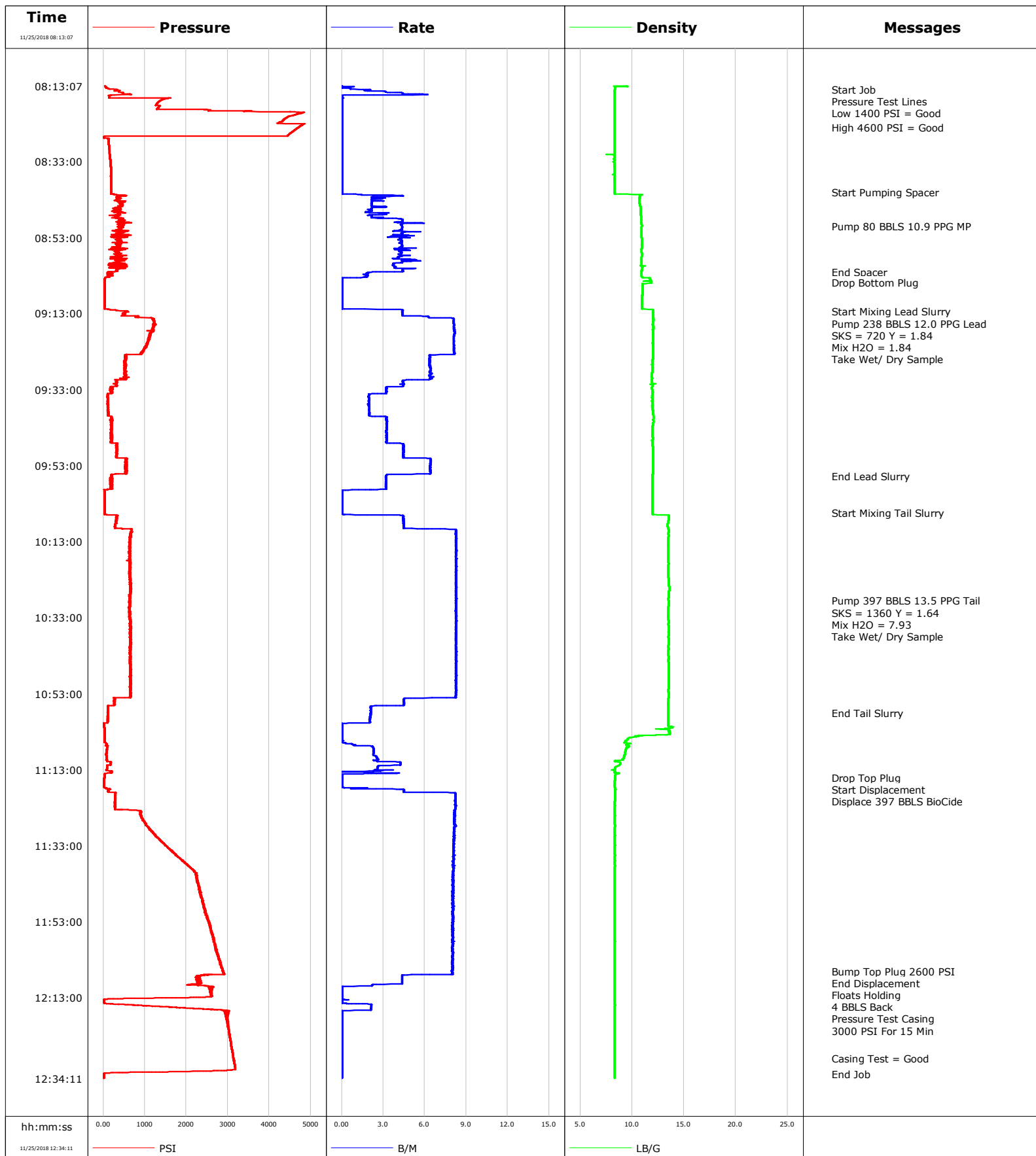


Well Castle Pines
Field Wattenberg
Engineer Conley Jensen/ Sheldon Bell
Country

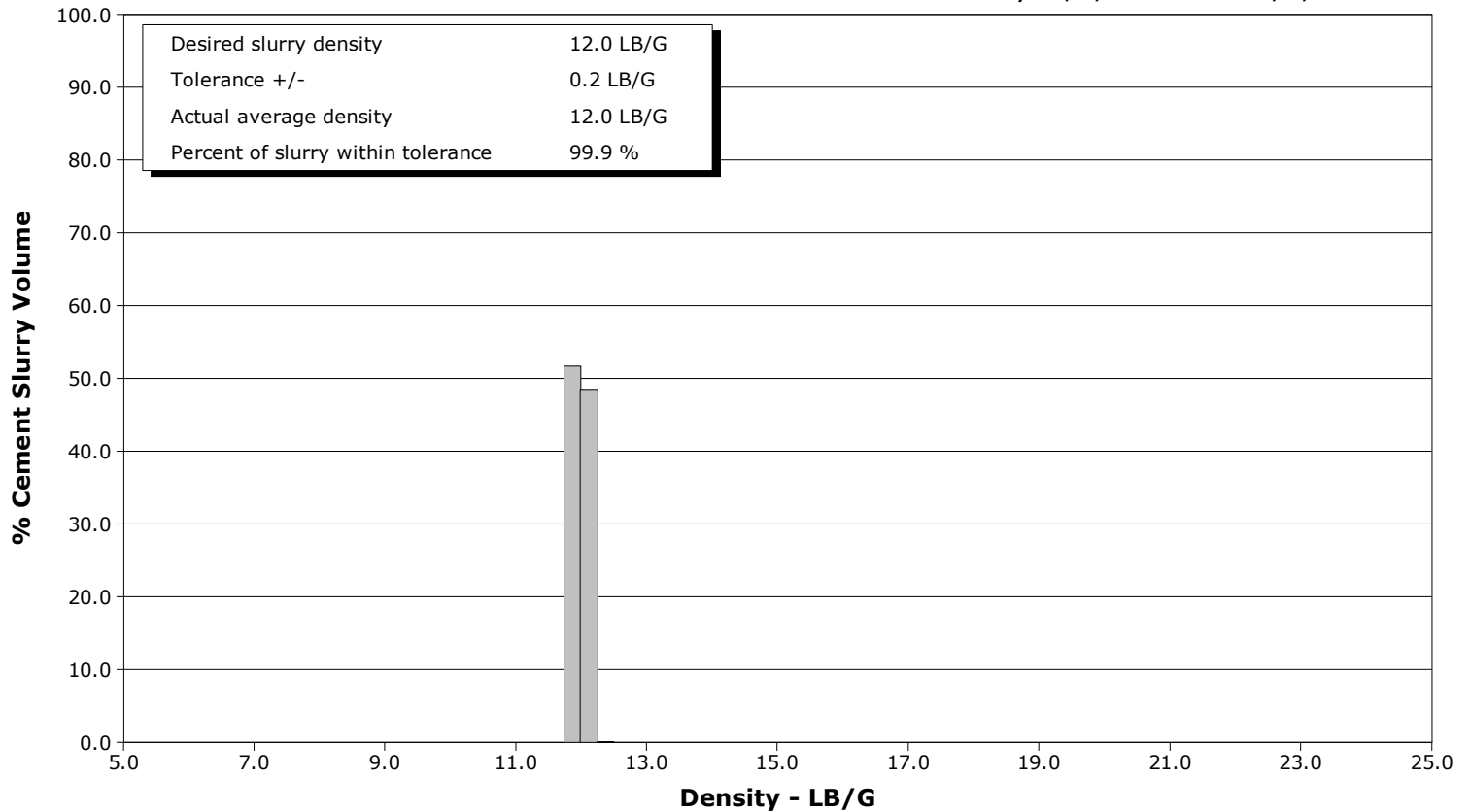
Client Anadarko
SIR No. 2843258
Job Type 5.5" Monobore
Job Date



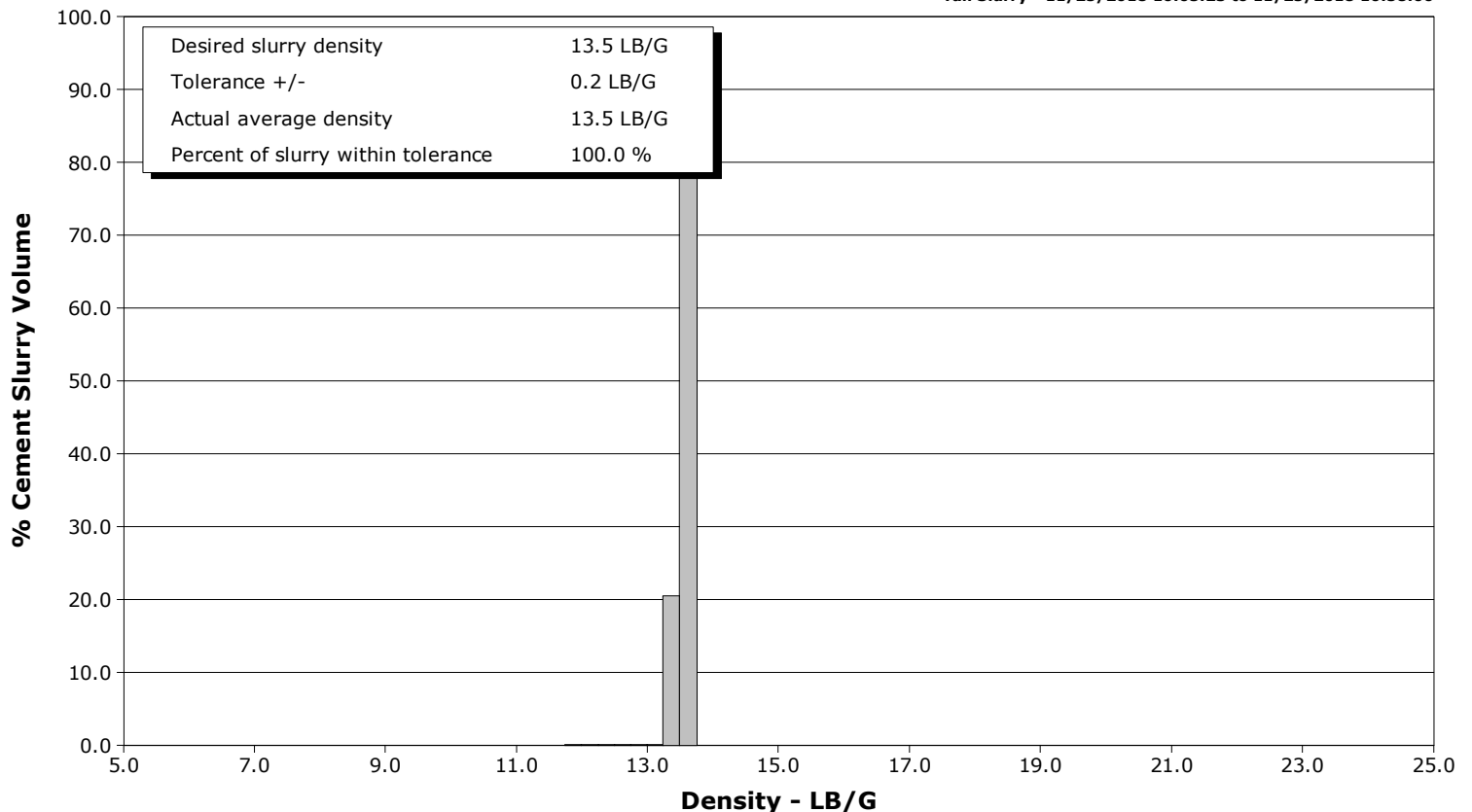
Well Castle Pines
Field Wattenberg
Engineer Conley Jensen/ Sheldon Bell
Country

Client Anadarko
SIR No. 2843258
Job Type 5.5" Monobore
Job Date

Lead Slurry - 11/25/2018 09:12:30 to 11/25/2018 09:55:45



Tail Slurry - 11/25/2018 10:05:23 to 11/25/2018 10:58:00



Cementing Service Report

				Customer Anadarko			Job Number 2843258				
Well Castle Pines 19-5HZ			Location (legal) PD 564			Schlumberger Location CWY			Job Start Nov/25/2018		
Field Wattenberg		Formation Name/Type Shale		Deviation deg		Bit Size 8.5 in		Well MD 17282.0 ft		Well TVD 7212.0 ft	
County		State/Province Wyoming		BHP psi		BHST 226 degF		BHCT 226 degF		Pore Press. Gradient lb/gal	
Well Master 0631786226		API/UWI 05123477120000									
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		1892.0		9.6		36.0	
						17271.0		5.5		17.0	
										J55	
										P110	
										8RD	
										8RD	
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 397.0 bbl		Packer Type	
										Packer Depth	
										ft	
						Tubing Vol. bbl		Casing Vol. 399.0 bbl		Annular Vol. 714.0 bbl	
										Openhole Vol. 1127.0 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 17271.0 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/25/2018 03:00		Arrived on Location Nov/25/2018 03:00		Leave Location Nov/25/2018 14:00		Collar Type Float		Tail Pipe Depth ft			
						Collar Depth 17179.0 ft		Sqz. Total Vol. bbl			
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
11/25/2018	08:13:07	39	0.0	7.40	0.0	Started Acquisition					
11/25/2018	08:14:00	218	0.7	8.35	0.2	Start Job					
11/25/2018	08:14:37	384	3.1	8.34	1.5						
11/25/2018	08:15:40	146	0.0	8.34	5.6	Pressure Test Lines					
11/25/2018	08:16:07	142	0.0	8.34	5.6						
11/25/2018	08:17:37	1307	0.0	8.34	5.6						
11/25/2018	08:18:00	1281	0.0	8.34	5.6	Low 1400 PSI = Good					
11/25/2018	08:19:07	1299	0.0	8.34	5.6						
11/25/2018	08:20:37	4659	0.0	8.34	5.6						
11/25/2018	08:22:07	4339	0.0	8.34	5.6						
11/25/2018	08:23:37	4755	0.0	8.34	5.6						
11/25/2018	08:24:00	4706	0.0	8.34	5.6	High 4600 PSI = Good					
11/25/2018	08:25:07	4565	0.0	8.34	5.6						
11/25/2018	08:26:37	17	0.0	8.34	5.6						
11/25/2018	08:28:07	126	0.0	8.34	5.6						
11/25/2018	08:29:37	142	0.0	8.34	5.6						
11/25/2018	08:31:07	155	0.0	8.34	5.6						
11/25/2018	08:32:37	169	0.0	8.30	0.0						
11/25/2018	08:34:07	179	0.0	8.30	0.0						
11/25/2018	08:35:37	181	0.0	8.34	0.0						
11/25/2018	08:37:07	181	0.0	8.34	0.0						

Well			Field	Job Start		Customer	Job Number
Castle Pines 19-5HZ			Wattenberg	Nov/25/2018		Anadarko	2843258
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
11/25/2018	08:40:07	181	0.0	8.34	0.0		
11/25/2018	08:41:00	181	0.0	8.34	0.0	Start Pumping Spacer	
11/25/2018	08:41:37	228	0.9	8.90	0.0		
11/25/2018	08:43:07	322	2.2	10.74	3.9		
11/25/2018	08:44:37	465	2.2	10.78	7.3		
11/25/2018	08:46:07	376	2.0	10.82	10.8		
11/25/2018	08:47:37	299	2.1	10.85	14.4		
11/25/2018	08:49:07	569	4.3	10.87	20.2		
11/25/2018	08:50:00	367	4.3	10.94	24.2	Pump 80 BBLS 10.9 PPG MP	
11/25/2018	08:50:37	448	4.4	10.91	26.9		
11/25/2018	08:52:07	379	4.4	10.91	33.4		
11/25/2018	08:53:37	369	4.1	10.98	39.7		
11/25/2018	08:55:07	380	4.4	10.94	46.1		
11/25/2018	08:56:37	356	4.2	10.91	52.6		
11/25/2018	08:58:07	429	4.1	10.92	59.1		
11/25/2018	08:59:37	320	4.4	10.93	65.6		
11/25/2018	09:01:07	365	5.1	10.94	71.4		
11/25/2018	09:02:00	255	4.3	10.93	75.4	End Spacer	
11/25/2018	09:02:37	103	1.9	10.92	76.7		
11/25/2018	09:04:07	32	0.0	11.76	0.0		
11/25/2018	09:04:49	29	0.0	11.82	0.0	Drop Bottom Plug	
11/25/2018	09:05:37	29	0.0	10.99	0.0		
11/25/2018	09:07:07	29	0.0	10.99	0.0		
11/25/2018	09:08:37	28	0.0	10.97	0.0		
11/25/2018	09:10:07	28	0.0	10.97	0.0		
11/25/2018	09:11:37	28	0.0	10.97	0.0		
11/25/2018	09:12:30	596	4.4	12.01	2.6	Start Mixing Lead Slurry	
11/25/2018	09:13:00	532	4.4	12.02	4.8	Pump 238 BBLS 12.0 PPG Lead	
11/25/2018	09:13:07	459	4.4	12.02	5.3		
11/25/2018	09:14:00	847	6.3	12.01	9.8	SKS = 720 Y = 1.84	
11/25/2018	09:14:37	1217	8.1	12.04	14.5		
11/25/2018	09:15:00	1221	8.1	12.03	17.6	Mix H2O = 1.84	
11/25/2018	09:16:07	1202	8.1	12.03	26.7		
11/25/2018	09:17:37	1224	8.1	12.00	38.8		
11/25/2018	09:19:07	1110	8.1	12.00	51.0		
11/25/2018	09:20:37	1088	8.1	11.99	63.2		
11/25/2018	09:22:07	996	8.1	12.00	75.3		
11/25/2018	09:23:37	920	8.1	12.03	87.5		
11/25/2018	09:25:00	528	6.3	12.00	96.8	Take Wet/ Dry Sample	
11/25/2018	09:25:07	517	6.4	11.98	97.5		
11/25/2018	09:26:37	529	6.3	11.97	107.0		
11/25/2018	09:28:07	510	6.4	11.95	116.6		
11/25/2018	09:29:37	489	6.5	11.93	126.2		
11/25/2018	09:31:07	330	4.5	11.91	134.6		
11/25/2018	09:32:37	227	3.2	11.94	140.7		
11/25/2018	09:34:07	108	2.4	11.97	145.6		
11/25/2018	09:35:37	116	2.0	11.95	148.6		
11/25/2018	09:37:07	118	2.0	11.96	151.5		
11/25/2018	09:40:07	188	3.2	12.05	157.5		
11/25/2018	09:41:37	206	3.2	12.05	162.4		
11/25/2018	09:43:07	186	3.2	11.97	167.3		
11/25/2018	09:44:37	174	3.2	11.95	172.1		
11/25/2018	09:46:07	185	3.2	12.00	177.0		
11/25/2018	09:47:37	319	4.4	11.96	182.4		

Well			Field	Job Start		Customer		Job Number	
Castle Pines 19-5HZ			Wattenberg		Nov/25/2018		Anadarko		2843258
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
11/25/2018	09:50:37	342	4.5	11.99	195.8				
11/25/2018	09:52:07	529	6.4	12.00	204.5				
11/25/2018	09:53:37	527	6.4	12.01	214.1				
11/25/2018	09:55:07	529	6.4	12.02	223.7				
11/25/2018	09:55:45	181	3.2	11.98	226.3	End Lead Slurry			
11/25/2018	09:56:37	172	3.2	11.95	229.1				
11/25/2018	09:58:07	176	3.2	11.95	233.9				
11/25/2018	09:59:37	27	0.0	11.98	0.0				
11/25/2018	10:01:07	26	0.0	11.96	0.0				
11/25/2018	10:02:37	26	0.0	11.96	0.0				
11/25/2018	10:04:07	25	0.0	11.97	0.0				
11/25/2018	10:05:23	25	0.0	11.97	0.0	Start Mixing Tail Slurry			
11/25/2018	10:05:37	25	0.0	11.97	0.0				
11/25/2018	10:07:07	320	4.5	13.56	5.0				
11/25/2018	10:08:37	292	4.5	13.40	11.7				
11/25/2018	10:10:07	684	8.2	13.52	20.1				
11/25/2018	10:11:37	655	8.3	13.52	32.5				
11/25/2018	10:13:07	657	8.2	13.49	44.9				
11/25/2018	10:14:37	654	8.3	13.48	57.3				
11/25/2018	10:16:07	648	8.3	13.50	69.7				
11/25/2018	10:17:37	643	8.3	13.49	82.1				
11/25/2018	10:19:07	644	8.2	13.51	94.5				
11/25/2018	10:20:37	633	8.3	13.48	106.9				
11/25/2018	10:22:07	657	8.2	13.47	119.3				
11/25/2018	10:23:37	655	8.3	13.54	131.7				
11/25/2018	10:25:07	663	8.3	13.57	144.0				
11/25/2018	10:26:37	639	8.3	13.54	156.4				
11/25/2018	10:28:34	654	8.2	13.52	172.5	Pump 397 BBLS 13.5 PPG Tail			
11/25/2018	10:28:35	661	8.2	13.52	172.7	SKS = 1360 Y = 1.64			
11/25/2018	10:29:37	635	8.3	13.53	181.2				
11/25/2018	10:30:00	643	8.3	13.52	184.4	Take Wet/ Dry Sample			
11/25/2018	10:31:07	618	8.2	13.49	193.6				
11/25/2018	10:32:37	639	8.3	13.44	206.0				
11/25/2018	10:34:07	669	8.2	13.52	218.4				
11/25/2018	10:35:37	655	8.3	13.53	230.8				
11/25/2018	10:37:07	644	8.2	13.52	243.1				
11/25/2018	10:38:37	652	8.2	13.53	255.5				
11/25/2018	10:40:07	664	8.2	13.52	267.9				
11/25/2018	10:41:37	647	8.3	13.51	280.3				
11/25/2018	10:43:07	659	8.2	13.52	292.7				
11/25/2018	10:44:37	652	8.3	13.52	305.0				
11/25/2018	10:46:07	668	8.2	13.54	317.4				
11/25/2018	10:47:37	663	8.3	13.54	329.8				
11/25/2018	10:49:07	654	8.3	13.54	342.2				
11/25/2018	10:50:37	654	8.3	13.53	354.6				
11/25/2018	10:52:07	668	8.3	13.51	367.0				
11/25/2018	10:53:37	659	8.2	13.52	379.3				
11/25/2018	10:55:07	268	4.5	13.48	388.1				
11/25/2018	10:56:37	110	2.1	13.51	393.8				
11/25/2018	10:58:00	112	2.1	13.51	396.7	End Tail Slurry			
11/25/2018	10:58:07	109	2.1	13.51	397.0				
11/25/2018	10:59:37	106	2.0	13.51	400.1				
11/25/2018	11:01:07	17	0.0	13.49	0.0				
11/25/2018	11:02:37	26	0.0	13.59	0.0				

Well			Field	Job Start		Customer	Job Number	
Castle Pines 19-5HZ			Wattenberg		Nov/25/2018		Anadarko	2843258
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
11/25/2018	11:05:37	27	0.0	9.34	0.0			
11/25/2018	11:07:07	95	2.3	9.60	1.4			
11/25/2018	11:08:37	74	2.3	9.33	4.9			
11/25/2018	11:10:07	81	2.6	9.16	8.5			
11/25/2018	11:11:37	177	4.2	8.83	13.5			
11/25/2018	11:13:07	69	3.7	8.03	17.8			
11/25/2018	11:14:37	25	0.0	8.37	19.9			
11/25/2018	11:15:00	24	0.0	8.37	19.9	Drop Top Plug		
11/25/2018	11:15:02	25	0.0	8.37	19.9	Start Displacement		
11/25/2018	11:16:00	23	0.0	8.35	0.0	Displace 397 BBLS BioCide		
11/25/2018	11:16:07	23	0.0	8.35	0.0			
11/25/2018	11:17:37	23	0.0	8.35	0.0			
11/25/2018	11:19:07	294	8.2	8.38	5.5			
11/25/2018	11:20:37	284	8.2	8.38	17.8			
11/25/2018	11:22:07	275	8.2	8.34	30.1			
11/25/2018	11:23:37	705	8.2	8.34	42.4			
11/25/2018	11:25:07	914	8.2	8.35	54.6			
11/25/2018	11:26:37	989	8.1	8.34	66.8			
11/25/2018	11:28:07	1090	8.2	8.35	79.1			
11/25/2018	11:29:37	1209	8.1	8.34	91.3			
11/25/2018	11:31:07	1332	8.1	8.34	103.5			
11/25/2018	11:32:37	1482	8.1	8.34	115.6			
11/25/2018	11:34:07	1619	8.1	8.34	127.7			
11/25/2018	11:35:37	1768	8.1	8.35	139.9			
11/25/2018	11:37:07	1924	8.1	8.34	152.0			
11/25/2018	11:38:37	2082	8.0	8.34	164.1			
11/25/2018	11:40:07	2222	8.0	8.34	176.2			
11/25/2018	11:41:37	2256	8.0	8.34	188.2			
11/25/2018	11:43:07	2296	8.1	8.34	200.3			
11/25/2018	11:44:37	2301	8.1	8.34	212.3			
11/25/2018	11:46:07	2347	8.0	8.34	224.4			
11/25/2018	11:47:37	2384	8.0	8.34	236.4			
11/25/2018	11:49:07	2434	8.0	8.34	248.5			
11/25/2018	11:50:37	2453	8.0	8.34	260.5			
11/25/2018	11:52:07	2504	8.0	8.34	272.5			
11/25/2018	11:53:37	2550	8.0	8.34	284.6			
11/25/2018	11:55:07	2600	8.0	8.34	296.6			
11/25/2018	11:56:37	2620	8.0	8.34	308.6			
11/25/2018	11:58:07	2665	8.1	8.35	320.6			
11/25/2018	11:59:37	2695	8.0	8.34	332.6			
11/25/2018	12:01:07	2749	8.0	8.34	344.6			
11/25/2018	12:02:37	2772	8.0	8.34	356.6			
11/25/2018	12:04:07	2824	8.0	8.34	368.6			
11/25/2018	12:05:37	2869	8.0	8.34	380.7			
11/25/2018	12:06:00	2885	7.9	8.34	383.7	Bump Top Plug 2600 PSI		
11/25/2018	12:07:07	2374	4.4	8.34	392.0			
11/25/2018	12:08:37	2361	4.4	8.34	398.6			
11/25/2018	12:10:00	2535	0.3	8.34	403.3	Floats Holding		
11/25/2018	12:10:07	2545	0.0	8.34	403.4			
11/25/2018	12:11:37	2581	0.0	8.34	403.4			
11/25/2018	12:13:00	1752	0.0	8.34	403.4	Pressure Test Casing		
11/25/2018	12:14:37	234	1.7	8.34	403.5			
11/25/2018	12:16:07	2680	2.1	8.34	406.7			
11/25/2018	12:17:37	2947	0.0	8.34	407.2			

Well			Field		Job Start	Customer		Job Number
Castle Pines 19-5HZ			Wattenberg		Nov/25/2018	Anadarko		2843258
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
11/25/2018	12:20:37	2999	0.0	8.34	407.2			
11/25/2018	12:22:07	3030	0.0	8.34	407.2			
11/25/2018	12:23:37	3050	0.0	8.34	407.2			
11/25/2018	12:25:07	3076	0.0	8.34	407.2			
11/25/2018	12:26:37	3099	0.0	8.34	407.2			
11/25/2018	12:28:07	3119	0.0	8.34	407.2			
11/25/2018	12:29:00	3134	0.0	8.34	407.2	Casing Test = Good		
11/25/2018	12:29:37	3147	0.0	8.34	407.2			
11/25/2018	12:31:07	3170	0.0	8.34	407.2			
11/25/2018	12:32:37	662	0.0	8.34	407.2			
11/25/2018	12:33:03	19	0.0	8.34	407.2	End Job		

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl						
Slurry	N2	Mud	Maximum Rate		Total Slurry 640.0	Mud	Spacer 78.0	N2			
Treating Pressure Summary, psi					Breakdown Fluid						
Maximum	Final 0	Average	Bump Plug to 2600	Breakdown	Type	Volume bbl	Density lb/gal				
Avg. N2 Percent %	Designed Slurry Volume 633.0 bbl		Displacement 397.0 bbl	Mix Water Temp 70 degF	Cement Circulated to Surface?		Volume bbl				
					Washed Thru Perfs		To ft				
Customer or Authorized Representative Josh Barkell			Schlumberger Supervisor Conley Jensen/ Sheldon Bell			Circulation Lost	Job Completed				
						-	-				



Service Order #:	
Date:	Nov/25/2018
Operating Time (hh:mm):	00:00
Client Rep:	Josh Barkell
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: