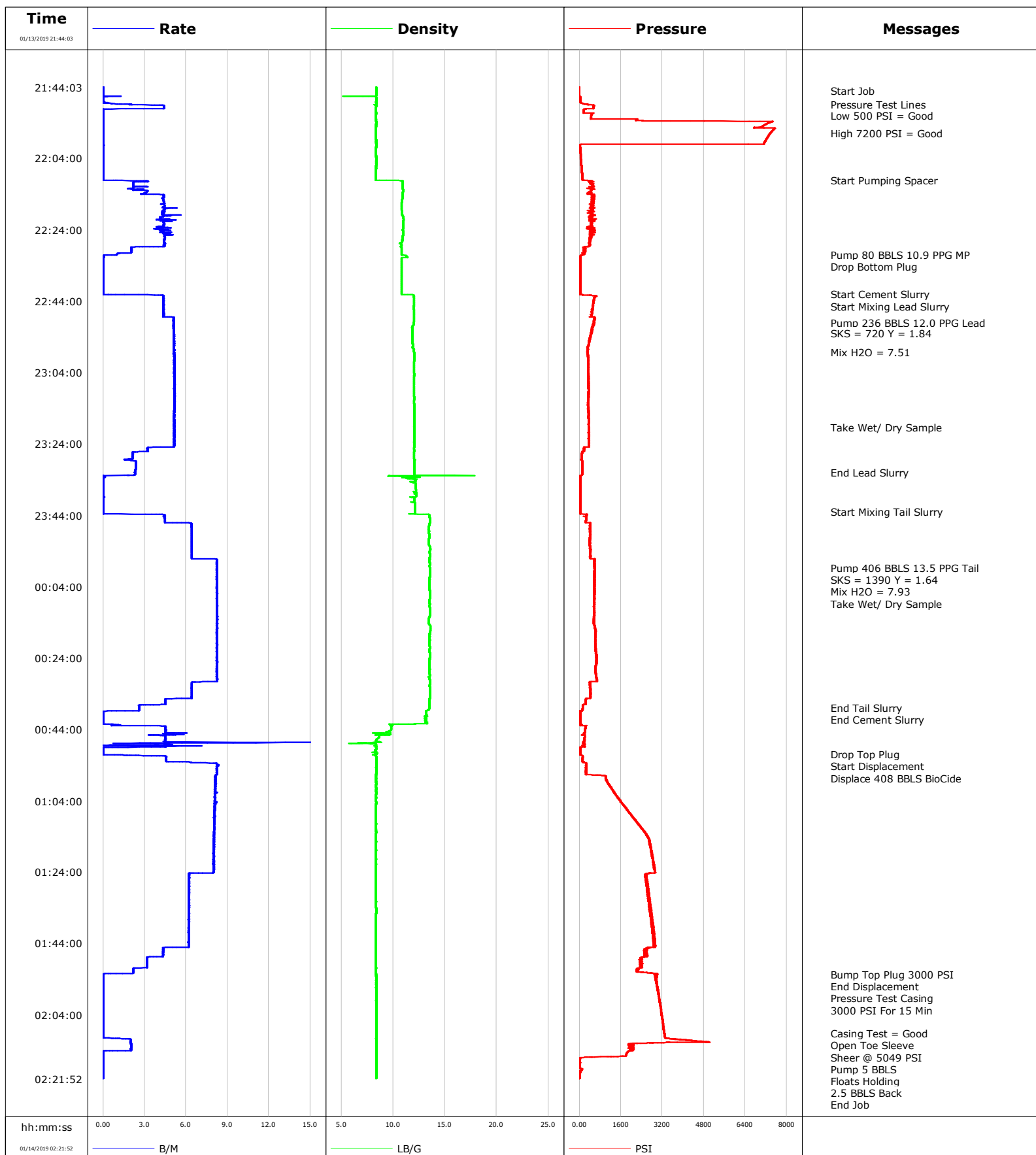


Well Castle Pines
Field Wattenberg
Engineer Conley Jensen/ Sheldon Bell
Country United States

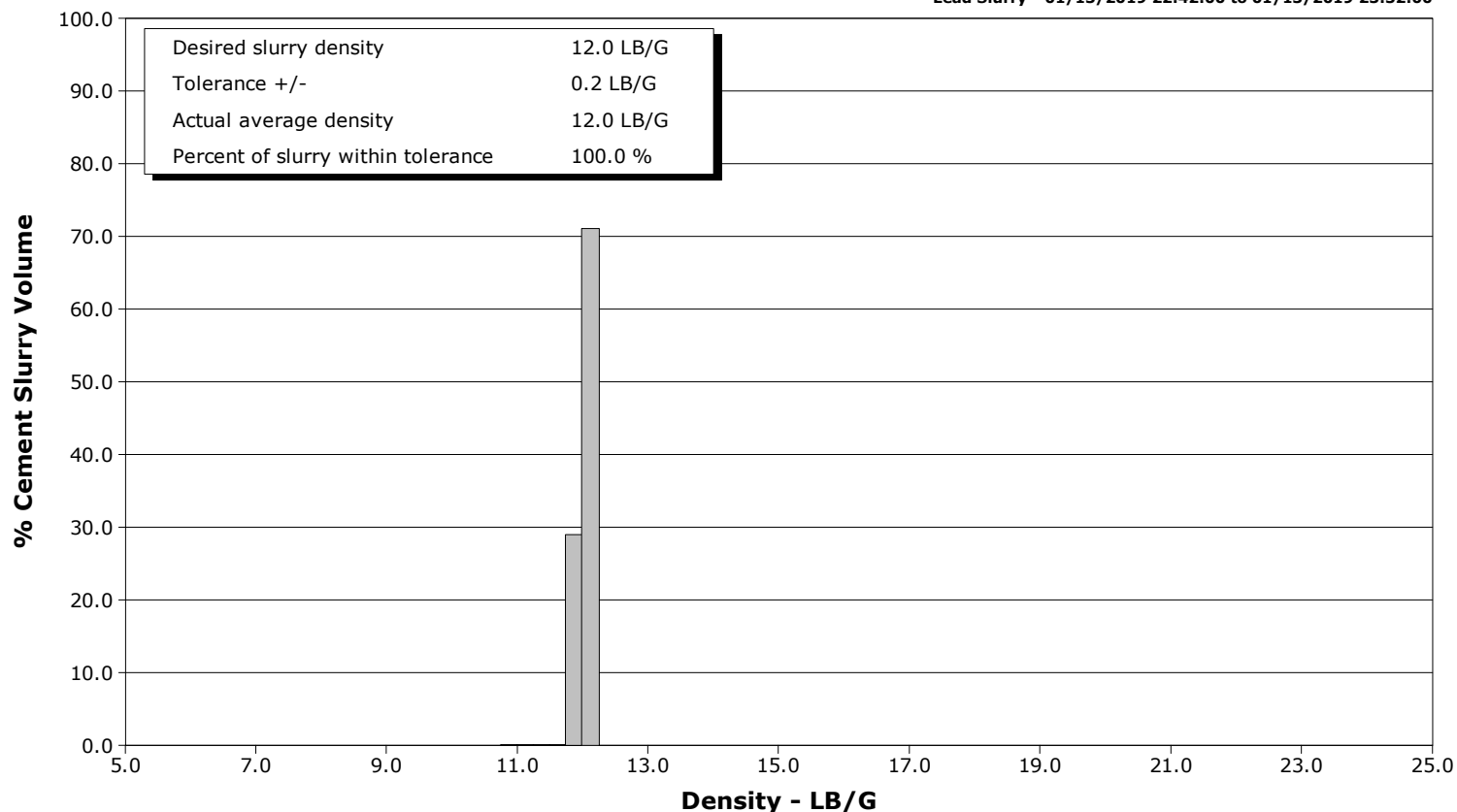
Client Anadarko
SIR No. 2843267
Job Type 5.5" Monobore
Job Date 01-13-2019



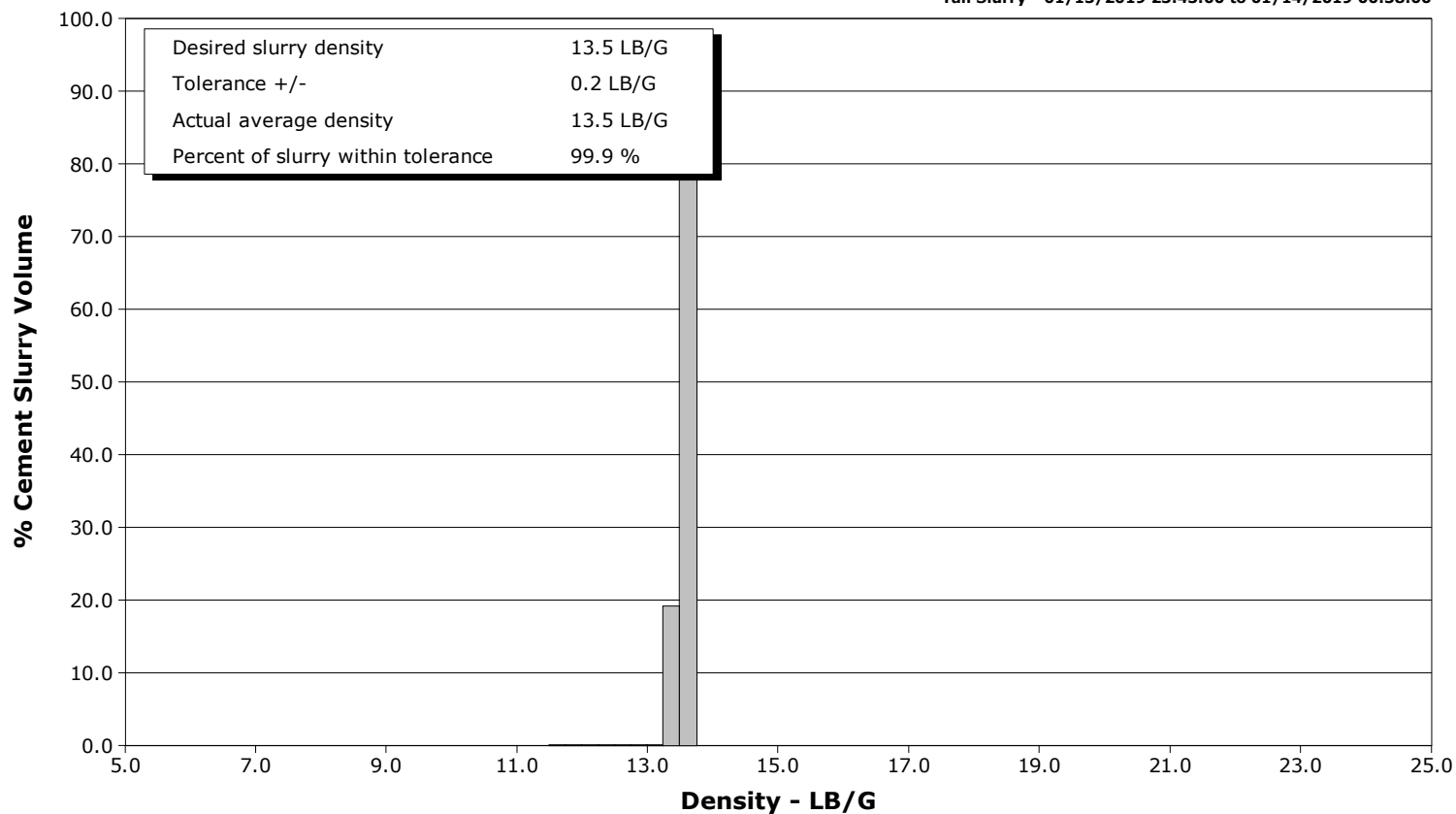
Well Castle Pines
Field Wattenberg
Engineer Conley Jensen/ Sheldon Bell
Country United States

Client Anadarko
SIR No. 2843267
Job Type 5.5" Monobore
Job Date 01-13-2019

Lead Slurry - 01/13/2019 22:42:00 to 01/13/2019 23:32:00



Tail Slurry - 01/13/2019 23:43:00 to 01/14/2019 00:38:00



Cementing Service Report

				Customer Anadarko			Job Number 2843267				
Well Castle Pines 19-15HZ			Location (legal)			Schlumberger Location CWY			Job Start Jan/13/2019		
Field Wattenberg		Formation Name/Type Shale		Deviation deg		Bit Size 8.5 in		Well MD 17572.0 ft		Well TVD 7398.0 ft	
County		State/Province Colorado		BHP psi		BHST 230 degF		BHCT 230 degF		Pore Press. Gradient lb/gal	
Well Master 0631784439		API/UWI 05123477140000									
Rig Name Precision 564		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		1860.0		9.6		36.0	
						17572.0		5.5		17.0	
										P110	
Drilling Fluid Type		Max. Density lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe					
						T/D		Depth, ft		Size, in	
										Weight, lb/ft	
										Grade	
										Thread	
Service Line Cementing		Job Type 5.5" Monobore									
Max. Allowed Tub. Press 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 408.0 bbl		Packer Type	
										Packer Depth	
										ft	
						Tubing Vol. bbl		Casing Vol. 408.0 bbl		Annular Vol. 730.0 bbl	
										Openhole Vol. 1152.0 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 17572.0 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 Jan/13/2019 16:00		Arrived on Location Jan/13/2019 16:00		Leave Location Jan/14/2019 04:00		Collar Type Float			Tail Pipe Depth ft		
						Collar Depth 17562.0 ft			Sqz. Total Vol. bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
01/13/2019	21:44:03	-1	0.0	8.36	0.0	Started Acquisition					
01/13/2019	21:45:00	-2	0.0	8.36	0.0	Start Job					
01/13/2019	21:45:33	-4	0.0	8.36	0.0						
01/13/2019	21:47:03	34	0.0	8.36	0.0						
01/13/2019	21:48:33	70	0.1	8.37	0.0						
01/13/2019	21:49:00	387	1.9	8.31	0.5	Pressure Test Lines					
01/13/2019	21:50:03	540	4.4	8.35	5.0						
01/13/2019	21:51:33	481	0.0	8.35	5.4						
01/13/2019	21:52:00	460	0.0	8.35	5.4	Low 500 PSI = Good					
01/13/2019	21:53:03	2236	0.0	8.35	5.4						
01/13/2019	21:54:33	7196	0.0	8.35	5.4						
01/13/2019	21:56:03	7496	0.0	8.35	5.4						
01/13/2019	21:57:00	7389	0.0	8.35	5.4	High 7200 PSI = Good					
01/13/2019	21:57:33	7336	0.0	8.35	5.4						
01/13/2019	21:59:03	7204	0.0	8.35	5.4						
01/13/2019	22:00:33	14	0.0	8.35	5.4						
01/13/2019	22:02:03	26	0.0	8.35	5.4						
01/13/2019	22:03:33	47	0.0	8.35	5.4						
01/13/2019	22:05:03	71	0.0	8.35	0.0						
01/13/2019	22:06:33	82	0.0	8.35	0.0						
01/13/2019	22:08:03	97	0.0	8.35	0.0						

Well			Field	Job Start		Customer	Job Number
Castle Pines 19-15HZ			Wattenberg	Jan/13/2019		Anadarko	2843267
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
01/13/2019	22:10:00	117	0.0	8.35	0.0	Start Pumping Spacer	
01/13/2019	22:11:03	447	2.2	10.92	2.1		
01/13/2019	22:12:33	451	1.8	10.92	5.5		
01/13/2019	22:14:03	484	3.1	10.93	9.7		
01/13/2019	22:15:33	577	4.4	10.88	16.2		
01/13/2019	22:17:03	521	4.4	10.82	22.8		
01/13/2019	22:18:33	557	4.4	10.84	29.5		
01/13/2019	22:20:03	652	4.3	10.92	36.1		
01/13/2019	22:21:33	461	4.2	10.97	42.6		
01/13/2019	22:23:03	409	4.4	10.94	49.1		
01/13/2019	22:24:33	419	4.3	10.96	55.5		
01/13/2019	22:26:03	436	4.5	10.93	62.2		
01/13/2019	22:27:33	392	4.4	10.81	68.9		
01/13/2019	22:29:03	142	2.0	10.81	74.9		
01/13/2019	22:30:33	110	1.4	10.81	78.0		
01/13/2019	22:31:00	119	1.0	10.80	78.5	Pump 80 BBLS 10.9 PPG MP	
01/13/2019	22:32:03	22	0.0	10.80	0.0		
01/13/2019	22:33:00	20	0.0	10.80	0.0	Drop Bottom Plug	
01/13/2019	22:33:33	19	0.0	10.80	0.0		
01/13/2019	22:35:03	19	0.0	10.80	0.0		
01/13/2019	22:36:33	19	0.0	10.80	0.0		
01/13/2019	22:38:03	19	0.0	10.79	0.0		
01/13/2019	22:39:33	19	0.0	10.79	0.0		
01/13/2019	22:41:03	19	0.0	10.79	0.0		
01/13/2019	22:42:00	19	0.0	10.80	0.0	Start Cement Slurry	
01/13/2019	22:42:33	609	4.4	11.99	1.3		
01/13/2019	22:44:03	554	4.4	11.99	7.8		
01/13/2019	22:45:33	517	4.4	11.99	14.4		
01/13/2019	22:47:03	484	4.4	11.99	21.0		
01/13/2019	22:48:33	529	5.1	12.00	27.6		
01/13/2019	22:50:00	508	5.1	11.98	35.0	Pump 236 BBLS 12.0 PPG Lead	
01/13/2019	22:50:03	543	5.1	11.97	35.2		
01/13/2019	22:51:33	442	5.1	11.84	42.9		
01/13/2019	22:53:00	412	5.1	11.88	50.3	SKS = 720 Y = 1.84	
01/13/2019	22:53:03	397	5.1	11.88	50.5		
01/13/2019	22:54:33	386	5.1	11.87	58.2		
01/13/2019	22:56:03	325	5.1	11.92	65.9		
01/13/2019	22:57:33	308	5.1	12.00	73.6		
01/13/2019	22:58:20	294	5.1	12.02	77.6	Mix H2O = 7.51	
01/13/2019	22:59:03	305	5.1	12.06	81.3		
01/13/2019	23:00:33	308	5.1	12.04	89.0		
01/13/2019	23:02:03	328	5.1	12.02	96.7		
01/13/2019	23:03:33	315	5.1	12.03	104.4		
01/13/2019	23:05:03	322	5.1	12.03	112.2		
01/13/2019	23:06:33	330	5.2	12.03	119.9		
01/13/2019	23:08:03	338	5.1	12.03	127.6		
01/13/2019	23:09:33	328	5.2	12.03	135.3		
01/13/2019	23:11:03	316	5.2	12.04	143.1		
01/13/2019	23:12:33	315	5.1	12.02	150.7		
01/13/2019	23:14:03	306	5.2	12.05	158.5		
01/13/2019	23:15:33	344	5.1	12.05	166.2		
01/13/2019	23:17:03	326	5.1	12.05	173.9		
01/13/2019	23:18:33	340	5.1	12.04	181.6		
01/13/2019	23:19:20	351	5.1	12.03	185.7	Take Wet/ Dry Sample	

Well			Field	Job Start		Customer	Job Number	
Castle Pines 19-15HZ			Wattenberg		Jan/13/2019		Anadarko	2843267
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
01/13/2019	23:21:33	344	5.1	12.04	197.1			
01/13/2019	23:23:03	355	5.1	12.04	204.8			
01/13/2019	23:24:33	330	5.1	12.04	212.5			
01/13/2019	23:26:03	158	3.2	12.03	218.1			
01/13/2019	23:27:33	88	2.1	12.03	221.5			
01/13/2019	23:29:03	98	2.4	12.04	224.6			
01/13/2019	23:30:33	97	2.3	12.05	228.1			
01/13/2019	23:32:00	92	2.3	12.04	231.5	End Lead Slurry		
01/13/2019	23:32:03	93	2.3	12.05	231.6			
01/13/2019	23:33:33	13	0.0	11.60	0.1			
01/13/2019	23:35:03	13	0.0	12.17	0.1			
01/13/2019	23:36:33	13	0.0	12.17	0.1			
01/13/2019	23:38:03	12	0.0	12.06	0.1			
01/13/2019	23:39:33	12	0.0	12.07	0.1			
01/13/2019	23:41:03	12	0.0	12.09	0.1			
01/13/2019	23:42:33	12	0.0	12.10	0.1			
01/13/2019	23:43:00	12	0.0	12.10	0.1	Start Mixing Tail Slurry		
01/13/2019	23:44:03	263	4.5	13.47	1.5			
01/13/2019	23:45:33	241	4.5	13.54	8.2			
01/13/2019	23:47:03	381	6.4	13.46	16.7			
01/13/2019	23:48:33	390	6.4	13.46	26.3			
01/13/2019	23:50:03	373	6.4	13.49	35.9			
01/13/2019	23:51:33	379	6.4	13.43	45.5			
01/13/2019	23:53:03	383	6.4	13.54	55.1			
01/13/2019	23:54:33	397	6.4	13.51	64.7			
01/13/2019	23:56:03	402	6.4	13.51	74.3			
01/13/2019	23:57:33	582	8.2	13.52	86.3			
01/13/2019	23:58:45	577	8.2	13.53	96.1	Pump 406 BBLS 13.5 PPG Tail		
01/13/2019	23:59:03	588	8.2	13.53	98.6			
01/13/2019	23:59:47	586	8.2	13.53	104.7	SKS = 1390 Y = 1.64		
01/13/2019	23:59:59	572	8.2	13.53	106.3	Mix H2O = 7.93		
01/14/2019	00:00:11	575	8.2	13.53	107.9	Take Wet/ Dry Sample		
01/14/2019	00:00:33	572	8.2	13.52	111.0			
01/14/2019	00:02:03	575	8.2	13.52	123.3			
01/14/2019	00:03:33	585	8.2	13.51	135.7			
01/14/2019	00:05:03	583	8.2	13.52	148.0			
01/14/2019	00:06:33	592	8.2	13.53	160.4			
01/14/2019	00:08:03	580	8.2	13.50	172.6			
01/14/2019	00:09:33	574	8.2	13.50	185.1			
01/14/2019	00:11:03	576	8.2	13.55	197.4			
01/14/2019	00:12:33	572	8.2	13.49	209.8			
01/14/2019	00:14:03	568	8.2	13.43	222.2			
01/14/2019	00:15:33	617	8.2	13.61	234.5			
01/14/2019	00:17:03	627	8.2	13.52	246.9			
01/14/2019	00:18:33	632	8.2	13.50	259.2			
01/14/2019	00:20:03	632	8.2	13.50	271.6			
01/14/2019	00:21:33	629	8.2	13.51	283.9			
01/14/2019	00:23:03	662	8.2	13.54	296.3			
01/14/2019	00:24:33	668	8.2	13.51	308.6			
01/14/2019	00:26:03	651	8.2	13.49	320.9			
01/14/2019	00:27:33	631	8.2	13.48	333.3			
01/14/2019	00:29:03	660	8.2	13.52	345.6			
01/14/2019	00:30:33	680	8.2	13.53	358.0			
01/14/2019	00:32:03	396	6.4	13.54	367.9			

Well			Field	Job Start		Customer		Job Number	
Castle Pines 19-15HZ			Wattenberg		Jan/13/2019		Anadarko		2843267
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
01/14/2019	00:35:03	395	6.4	13.52	387.1				
01/14/2019	00:36:33	235	4.5	13.51	394.5				
01/14/2019	00:38:00	108	2.6	13.49	399.3	End Tail Slurry			
01/14/2019	00:38:03	109	2.6	13.49	399.5				
01/14/2019	00:39:33	13	0.0	13.16	0.3				
01/14/2019	00:41:03	17	0.0	13.08	0.3				
01/14/2019	00:42:33	57	0.2	10.53	0.3				
01/14/2019	00:44:03	189	4.5	9.79	5.4				
01/14/2019	00:45:33	164	5.1	8.26	12.4				
01/14/2019	00:47:03	184	4.5	8.35	19.1				
01/14/2019	00:48:33	146	0.0	8.33	26.8				
01/14/2019	00:50:03	9	0.0	8.31	0.0				
01/14/2019	00:51:00	8	0.0	8.36	0.0	Drop Top Plug			
01/14/2019	00:51:33	111	4.5	8.37	1.1				
01/14/2019	00:53:03	157	5.1	8.37	4.6				
01/14/2019	00:54:33	264	8.2	8.35	16.2				
01/14/2019	00:56:03	260	8.2	8.35	28.6				
01/14/2019	00:57:33	1020	8.1	8.35	40.8				
01/14/2019	00:57:45	1037	8.1	8.35	42.4	Displace 408 BBLs BioCide			
01/14/2019	00:59:03	1104	8.1	8.36	53.0				
01/14/2019	01:00:33	1233	8.1	8.35	65.2				
01/14/2019	01:02:03	1367	8.1	8.35	77.3				
01/14/2019	01:05:03	1663	8.1	8.35	101.6				
01/14/2019	01:06:33	1858	8.1	8.35	113.8				
01/14/2019	01:08:03	2003	8.0	8.35	125.8				
01/14/2019	01:09:33	2147	8.0	8.35	137.9				
01/14/2019	01:11:03	2316	8.0	8.35	150.0				
01/14/2019	01:12:33	2507	8.0	8.35	162.0				
01/14/2019	01:14:03	2629	8.0	8.35	174.0				
01/14/2019	01:15:33	2688	8.0	8.35	186.1				
01/14/2019	01:17:03	2730	8.0	8.35	198.1				
01/14/2019	01:18:33	2810	8.0	8.35	210.1				
01/14/2019	01:20:03	2829	8.0	8.35	222.0				
01/14/2019	01:21:33	2848	8.0	8.35	234.0				
01/14/2019	01:23:03	2882	8.0	8.35	246.0				
01/14/2019	01:24:33	2568	6.2	8.35	257.5				
01/14/2019	01:26:03	2617	6.2	8.35	266.8				
01/14/2019	01:27:33	2633	6.2	8.35	276.1				
01/14/2019	01:29:03	2635	6.2	8.35	285.4				
01/14/2019	01:30:33	2693	6.2	8.35	294.7				
01/14/2019	01:32:03	2652	6.2	8.35	304.0				
01/14/2019	01:33:33	2660	6.2	8.35	313.3				
01/14/2019	01:35:03	2691	6.2	8.35	322.6				
01/14/2019	01:36:33	2747	6.2	8.35	331.9				
01/14/2019	01:38:03	2839	6.2	8.35	341.2				
01/14/2019	01:39:33	2837	6.2	8.35	350.5				
01/14/2019	01:41:03	2875	6.2	8.35	359.8				
01/14/2019	01:42:33	2904	6.2	8.35	369.1				
01/14/2019	01:44:03	2888	6.2	8.35	378.4				
01/14/2019	01:45:33	2599	4.3	8.35	386.8				
01/14/2019	01:47:03	2625	4.3	8.35	393.3				
01/14/2019	01:48:33	2359	3.2	8.35	398.9				
01/14/2019	01:50:03	2437	3.2	8.35	403.7				
01/14/2019	01:51:33	2221	2.2	8.35	407.7				

Well			Field		Job Start		Customer		Job Number	
Castle Pines 19-15HZ			Wattenberg		Jan/13/2019		Anadarko		2843267	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
01/14/2019	01:52:51	2908	0.0	8.35	409.6	Pressure Test Casing				
01/14/2019	01:53:03	2912	0.0	8.35	409.6					
01/14/2019	01:54:33	2978	0.0	8.35	409.6					
01/14/2019	01:56:03	2992	0.0	8.35	409.6					
01/14/2019	01:57:33	3030	0.0	8.35	409.6					
01/14/2019	01:59:03	3070	0.0	8.35	409.6					
01/14/2019	02:00:33	3100	0.0	8.35	409.6					
01/14/2019	02:02:03	3129	0.0	8.35	409.6					
01/14/2019	02:03:33	3161	0.0	8.35	409.6					
01/14/2019	02:05:03	3190	0.0	8.35	409.6					
01/14/2019	02:06:33	3222	0.0	8.35	409.6					
01/14/2019	02:08:03	3253	0.0	8.35	409.6					
01/14/2019	02:09:11	3275	0.0	8.35	409.6	Casing Test = Good				
01/14/2019	02:09:33	3280	0.0	8.35	409.6					
01/14/2019	02:10:04	3292	0.0	8.35	409.6	Open Toe Sleeve				
01/14/2019	02:11:03	4169	2.0	8.35	410.5					
01/14/2019	02:11:40	3525	2.0	8.35	411.8	Sheer @ 5049 PSI				
01/14/2019	02:12:04	1980	2.0	8.35	412.6	Pump 5 BBLS				
01/14/2019	02:12:33	2045	2.0	8.35	413.5					
01/14/2019	02:14:03	1905	0.5	8.35	416.5					
01/14/2019	02:15:33	1660	0.0	8.35	416.6					
01/14/2019	02:16:11	8	0.0	8.35	416.6	Floats Holding				
01/14/2019	02:16:12	8	0.0	8.35	416.6	2.5 BBLS Back				
01/14/2019	02:16:48	7	0.0	8.36	416.6	End Job				
01/14/2019	02:16:49	7	0.0	8.35	416.6	18 BBLS MP To Surface				
01/14/2019	02:17:03	7	0.0	8.35	416.6					
01/14/2019	02:18:33	7	0.0	8.35	416.6					
01/14/2019	02:20:03	22	0.0	8.35	416.6					
01/14/2019	02:21:33	3	0.0	8.35	416.6					

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl							
Slurry 5.8	N2	Mud	Maximum Rate 20.0		Total Slurry 635.0	Mud 0.0	Spacer 81.8	N2				
Treating Pressure Summary, psi					Breakdown Fluid							
Maximum 7546	Final 14	Average 1135	Bump Plug to 3000	Breakdown	Type	Volume bbl	Density lb/gal					
Avg. N2 Percent %	Designed Slurry Volume 642.0 bbl	Displacement 408.0 bbl	Mix Water Temp 68 degF	Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl						
				Washed Thru Perfs <input type="checkbox"/>		To ft						
Customer or Authorized Representative John Truett			Schlumberger Supervisor Conley Jensen/ Sheldon Bell			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>					
						-	-					



Service Order #:	
Date:	Jan/13/2019
Operating Time (hh:mm):	00:00
Client Rep:	John Truett
Schlumberger Engineer:	Conley Jensen/ Sheldon Bell
Schlumberger FSM:	

To be completed by Company Rep. Please answer Y (Yes) or N (No) and add any comments below.

4	Evaluation				
4a	Main job objective achieved with no consequential non-productive time	10	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
Sub-total					0%

Comments: (Please include a brief explanation for a "NO" response and summarize any innovations attempted on this well.)

Client:	Schlumberger:
Client Signature:	Schlumberger Signature: