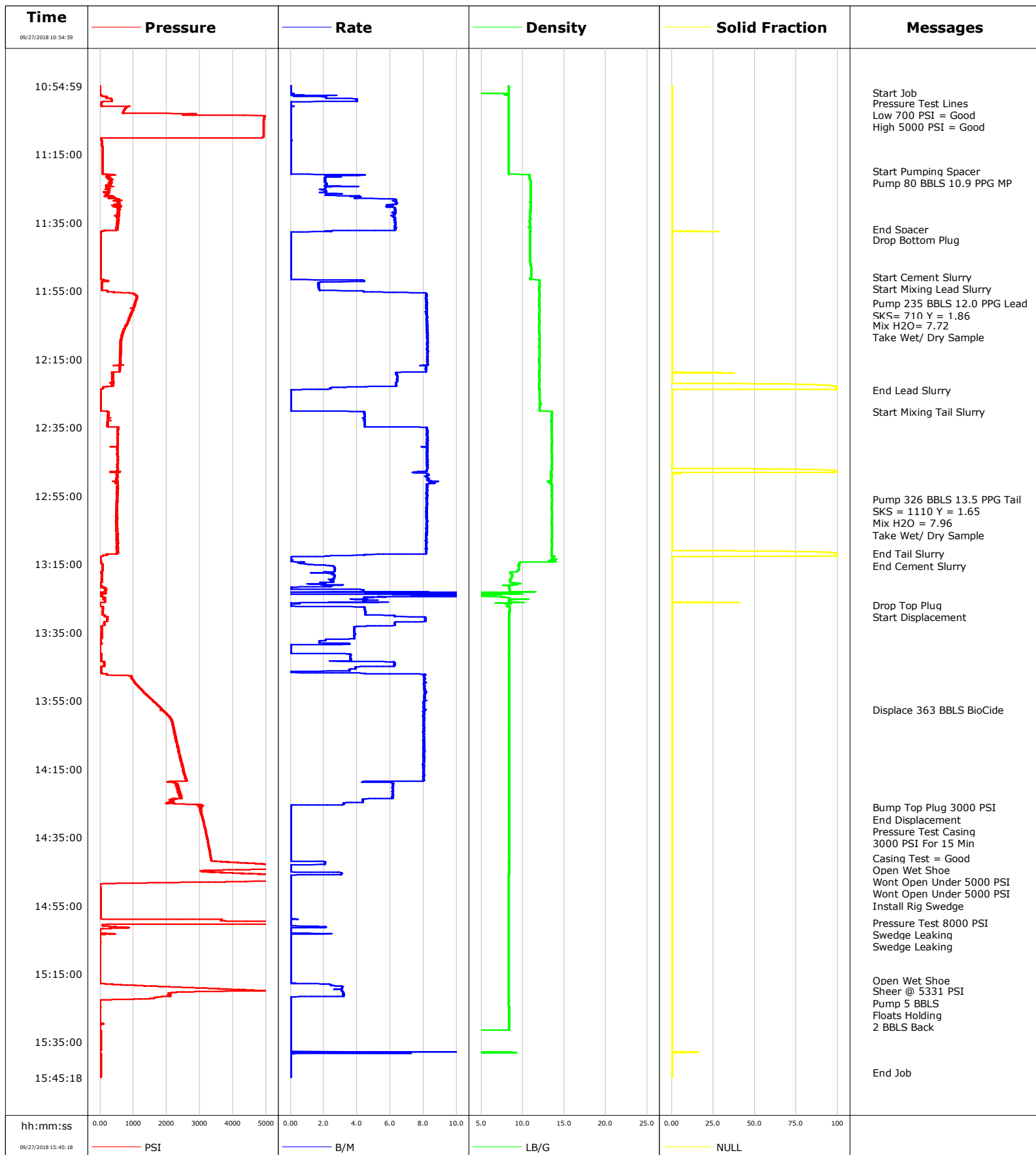


Well Cowboy 21-3HZ
Field Wattenberg
Engineer Conley Jensen/ Sheldon Bell
Country United States

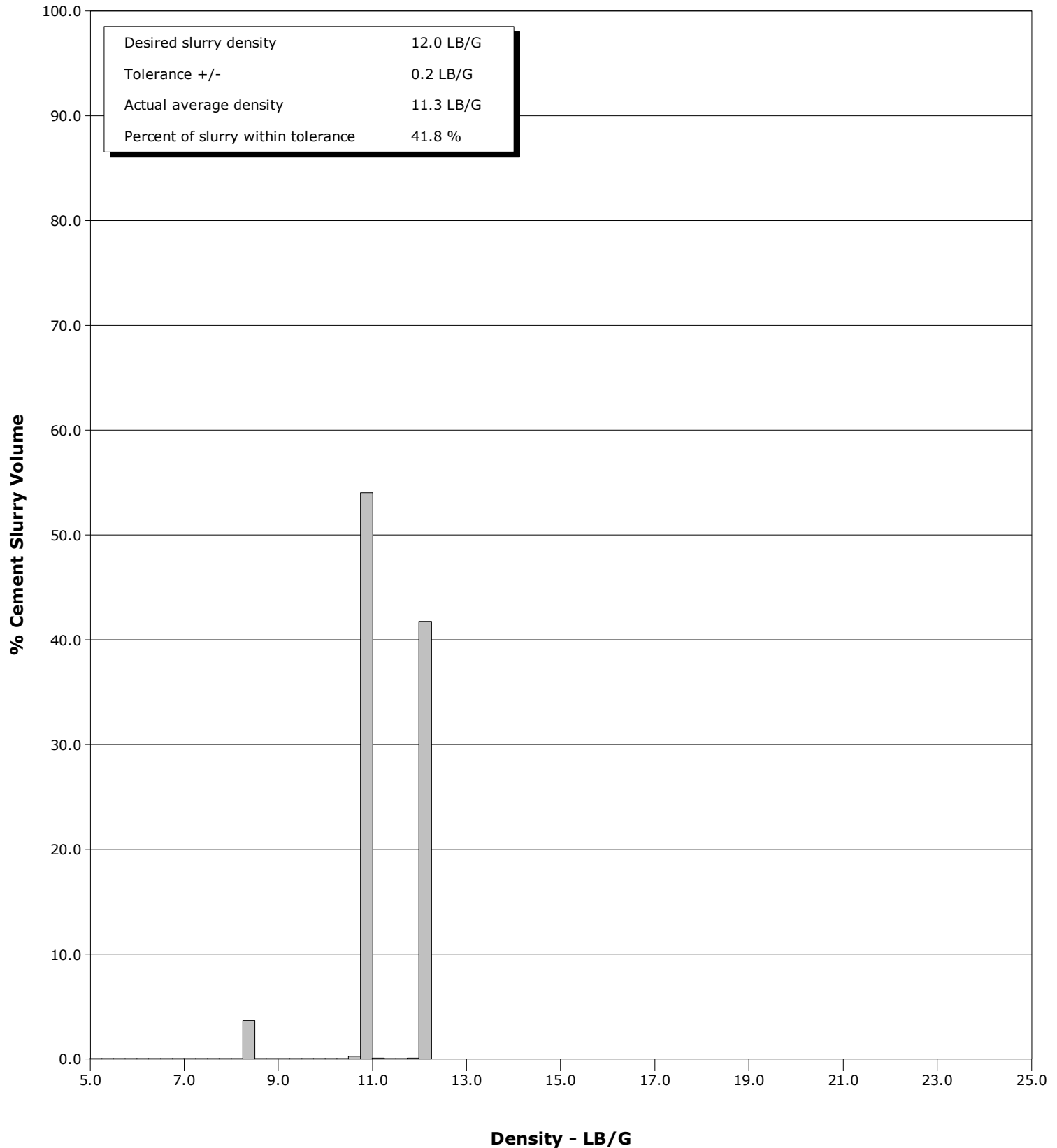
Client Anadarko
SIR No. 2821402
Job Type 5.5" Monobore
Job Date 09-27-2018



Well Cowboy 21-3HZ
Field Wattenberg
Engineer Conley Jensen/ Sheldon Bell
Country United States

Client Anadarko
SIR No. 2821402
Job Type 5.5" Monobore
Job Date 09-27-2018

Cement Slurry - 09/27/2018 10:54:59 to 09/27/2018 12:01:36



Cementing Service Report

				Customer Anadarko			Job Number 2821402			
Well Cowboy 21-3HZ 21-3HZ			Location (legal)			Schlumberger Location CWY			Job Start Sep/27/2018	
Field Wattenberg		Formation Name/Type Shale		Deviation deg		Bit Size 8.5 in		Well MD 15678.0 ft		Well TVD 7494.0 ft
County		State/Province Colorado		BHP psi		BHST 235 degF		BHCT 230 degF		Pore Press. Gradient lb/gal
Well Master 0631777464		API/UWI 05123471030000								
Rig Name Precision 564		Drilled For Oil		Service Via Land		Casing/ Liner				
						Depth, ft		Size, in		Weight, lb/ft
Offshore Zone		Well Class New		Well Type Development		1887.0		9.6		36.0
						15628.0		5.5		17.0
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 Double Cement head		Perforations/Open Hole				
						Top, ft		Bottom, ft		shot/ft
						ft		ft		
						ft		ft		
						Treat Down Casing		Displacement 363.0 bbl		Packer Type
										Packer Depth ft
						Tubing Vol. bbl		Casing Vol. 363.0 bbl		Annular Vol. 651.0 bbl
										Openhole Vol. 1028.0 bbl
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input 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 15628.0 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 Sep/27/2018 07:00		Arrived on Location Sep/27/2018 07:00		Leave Location Sep/27/2018 17:00		Collar Type Float		Tail Pipe Depth ft		
						Collar Depth 15618.0 ft		Sqz. Total Vol. bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
09/27/2018	10:54:59	-0	0.0	8.33	0.0	Started Acquisition				
09/27/2018	10:56:29	-0	0.0	8.34	0.0					
09/27/2018	10:57:00	-0	0.0	8.34	0.0	Start Job				
09/27/2018	10:57:59	51	0.2	8.34	0.3					
09/27/2018	10:59:29	357	4.0	8.35	4.6					
09/27/2018	11:00:00	36	0.0	8.35	5.2	Pressure Test Lines				
09/27/2018	11:00:59	83	0.1	8.35	5.2					
09/27/2018	11:01:00	191	0.1	8.35	5.3	Low 700 PSI = Good				
09/27/2018	11:02:29	704	0.0	8.35	5.3					
09/27/2018	11:03:59	4962	0.0	8.34	5.3					
09/27/2018	11:04:00	4961	0.0	8.34	5.3	High 5000 PSI = Good				
09/27/2018	11:05:29	4934	0.0	8.35	5.3					
09/27/2018	11:06:59	4928	0.0	8.35	5.3					
09/27/2018	11:08:29	4926	0.0	8.34	5.3					
09/27/2018	11:09:59	4921	0.0	8.34	5.3					
09/27/2018	11:11:29	51	0.0	8.34	5.3					
09/27/2018	11:12:59	61	0.0	8.35	0.0					
09/27/2018	11:14:29	67	0.0	8.35	0.0					
09/27/2018	11:15:59	70	0.0	8.35	0.0					
09/27/2018	11:17:29	71	0.0	8.34	0.0					
09/27/2018	11:18:59	72	0.0	8.34	0.0					

Well			Field	Job Start		Customer		Job Number	
Cowboy 21-3HZ 21-3HZ			Wattenberg		Sep/27/2018		Anadarko		2821402
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
09/27/2018	11:20:29	72	0.0	8.33	0.0				
09/27/2018	11:21:59	237	2.1	10.85	3.0				
09/27/2018	11:22:00	247	2.1	10.85	3.1	Pump 80 BBLs 10.9 PPG MP			
09/27/2018	11:23:29	298	2.1	10.95	6.1				
09/27/2018	11:24:59	192	2.1	10.95	9.6				
09/27/2018	11:26:29	181	2.1	10.95	12.6				
09/27/2018	11:27:59	465	4.5	10.95	17.5				
09/27/2018	11:29:29	596	6.4	10.94	26.9				
09/27/2018	11:30:59	514	6.3	10.95	36.1				
09/27/2018	11:32:29	565	6.3	10.93	45.5				
09/27/2018	11:33:59	546	6.3	10.94	54.9				
09/27/2018	11:35:29	527	6.3	10.90	64.3				
09/27/2018	11:36:59	493	6.3	10.89	73.8				
09/27/2018	11:37:00	483	6.3	10.90	73.9	End Spacer			
09/27/2018	11:38:29	4	0.0	10.93	0.0				
09/27/2018	11:39:59	6	0.0	10.93	0.0				
09/27/2018	11:40:00	5	0.0	10.93	0.0	Drop Bottom Plug			
09/27/2018	11:41:29	7	0.0	10.92	0.0				
09/27/2018	11:42:59	7	0.0	10.90	0.0				
09/27/2018	11:44:29	7	0.0	10.90	0.0				
09/27/2018	11:45:59	6	0.0	10.90	0.0				
09/27/2018	11:47:29	6	0.0	10.99	0.0				
09/27/2018	11:48:59	7	0.0	11.00	0.0				
09/27/2018	11:51:00	9	0.0	11.02	0.0	Start Cement Slurry			
09/27/2018	11:51:59	247	4.4	12.04	0.8				
09/27/2018	11:53:29	58	1.7	12.01	4.4				
09/27/2018	11:54:59	217	3.7	12.00	7.0				
09/27/2018	11:56:29	1102	8.2	12.02	17.3				
09/27/2018	11:57:59	1079	8.2	12.00	29.6				
09/27/2018	11:58:37	1064	8.2	12.03	34.8	Pump 235 BBLs 12.0 PPG Lead			
09/27/2018	11:59:13	1041	8.2	12.00	39.7	SKS= 710 Y = 1.86			
09/27/2018	11:59:29	1018	8.2	12.00	41.9				
09/27/2018	12:00:59	994	8.2	12.02	54.2				
09/27/2018	12:02:29	897	8.2	12.00	66.5				
09/27/2018	12:03:59	846	8.2	12.01	78.8				
09/27/2018	12:04:59	791	8.2	12.00	87.0	Mix H2O= 7.72			
09/27/2018	12:05:11	777	8.2	12.00	88.7	Take Wet/ Dry Sample			
09/27/2018	12:05:29	764	8.2	12.00	91.1				
09/27/2018	12:06:59	686	8.3	12.00	103.5				
09/27/2018	12:08:29	663	8.2	12.01	115.9				
09/27/2018	12:09:59	624	8.3	12.01	128.2				
09/27/2018	12:11:29	649	8.3	12.01	140.6				
09/27/2018	12:12:59	623	8.3	12.01	153.0				
09/27/2018	12:14:29	611	8.2	12.01	165.4				
09/27/2018	12:15:59	611	8.2	12.00	177.7				
09/27/2018	12:17:29	573	8.2	12.05	190.0				
09/27/2018	12:18:59	402	6.4	11.96	202.0				
09/27/2018	12:20:29	384	6.4	12.01	211.6				
09/27/2018	12:21:59	298	6.4	11.98	221.3				
09/27/2018	12:23:29	78	2.4	11.97	229.4				
09/27/2018	12:24:02	4	0.0	12.07	230.4	End Lead Slurry			
09/27/2018	12:24:59	5	0.0	12.01	230.4				
09/27/2018	12:26:29	4	0.0	12.05	230.4				
09/27/2018	12:27:59	4	0.0	12.11	0.0				

Well			Field	Job Start		Customer	Job Number
Cowboy 21-3HZ 21-3HZ			Wattenberg	Sep/27/2018		Anadarko	2821402
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/27/2018	12:30:27	241	4.4	13.53	0.7	Start Mixing Tail Slurry	
09/27/2018	12:30:59	245	4.4	13.53	3.1		
09/27/2018	12:32:29	233	4.4	13.50	9.8		
09/27/2018	12:33:59	222	4.5	13.49	16.5		
09/27/2018	12:35:29	548	8.2	13.50	25.3		
09/27/2018	12:36:59	521	8.2	13.48	37.7		
09/27/2018	12:38:29	545	8.2	13.52	50.0		
09/27/2018	12:39:59	519	8.2	13.51	62.4		
09/27/2018	12:41:29	527	8.2	13.49	74.7		
09/27/2018	12:42:59	532	8.3	13.51	87.1		
09/27/2018	12:44:29	528	8.2	13.53	99.4		
09/27/2018	12:47:29	516	8.2	13.49	124.1		
09/27/2018	12:48:59	500	8.2	13.43	136.2		
09/27/2018	12:50:29	524	8.3	13.44	148.6		
09/27/2018	12:51:59	511	8.2	13.52	161.2		
09/27/2018	12:53:29	546	8.2	13.53	173.5		
09/27/2018	12:54:59	506	8.2	13.50	185.9		
09/27/2018	12:55:58	527	8.2	13.51	194.0	Pump 326 BBLS 13.5 PPG Tail	
09/27/2018	12:56:27	526	8.2	13.51	197.9	SKS = 1110 Y = 1.65	
09/27/2018	12:56:29	515	8.2	13.50	198.2		
09/27/2018	12:56:36	507	8.2	13.51	199.2	Mix H2O = 7.96	
09/27/2018	12:56:44	496	8.2	13.51	200.2	Take Wet/ Dry Sample	
09/27/2018	12:57:59	499	8.2	13.50	210.5		
09/27/2018	12:59:29	513	8.2	13.51	222.8		
09/27/2018	13:00:59	503	8.2	13.51	235.1		
09/27/2018	13:02:29	489	8.2	13.50	247.4		
09/27/2018	13:03:59	528	8.2	13.51	259.7		
09/27/2018	13:05:29	504	8.2	13.51	272.0		
09/27/2018	13:06:59	541	8.2	13.52	284.3		
09/27/2018	13:08:29	510	8.2	13.48	296.6		
09/27/2018	13:09:59	525	8.2	13.51	308.9		
09/27/2018	13:11:29	516	8.2	13.50	321.1		
09/27/2018	13:12:00	517	8.2	13.49	325.4	End Tail Slurry	
09/27/2018	13:12:59	4	0.0	13.68	328.9		
09/27/2018	13:14:29	33	0.6	9.73	329.0		
09/27/2018	13:15:59	62	2.6	9.56	331.3		
09/27/2018	13:17:29	50	2.4	8.49	335.2		
09/27/2018	13:18:59	54	2.6	8.66	339.0		
09/27/2018	13:20:29	21	1.8	8.86	342.7		
09/27/2018	13:21:59	145	0.0	8.37	345.3		
09/27/2018	13:23:29	56	23.9	7.83	8.1		
09/27/2018	13:24:59	149	4.4	8.37	20.6		
09/27/2018	13:26:29	-3	0.0	8.16	26.6		
09/27/2018	13:27:59	76	4.5	8.42	2.2		
09/27/2018	13:29:29	71	4.5	8.41	8.9		
09/27/2018	13:30:59	215	8.1	8.36	18.4		
09/27/2018	13:32:29	132	6.3	8.37	29.6		
09/27/2018	13:33:59	46	3.8	8.36	37.0		
09/27/2018	13:35:29	46	3.9	8.36	42.7		
09/27/2018	13:36:59	9	2.9	8.36	48.5		
09/27/2018	13:38:29	36	3.5	8.36	51.9		
09/27/2018	13:39:59	-5	0.0	8.36	52.3		
09/27/2018	13:42:59	42	3.6	8.36	58.6		
09/27/2018	13:44:29	128	6.3	8.36	66.3		

Well			Field	Job Start		Customer	Job Number	
Cowboy 21-3HZ 21-3HZ			Wattenberg		Sep/27/2018		Anadarko	2821402
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
09/27/2018	13:47:29	213	8.1	8.36	78.6			
09/27/2018	13:48:59	1016	8.0	8.36	90.7			
09/27/2018	13:50:29	1105	8.1	8.36	102.8			
09/27/2018	13:51:59	1263	8.1	8.36	114.9			
09/27/2018	13:53:29	1422	8.1	8.36	127.0			
09/27/2018	13:54:59	1595	8.2	8.37	139.2			
09/27/2018	13:56:29	1766	8.0	8.36	151.2			
09/27/2018	13:57:36	1858	8.2	8.37	160.2	Displace 363 BBLS BioCide		
09/27/2018	13:57:59	1901	8.0	8.36	163.3			
09/27/2018	13:59:29	2075	8.0	8.36	175.4			
09/27/2018	14:00:59	2180	8.0	8.36	187.4			
09/27/2018	14:02:29	2199	8.0	8.35	199.5			
09/27/2018	14:03:59	2238	8.0	8.36	211.5			
09/27/2018	14:05:29	2289	8.1	8.35	223.6			
09/27/2018	14:06:59	2325	8.0	8.35	235.6			
09/27/2018	14:08:29	2330	8.0	8.36	247.7			
09/27/2018	14:09:59	2370	8.0	8.36	259.7			
09/27/2018	14:11:29	2428	8.1	8.36	271.8			
09/27/2018	14:12:59	2473	8.0	8.36	283.8			
09/27/2018	14:14:29	2501	8.0	8.35	295.8			
09/27/2018	14:15:59	2508	8.0	8.36	307.9			
09/27/2018	14:17:29	2580	8.0	8.35	319.9			
09/27/2018	14:18:59	2210	6.1	8.36	330.7			
09/27/2018	14:20:29	2321	6.2	8.36	340.0			
09/27/2018	14:21:59	2350	6.2	8.36	349.2			
09/27/2018	14:23:29	2432	6.2	8.35	358.4			
09/27/2018	14:24:59	2043	3.2	8.35	365.3			
09/27/2018	14:26:17	2993	0.0	8.36	367.0	Bump Top Plug 3000 PSI		
09/27/2018	14:26:29	3000	0.0	8.36	367.0			
09/27/2018	14:26:55	3014	0.0	8.35	367.0	Pressure Test Casing		
09/27/2018	14:27:59	3060	0.0	8.36	367.0			
09/27/2018	14:29:29	3098	0.0	8.36	367.0			
09/27/2018	14:30:59	3128	0.0	8.36	367.0			
09/27/2018	14:32:29	3166	0.0	8.36	367.0			
09/27/2018	14:33:59	3200	0.0	8.36	367.0			
09/27/2018	14:35:29	3232	0.0	8.36	367.0			
09/27/2018	14:36:59	3262	0.0	8.36	367.0			
09/27/2018	14:38:29	3292	0.0	8.36	367.0			
09/27/2018	14:39:59	3320	0.0	8.36	367.0			
09/27/2018	14:41:00	3339	0.0	8.36	367.0	Casing Test = Good		
09/27/2018	14:41:02	3340	0.0	8.36	367.0	Open Wet Shoe		
09/27/2018	14:41:29	3348	0.0	8.36	367.0			
09/27/2018	14:42:59	5066	2.0	8.35	368.9			
09/27/2018	14:43:00	5093	1.8	8.35	369.0	Wont Open Under 5000 PSI		
09/27/2018	14:44:29	4286	0.0	8.35	369.1			
09/27/2018	14:45:00	3328	0.0	8.35	369.1	Wont Open Under 5000 PSI		
09/27/2018	14:45:59	5215	1.9	8.35	371.3			
09/27/2018	14:47:29	5226	0.0	8.35	371.4			
09/27/2018	14:48:59	-4	0.0	8.35	371.4			
09/27/2018	14:50:29	4	0.0	8.35	371.4			
09/27/2018	14:51:59	5	0.0	8.35	371.4			
09/27/2018	14:53:00	6	0.0	8.35	371.4	Install Rig Swedge		
09/27/2018	14:53:29	5	0.0	8.35	371.4			
09/27/2018	14:54:59	5	0.0	8.35	371.4			

Well			Field	Job Start		Customer		Job Number	
Cowboy 21-3HZ 21-3HZ			Wattenberg		Sep/27/2018		Anadarko		2821402
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
09/27/2018	14:57:59	5	0.0	8.35	371.4				
09/27/2018	14:59:29	3731	0.0	8.35	371.5				
09/27/2018	15:00:00	7351	0.0	8.34	371.5	Pressure Test 8000 PSI			
09/27/2018	15:00:59	95	0.5	8.34	371.5				
09/27/2018	15:01:00	98	0.5	8.35	371.5	Swedge Leaking			
09/27/2018	15:02:29	-3	0.0	8.34	372.3				
09/27/2018	15:03:00	-1	0.0	8.34	372.3	Swedge Leaking			
09/27/2018	15:03:59	-2	0.0	8.34	372.8				
09/27/2018	15:05:29	-1	0.0	8.34	372.8				
09/27/2018	15:06:59	-1	0.0	8.34	372.8				
09/27/2018	15:08:29	-1	0.0	8.34	372.8				
09/27/2018	15:09:59	-1	0.0	8.34	372.8				
09/27/2018	15:11:29	-1	0.0	8.34	372.8				
09/27/2018	15:12:59	-1	0.0	8.34	372.8				
09/27/2018	15:14:29	-1	0.0	8.34	372.8				
09/27/2018	15:15:59	-1	0.0	8.34	372.8				
09/27/2018	15:17:00	-1	0.0	8.34	372.8	Open Wet Shoe			
09/27/2018	15:17:29	-1	0.0	8.34	372.8				
09/27/2018	15:18:59	2614	3.1	8.34	375.8				
09/27/2018	15:20:00	5177	3.1	8.34	378.9	Sheer @ 5331 PSI			
09/27/2018	15:20:04	4225	3.1	8.34	379.1	Pump 5 BBLS			
09/27/2018	15:20:29	2158	3.2	8.34	380.4				
09/27/2018	15:21:59	1655	0.0	8.35	384.1				
09/27/2018	15:22:00	1652	0.0	8.35	384.1	Floats Holding			
09/27/2018	15:23:29	-2	0.0	8.35	384.1				
09/27/2018	15:24:59	-2	0.0	8.35	384.1				
09/27/2018	15:26:29	-1	0.0	8.36	384.1				
09/27/2018	15:27:59	-1	0.0	8.36	384.1				
09/27/2018	15:29:29	73	0.0	8.36	384.1				
09/27/2018	15:30:59	-3	0.0	8.36	384.1				
09/27/2018	15:32:29	22	0.0	0.09	384.1				
09/27/2018	15:33:59	26	0.0	0.08	384.1				
09/27/2018	15:35:29	26	0.0	0.07	384.1				
09/27/2018	15:36:59	21	0.0	0.08	384.1				
09/27/2018	15:38:29	23	0.0	0.08	385.2				
09/27/2018	15:39:59	22	0.0	0.08	385.2				
09/27/2018	15:41:29	21	0.0	0.07	385.2				
09/27/2018	15:42:59	24	0.0	0.07	385.2				
09/27/2018	15:43:56	25	0.0	0.08	385.2	End Job			

Well Cowboy 21-3HZ 21-3HZ	Field Wattenberg	Job Start Sep/27/2018	Customer Anadarko	Job Number 2821402
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 6.3	N2	Mud	Maximum Rate 25.0	Total Slurry 561.0	Mud 0.0	Spacer 80.0	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 7359	Final 27	Average 1031	Bump Plug to 3000	Breakdown	Type	Volume bbl	Density lb/gal	
Avg. N2 Percent %	Designed Slurry Volume 561.0 bbl	Displacement 363.0 bbl	Mix Water Temp 65 degF	Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl		
				Washed Thru Perfs <input type="checkbox"/>		To ft		
Customer or Authorized Representative Josh Barkell			Schlumberger Supervisor Conley Jensen/ Sheldon Bell			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
						-	-	



Service Order #:	
Date:	Sep/27/2018
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: