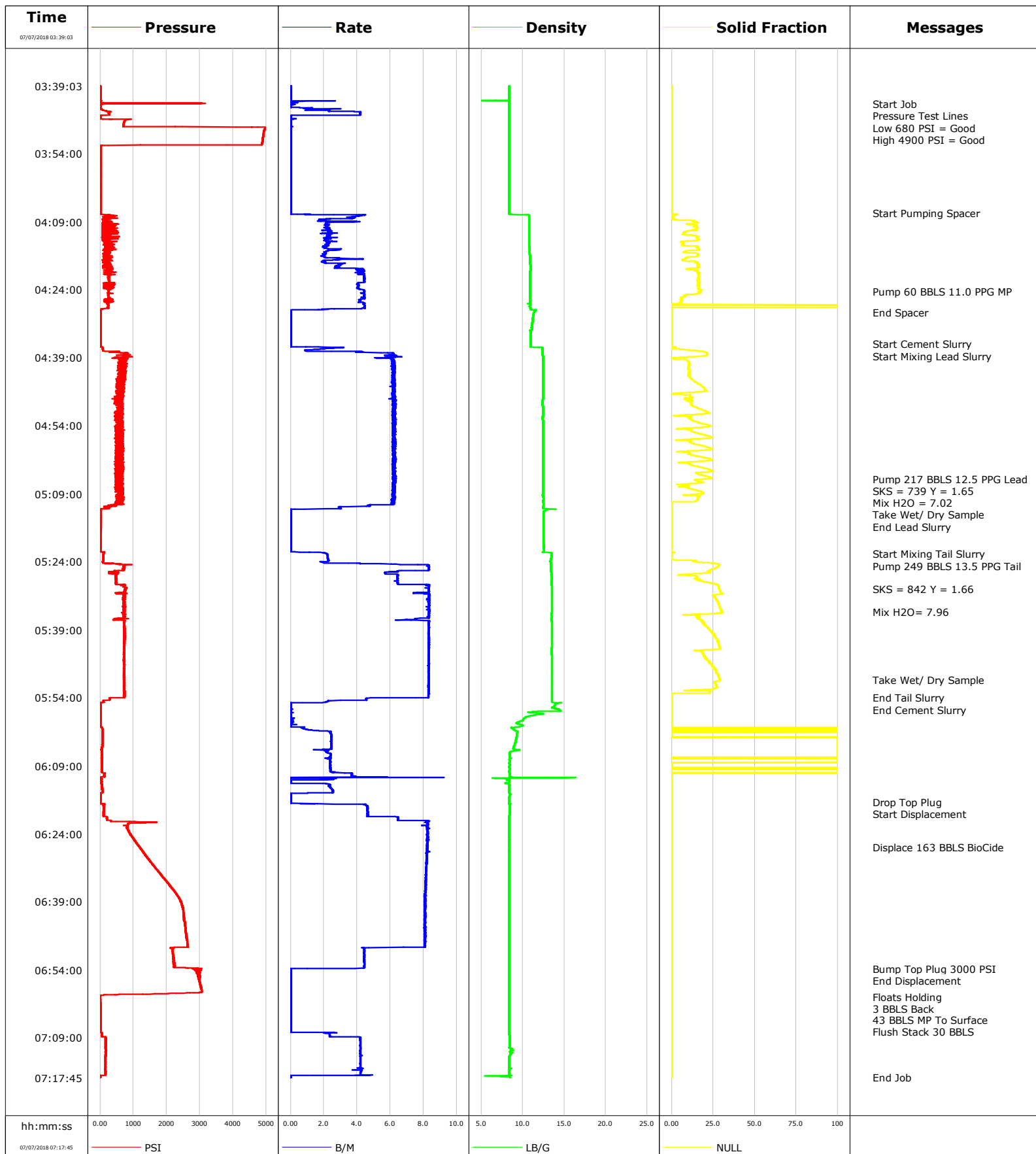


Well Ruegge
Field Wattenberg
Engineer Conley Jensen/ Sheldon Bell
Country United States

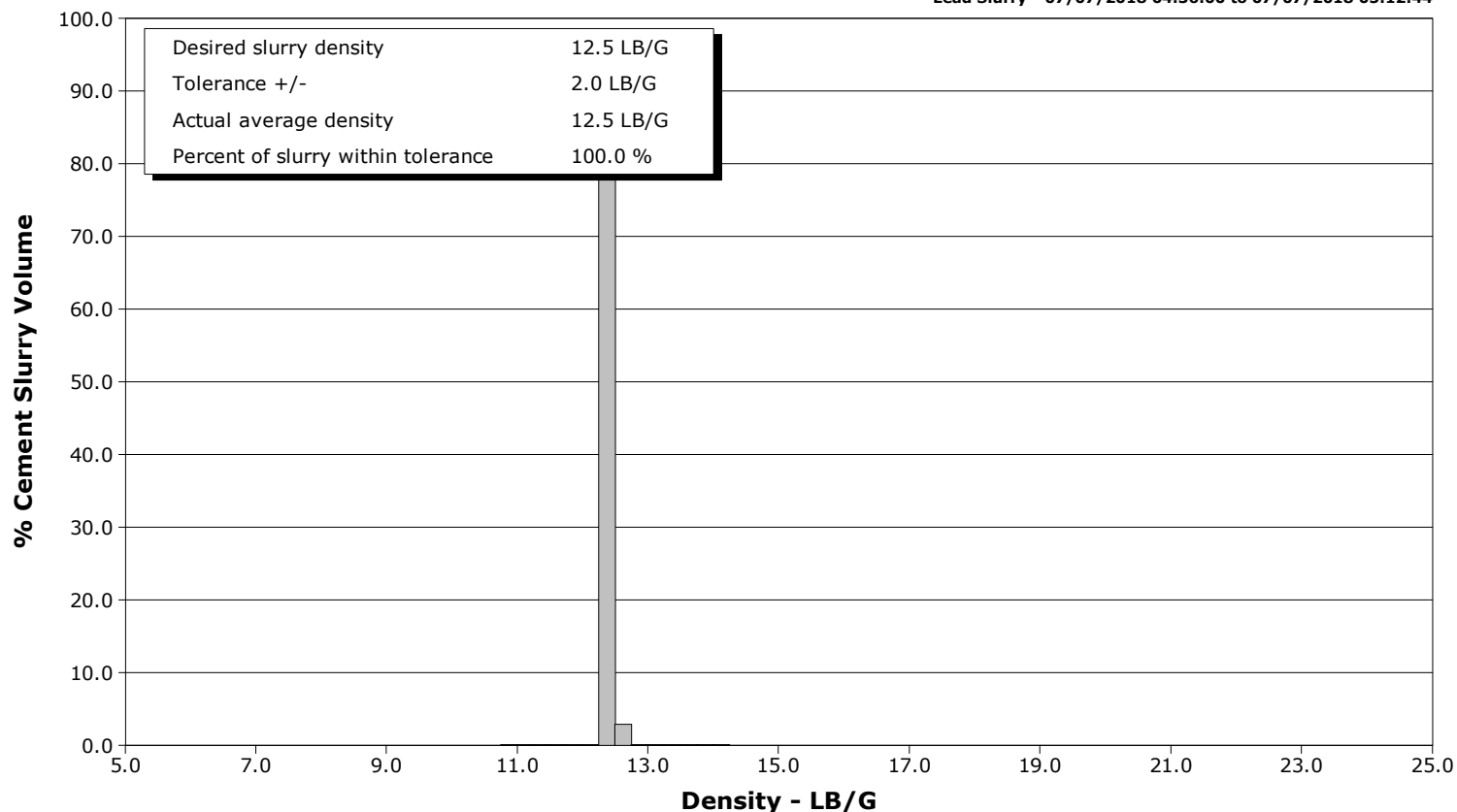
Client Crestone
SIR No. 2741116
Job Type 5.5" Monobore
Job Date 07-07-2018



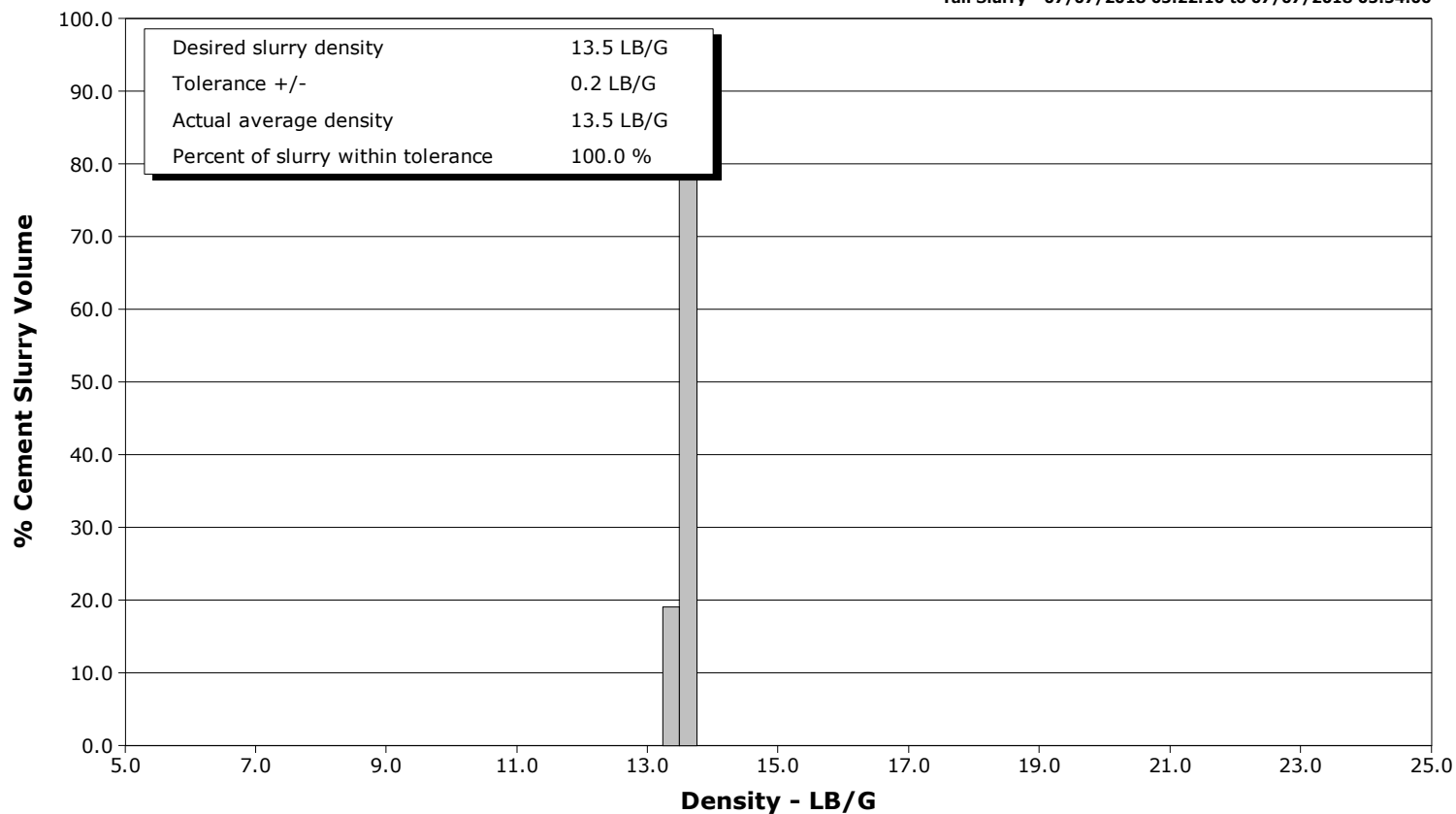
Well Ruegge
Field Wattenberg
Engineer Conley Jensen/ Sheldon Bell
Country United States

Client Crestone
SIR No. 2741116
Job Type 5.5" Monobore
Job Date 07-07-2018

Lead Slurry - 07/07/2018 04:36:00 to 07/07/2018 05:12:44



Tail Slurry - 07/07/2018 05:22:10 to 07/07/2018 05:54:00



Cementing Service Report

				Customer Crestone			Job Number 2741116				
Well Ruegge 3L-4H-N165			Location (legal)			Schlumberger Location CWY			Job Start Jul/07/2018		
Field Wattenberg		Formation Name/Type Shale		Deviation deg		Bit Size 8.5 in		Well MD 11876.0 ft		Well TVD 7106.0 ft	
County		State/Province Colorado		BHP psi		BHST 223 degF		BHCT 193 degF		Pore Press. Gradient lb/gal	
Well Master 0631761948		API/UWI 05123465610000									
Rig Name Ensign 140	Drilled For Oil		Service Via Land		Casing/ Liner						
						Depth, ft		Size, in		Weight, lb/ft	
Offshore Zone		Well Class New		Well Type Development		2483.0		9.6		40.0	
						11876.0		5.5		20.0	
Drilling Fluid Type		Max. Density lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe					
						T/D		Depth, ft		Size, in	
Service Line Cementing		Job Type 5.5" Monobore									
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection Single Cement head		Perforations/Open Hole					
						Top, ft		Bottom, ft		shot/ft	
						ft		ft			
						ft		ft			
						Treat Down Casing		Displacement 263.0 bbl		Packer Type	
										Packer Depth ft	
						Tubing Vol. bbl		Casing Vol. 263.0 bbl		Annular Vol. 499.0 bbl	
										Openhole Vol. 776.0 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 11876.0 ft			Tool Type		
No. Centralizers		Top Plugs 1		Bottom Plugs		Stage Tool Type			Tool Depth ft		
Cement Head Type Single						Stage Tool Depth ft			Tail Pipe Size in		
Job Scheduled For Jul/07/2018 01:00		Arrived on Location Jul/07/2018 01:00		Leave Location Jul/07/2018		Collar Type Float			Tail Pipe Depth ft		
						Collar Depth 11865.0 ft			Sqz. Total Vol. bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
07/07/2018	03:39:03	1	0.0	8.39	0.0	Started Acquisition					
07/07/2018	03:40:33	1	0.0	8.39	0.0						
07/07/2018	03:42:03	2	0.0	8.39	0.0						
07/07/2018	03:43:00	3014	0.0	8.39	0.2	Start Job					
07/07/2018	03:43:33	13	0.0	8.40	0.2						
07/07/2018	03:45:00	245	4.2	8.40	2.9	Pressure Test Lines					
07/07/2018	03:45:03	248	4.2	8.40	3.1						
07/07/2018	03:46:33	778	0.0	8.40	5.2						
07/07/2018	03:47:00	727	0.0	8.40	5.2	Low 680 PSI = Good					
07/07/2018	03:48:03	693	0.0	8.40	5.2						
07/07/2018	03:49:00	4945	0.0	8.40	5.2	High 4900 PSI = Good					
07/07/2018	03:49:33	4928	0.0	8.40	5.2						
07/07/2018	03:51:03	4901	0.0	8.40	5.2						
07/07/2018	03:52:33	23	0.0	8.40	5.2						
07/07/2018	03:54:03	24	0.0	8.41	5.2						
07/07/2018	03:55:33	25	0.0	8.41	5.2						
07/07/2018	03:57:03	25	0.0	8.41	5.2						
07/07/2018	03:58:33	24	0.0	8.40	5.2						
07/07/2018	04:00:03	25	0.0	8.40	5.2						
07/07/2018	04:01:33	24	0.0	8.40	5.2						
07/07/2018	04:03:03	25	0.0	8.40	5.2						

Well			Field	Job Start		Customer		Job Number	
Ruegge 3L-4H-N165			Wattenberg		Jul/07/2018		Crestone		2741116
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
07/07/2018	04:06:03	25	0.0	8.40	5.2				
07/07/2018	04:07:00	25	0.0	8.39	0.0	Start Pumping Spacer			
07/07/2018	04:07:33	353	4.4	10.76	0.4				
07/07/2018	04:09:03	266	4.2	10.79	5.2				
07/07/2018	04:10:33	97	2.3	10.76	8.6				
07/07/2018	04:12:03	66	2.3	10.77	12.1				
07/07/2018	04:13:33	243	2.4	10.79	15.5				
07/07/2018	04:15:03	298	3.1	10.84	18.8				
07/07/2018	04:16:33	153	2.0	10.88	22.2				
07/07/2018	04:18:03	311	2.0	10.91	25.8				
07/07/2018	04:19:33	345	4.1	10.94	30.3				
07/07/2018	04:21:03	233	4.4	10.90	36.7				
07/07/2018	04:22:33	135	4.0	10.91	43.4				
07/07/2018	04:24:03	284	4.4	10.93	49.5				
07/07/2018	04:24:25	244	4.5	10.92	51.1	Pump 60 BBLS 11.0 PPG MP			
07/07/2018	04:25:33	255	4.4	10.90	56.1				
07/07/2018	04:27:03	220	4.4	10.92	62.6				
07/07/2018	04:28:33	11	0.0	11.54	68.3				
07/07/2018	04:28:59	9	0.0	11.38	68.3	End Spacer			
07/07/2018	04:30:03	8	0.0	11.24	68.3				
07/07/2018	04:31:33	8	0.0	11.17	0.0				
07/07/2018	04:33:03	7	0.0	10.89	0.0				
07/07/2018	04:34:33	7	0.0	10.93	0.0				
07/07/2018	04:36:00	7	0.0	10.93	0.0	Start Cement Slurry			
07/07/2018	04:36:03	7	0.0	10.93	0.0				
07/07/2018	04:37:33	153	1.0	12.40	1.7				
07/07/2018	04:39:03	809	5.2	12.44	10.1				
07/07/2018	04:40:33	752	6.3	12.45	19.3				
07/07/2018	04:42:03	708	6.3	12.44	28.6				
07/07/2018	04:43:33	533	6.2	12.44	37.9				
07/07/2018	04:45:03	572	6.2	12.46	47.3				
07/07/2018	04:46:33	675	6.2	12.46	56.6				
07/07/2018	04:48:03	361	6.1	12.44	65.9				
07/07/2018	04:49:33	685	6.3	12.42	75.3				
07/07/2018	04:51:03	629	6.2	12.43	84.6				
07/07/2018	04:52:33	669	6.3	12.41	94.0				
07/07/2018	04:54:03	622	6.2	12.45	103.4				
07/07/2018	04:55:33	551	6.2	12.47	112.7				
07/07/2018	04:57:03	664	6.3	12.47	122.1				
07/07/2018	04:58:33	669	6.3	12.47	131.5				
07/07/2018	05:00:03	500	6.2	12.46	140.8				
07/07/2018	05:01:33	707	6.3	12.48	150.2				
07/07/2018	05:03:03	654	6.2	12.48	159.5				
07/07/2018	05:04:33	446	6.3	12.46	168.9				
07/07/2018	05:05:47	590	6.2	12.47	176.6	Pump 217 BBLS 12.5 PPG Lead			
07/07/2018	05:06:01	450	6.2	12.47	178.1	SKS = 739 Y = 1.65			
07/07/2018	05:06:03	611	6.3	12.46	178.3				
07/07/2018	05:06:11	650	6.3	12.46	179.1	Mix H2O = 7.02			
07/07/2018	05:06:21	664	6.2	12.45	180.2	Take Wet/ Dry Sample			
07/07/2018	05:07:33	510	6.2	12.44	187.6				
07/07/2018	05:09:03	535	6.2	12.43	197.0				
07/07/2018	05:10:33	545	6.3	12.47	206.3				
07/07/2018	05:12:03	131	3.0	12.47	214.3				
07/07/2018	05:12:44	17	0.0	12.70	215.3	End Lead Slurry			

Well			Field	Job Start		Customer	Job Number	
Ruegge 3L-4H-N165			Wattenberg		Jul/07/2018		Crestone	2741116
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
07/07/2018	05:15:03	15	0.0	12.53	215.3			
07/07/2018	05:16:33	15	0.0	12.53	0.0			
07/07/2018	05:18:03	15	0.0	12.54	0.0			
07/07/2018	05:19:33	15	0.0	12.54	0.0			
07/07/2018	05:21:03	14	0.0	12.55	0.0			
07/07/2018	05:22:10	105	2.1	13.50	0.5	Start Mixing Tail Slurry		
07/07/2018	05:22:33	103	2.2	13.47	1.4			
07/07/2018	05:24:03	75	1.9	13.37	4.7			
07/07/2018	05:25:00	702	8.3	13.42	10.0	Pump 249 BBLS 13.5 PPG Tail		
07/07/2018	05:25:33	682	8.3	13.41	14.6			
07/07/2018	05:27:03	480	6.4	13.48	24.7			
07/07/2018	05:28:33	492	6.5	13.49	34.4			
07/07/2018	05:30:00	792	8.3	13.52	45.6	SKS = 842 Y = 1.66		
07/07/2018	05:30:03	784	8.3	13.52	46.0			
07/07/2018	05:31:33	718	8.4	13.52	58.3			
07/07/2018	05:33:03	711	8.4	13.54	70.9			
07/07/2018	05:34:33	703	8.4	13.52	83.4			
07/07/2018	05:35:00	730	8.4	13.51	87.1	Mix H2O= 7.96		
07/07/2018	05:36:03	697	8.4	13.51	95.9			
07/07/2018	05:37:33	717	8.3	13.52	108.0			
07/07/2018	05:39:03	733	8.3	13.53	120.5			
07/07/2018	05:40:33	740	8.3	13.53	133.0			
07/07/2018	05:42:03	749	8.3	13.51	145.5			
07/07/2018	05:43:33	720	8.3	13.50	158.0			
07/07/2018	05:45:03	728	8.4	13.51	170.5			
07/07/2018	05:46:33	721	8.3	13.54	183.0			
07/07/2018	05:48:03	718	8.3	13.52	195.5			
07/07/2018	05:49:33	715	8.3	13.51	207.9			
07/07/2018	05:50:02	727	8.4	13.51	212.0	Take Wet/ Dry Sample		
07/07/2018	05:51:03	729	8.3	13.53	220.4			
07/07/2018	05:52:33	727	8.3	13.54	232.9			
07/07/2018	05:54:00	321	7.6	13.52	245.0	End Tail Slurry		
07/07/2018	05:54:03	288	4.6	13.52	245.3			
07/07/2018	05:55:33	5	0.0	13.94	248.8			
07/07/2018	05:57:03	6	0.0	11.46	248.8			
07/07/2018	05:58:33	12	0.0	10.14	248.8			
07/07/2018	06:00:03	13	0.0	9.95	248.9			
07/07/2018	06:01:33	64	2.4	9.38	250.3			
07/07/2018	06:03:03	64	2.5	9.21	253.9			
07/07/2018	06:04:33	62	2.5	8.99	257.6			
07/07/2018	06:06:03	58	2.2	8.47	261.0			
07/07/2018	06:07:33	57	2.4	8.41	264.6			
07/07/2018	06:09:03	57	2.4	8.41	268.1			
07/07/2018	06:10:33	142	3.3	8.41	271.8			
07/07/2018	06:12:03	40	2.6	8.35	276.5			
07/07/2018	06:13:33	59	2.3	8.41	278.2			
07/07/2018	06:15:03	5	0.0	8.45	281.9			
07/07/2018	06:16:33	3	0.0	8.39	0.0			
07/07/2018	06:17:00	3	0.0	8.40	0.0	Drop Top Plug		
07/07/2018	06:18:03	109	4.6	8.44	3.0			
07/07/2018	06:19:33	103	4.6	8.44	9.9			
07/07/2018	06:21:03	329	8.0	8.41	18.4			
07/07/2018	06:22:33	820	8.3	8.40	30.8			
07/07/2018	06:24:03	907	8.2	8.41	43.2			

Well			Field	Job Start		Customer		Job Number	
Ruegge 3L-4H-N165			Wattenberg		Jul/07/2018		Crestone		2741116
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
07/07/2018	06:27:00	1207	8.2	8.40	67.5	Displace 163 BBLS BioCide			
07/07/2018	06:27:03	1210	8.2	8.40	68.0				
07/07/2018	06:28:33	1358	8.2	8.40	80.3				
07/07/2018	06:30:03	1509	8.2	8.40	92.6				
07/07/2018	06:31:33	1673	8.2	8.40	104.9				
07/07/2018	06:33:03	1838	8.2	8.40	117.2				
07/07/2018	06:34:33	2017	8.1	8.40	129.4				
07/07/2018	06:36:03	2180	8.1	8.40	141.6				
07/07/2018	06:37:33	2328	8.1	8.40	153.8				
07/07/2018	06:39:03	2435	8.1	8.40	166.0				
07/07/2018	06:40:33	2489	8.1	8.40	178.1				
07/07/2018	06:42:03	2525	8.1	8.40	190.3				
07/07/2018	06:43:33	2566	8.1	8.40	202.5				
07/07/2018	06:45:03	2570	8.1	8.40	214.6				
07/07/2018	06:46:33	2598	8.1	8.40	226.8				
07/07/2018	06:48:03	2628	8.1	8.40	239.0				
07/07/2018	06:49:33	2198	4.4	8.40	249.3				
07/07/2018	06:51:03	2196	4.4	8.40	255.9				
07/07/2018	06:52:33	2213	4.4	8.40	262.6				
07/07/2018	06:53:41	3068	0.3	8.40	267.5	Bump Top Plug 3000 PSI			
07/07/2018	06:53:42	3068	0.0	8.40	267.5	End Displacement			
07/07/2018	06:54:03	2887	0.0	8.40	267.5				
07/07/2018	06:55:33	2957	0.0	8.40	267.5				
07/07/2018	06:57:03	3030	0.0	8.40	267.5				
07/07/2018	06:58:33	3062	0.0	8.41	267.5				
07/07/2018	06:59:55	0	0.0	8.41	267.5	Floats Holding			
07/07/2018	06:59:56	0	0.0	8.41	267.5	3 BBLS Back			
07/07/2018	07:00:03	-1	0.0	8.41	267.5				
07/07/2018	07:01:33	2	0.0	8.41	267.5				
07/07/2018	07:03:03	2	0.0	8.41	267.5				
07/07/2018	07:04:33	1	0.0	8.41	267.5				
07/07/2018	07:05:00	1	0.0	8.41	267.5	43 BBLS MP To Surface			
07/07/2018	07:06:03	1	0.0	8.41	267.5				
07/07/2018	07:07:00	1	0.0	8.41	267.5	Flush Stack 30 BBLS			
07/07/2018	07:07:33	1	0.0	8.41	267.5				
07/07/2018	07:09:03	169	4.2	8.42	3.2				
07/07/2018	07:10:33	167	4.2	8.42	9.5				
07/07/2018	07:12:03	167	4.2	8.47	15.8				
07/07/2018	07:13:33	160	4.2	8.40	22.1				
07/07/2018	07:15:03	159	4.2	8.40	28.4				
07/07/2018	07:16:33	160	4.2	8.40	34.8				

Well Ruegge 3L-4H-N165	Field Wattenberg	Job Start Jul/07/2018	Customer Crestone	Job Number 2741116
----------------------------------	----------------------------	---------------------------------	-----------------------------	------------------------------

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 5.7	N2	Mud	Maximum Rate 9.2		Total Slurry 876.3	Mud 0.0	Spacer 68.3	N2
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 5015	Final 0	Average 703	Bump Plug to 3000	Breakdown	Type	Volume bbl		Density lb/gal
Avg. N2 Percent %	Designed Slurry Volume 466.0 bbl	Displacement 202.2 bbl	Mix Water Temp 70 degF	Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl		
				Washed Thru Perfs <input type="checkbox"/>		To ft		
Customer or Authorized Representative Nate Curley			Schlumberger Supervisor Conley Jensen/ Sheldon Bell			Circulation Lost <input type="checkbox"/>		Job Completed <input type="checkbox"/>
						-		-



Service Order #:	
Date:	Jul/07/2018
Operating Time (hh:mm):	00:00
Client Rep:	Nate Curley
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: