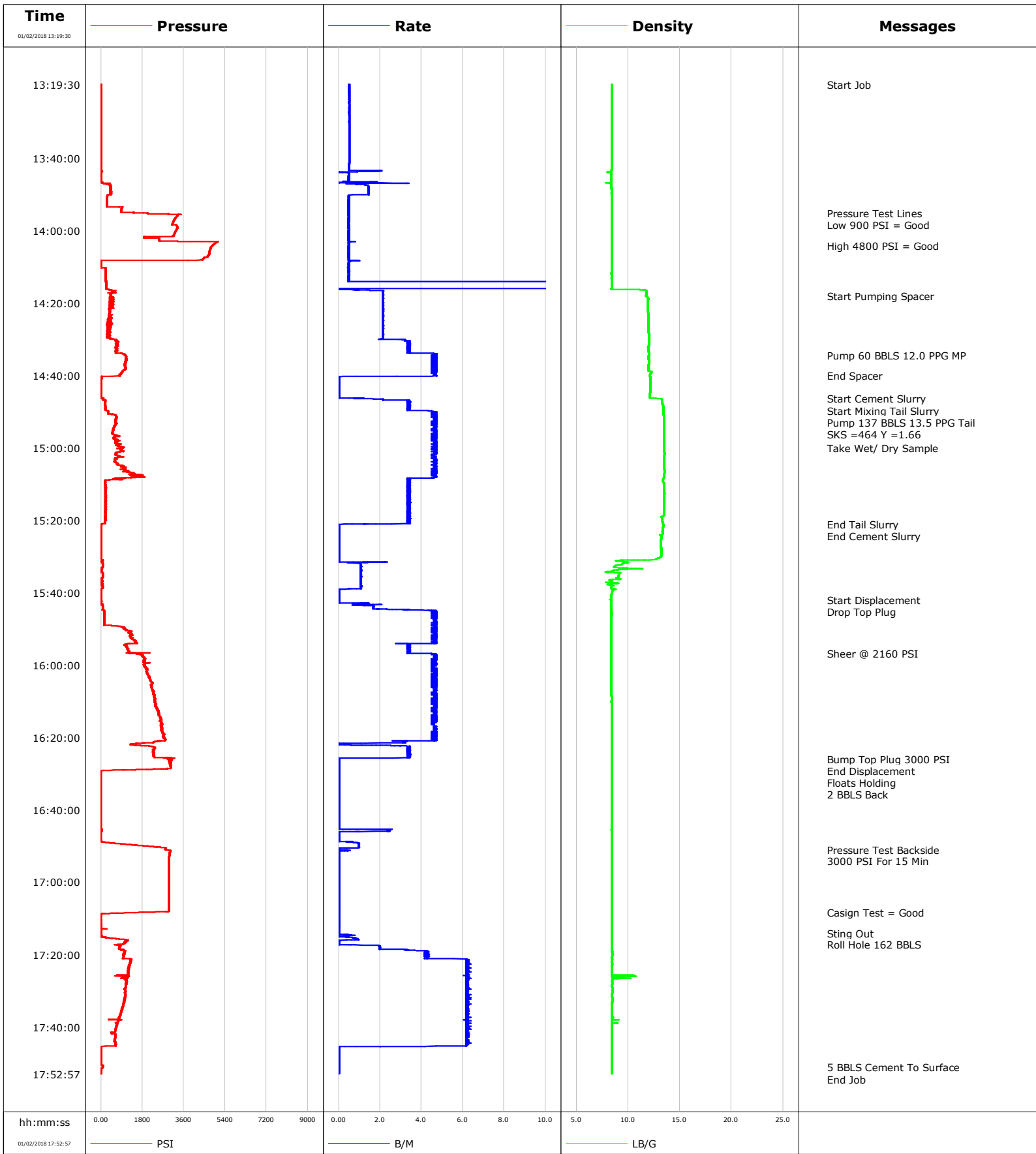


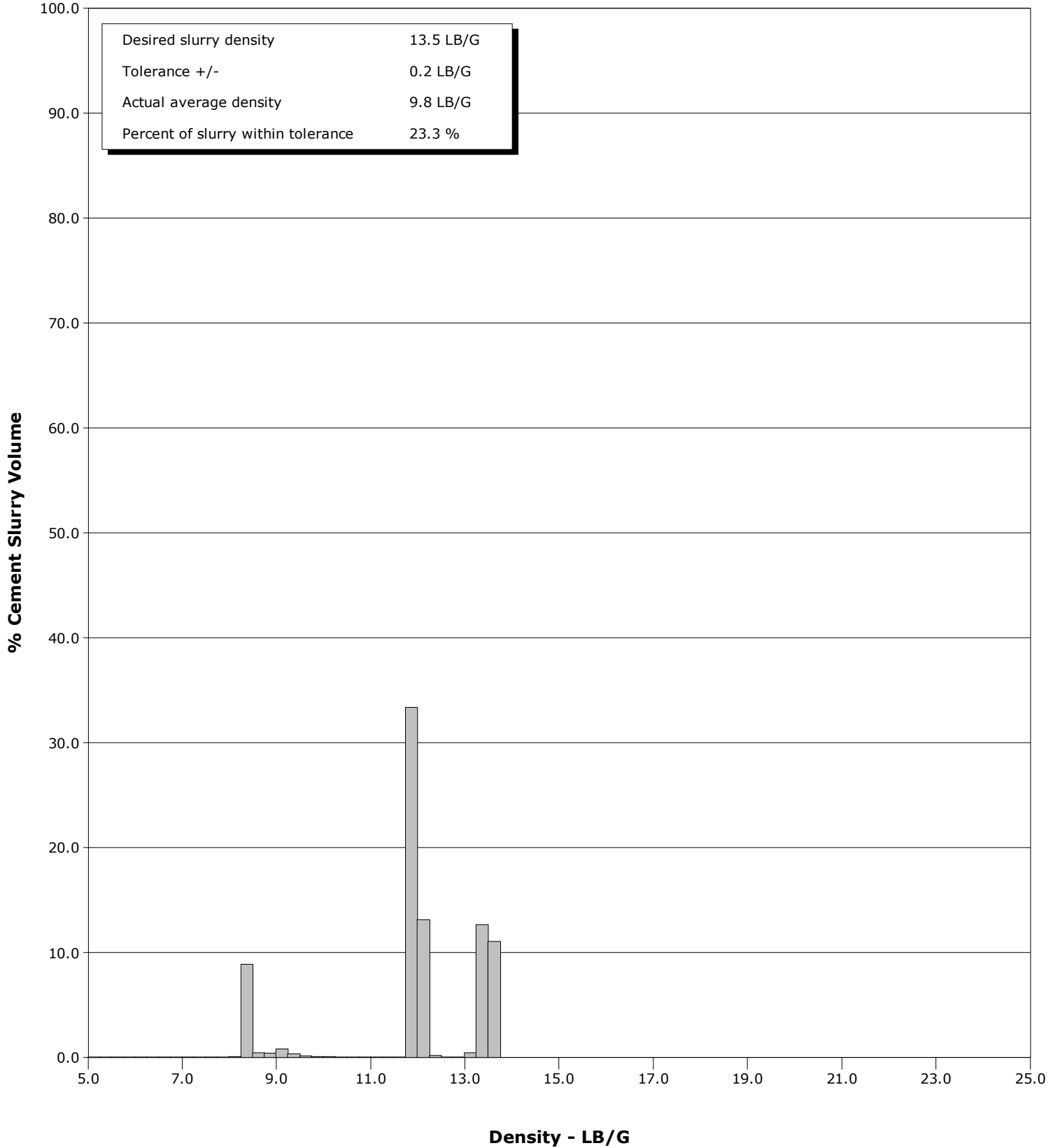
<b>Well</b>	Yellowhammer 34N-17HZ	<b>Client</b>	Anadarko
<b>Field</b>	Wattenberg	<b>SIR No.</b>	2647039
<b>Engineer</b>	Conley Jensen/ Jett Stanley	<b>Job Type</b>	4.5" Liner
<b>Country</b>	United States	<b>Job Date</b>	01-02-2018



**Well** Yellowhammer  
**Field** Wattenberg  
**Engineer** Conley Jensen/ Jett Stanley  
**Country** United States

**Client** Anadarko  
**SIR No.** 2647039  
**Job Type** 4.5" Liner  
**Job Date** 01-02-2018

Cement Slurry - 01/02/2018 13:19:30 to 01/02/2018 15:57:48



				Customer		Job Number	
				Anadarko		2647039	
Well		Location (legal)		Schlumberger Location		Job Start	
Yellowhammer 34N-17HZ				CWY		Jan/02/2018	
Field		Formation Name/Type		Deviation	Bit Size	Well MD	Well TVD
Wattenberg		Shale		deg	6.1 in	13390.0 ft	7701.0 ft
County		State/Province		BHP	BHST	BHCT	Pore Press. Gradient
		Colorado		psi	229 degF	227 degF	lb/gal
Well Master		API/UWI					
0631737895		05123454930000					
Rig Name	Drilled For	Service Via		Casing/Liner			
Xtreme 24	Oil	Land		Depth, ft	Size, in	Weight, lb/ft	Grade
				5519.0	7.0	26.0	P110
Offshore Zone	Well Class	Well Type		7871.0	4.5	11.6	P110
	New	Development					8RD
Drilling Fluid Type		Max. Density	Plastic Viscosity	Tubing/Drill Pipe			
		lb/gal	cP	T/D	Depth, ft	Size, in	Weight, lb/ft
Service Line	Job Type						
Cementing	4.5" Liner						
			D	5519.0	4.0		
				0.0	0.0		
Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection		Perforations/Open Hole			
psi	psi			Top, ft	Bottom, ft	shot/ft	No. of Shots
				ft	ft		
				ft	ft		Total Interval
				ft	ft		ft
							Diameter
							in
Service Instructions		Treat Down	Displacement	Packer Type	Packer Depth		
Perform 4.5" Liner Per Poposal Design.		Casing	177.0 bbl		ft		
		Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.		
		56.0 bbl	122.0 bbl	bbl	bbl		
Casing/Tubing Secured		1 Hole Vol. Circulated prior to Cement	Casing Tools		Squeeze Job		
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					
Lift Pressure		Shoe Type		Shoe Depth	Squeeze Type		
psi		Float		13390.0 ft			
Pipe Rotated		Pipe Reciprocated		Stage Tool Type		Tool Depth	
<input type="checkbox"/>		<input type="checkbox"/>				ft	
No. Centralizers		Top Plugs	Bottom Plugs		Stage Tool Depth		Tail Pipe Size
		1			ft		in
Cement Head Type		Collar Type		Collar Depth	Tail Pipe Depth		
		Float		13364.0 ft	ft		
Job Scheduled For		Arrived on Location	Leave Location		Sqz. Total Vol.		
Jan/02/2018 05:00		Jan/02/2018 05:00	Jan/02/2018 19:00		bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
01/02/2018	13:19:30	5	0.5	8.40	14.1	Started Acquisition	
01/02/2018	13:19:34	5	0.5	8.40	14.2	Start Job	
01/02/2018	13:21:00	5	0.5	8.40	14.9		
01/02/2018	13:22:30	5	0.5	8.40	0.2		
01/02/2018	13:24:00	5	0.5	8.40	1.0		
01/02/2018	13:25:30	5	0.5	8.40	1.8		
01/02/2018	13:27:00	4	0.5	8.40	2.5		
01/02/2018	13:28:30	4	0.5	8.40	3.3		
01/02/2018	13:30:00	4	0.5	8.40	4.0		
01/02/2018	13:31:30	4	0.5	8.40	4.8		
01/02/2018	13:33:00	4	0.5	8.40	5.6		
01/02/2018	13:34:30	4	0.5	8.40	6.3		
01/02/2018	13:36:00	5	0.5	8.40	7.1		
01/02/2018	13:37:30	5	0.5	8.40	7.8		
01/02/2018	13:39:00	5	0.5	8.40	8.6		
01/02/2018	13:40:30	2	0.5	8.40	0.6		
01/02/2018	13:42:00	3	0.5	8.40	0.1		
01/02/2018	13:43:30	29	2.1	8.39	0.4		
01/02/2018	13:45:00	15	0.5	8.40	0.4		
01/02/2018	13:46:30	43	1.7	8.39	0.2		
01/02/2018	13:48:00	444	1.4	8.40	2.1		

Well Yellowhammer 34N-17HZ			Field Wattenberg		Job Start Jan/02/2018	Customer Anadarko		Job Number 2647039
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
01/02/2018	13:51:00	256	0.5	8.40	5.5			
01/02/2018	13:52:30	247	0.5	8.40	6.2			
01/02/2018	13:54:00	892	0.5	8.40	6.9			
01/02/2018	13:55:00	1408	0.5	8.40	7.4	Pressure Test Lines		
01/02/2018	13:55:30	3366	0.5	8.40	7.6			
01/02/2018	13:56:00	3305	0.5	8.40	7.9	Low 900 PSI = Good		
01/02/2018	13:57:00	3184	0.5	8.40	8.4			
01/02/2018	13:58:30	3281	0.5	8.40	9.1			
01/02/2018	14:00:00	3254	0.5	8.40	9.8			
01/02/2018	14:01:30	3141	0.5	8.40	10.5			
01/02/2018	14:03:00	5077	0.5	8.40	11.2			
01/02/2018	14:04:00	4858	0.5	8.40	11.7	High 4800 PSI = Good		
01/02/2018	14:04:30	4780	0.5	8.40	12.0			
01/02/2018	14:06:00	4705	0.5	8.40	12.7			
01/02/2018	14:07:30	4481	0.5	8.40	13.4			
01/02/2018	14:09:00	7	0.5	8.40	14.2			
01/02/2018	14:10:30	205	0.5	8.40	14.9			
01/02/2018	14:12:00	209	0.5	8.40	15.6			
01/02/2018	14:13:30	215	0.5	8.40	16.3			
01/02/2018	14:15:00	217	25.0	8.40	40.4			
01/02/2018	14:16:30	479	2.2	11.75	65.6			
01/02/2018	14:18:00	425	2.1	11.72	68.8	Start Pumping Spacer		
01/02/2018	14:19:30	422	2.2	11.90	72.0			
01/02/2018	14:21:00	417	2.1	11.90	75.2			
01/02/2018	14:22:30	367	2.1	11.92	78.4			
01/02/2018	14:24:00	360	2.1	11.97	81.6			
01/02/2018	14:25:30	364	2.1	11.96	84.8			
01/02/2018	14:27:00	300	2.1	11.96	88.0			
01/02/2018	14:28:30	291	2.1	12.02	91.2			
01/02/2018	14:30:00	582	3.2	12.02	94.4			
01/02/2018	14:31:30	716	3.4	12.02	99.4			
01/02/2018	14:33:00	670	3.4	11.97	104.5			
01/02/2018	14:34:24	1081	4.6	11.99	110.0	Pump 60 BBLs 12.0 PPG MP		
01/02/2018	14:34:30	1071	4.5	11.99	110.4			
01/02/2018	14:36:00	1080	4.6	11.99	117.3			
01/02/2018	14:37:30	1067	4.5	11.97	124.3			
01/02/2018	14:39:00	926	4.6	12.24	131.3			
01/02/2018	14:40:00	796	4.7	12.10	135.9	End Spacer		
01/02/2018	14:40:30	23	0.0	12.14	136.8			
01/02/2018	14:42:00	19	0.0	12.13	136.8			
01/02/2018	14:43:30	18	0.0	12.13	136.8			
01/02/2018	14:45:00	18	0.0	12.13	136.8			
01/02/2018	14:46:24	65	1.5	13.18	137.0	Start Cement Slurry		
01/02/2018	14:46:30	84	2.1	13.26	137.2			
01/02/2018	14:47:39	180	3.4	13.31	140.7	Start Mixing Tail Slurry		
01/02/2018	14:48:00	180	3.4	13.34	141.9			
01/02/2018	14:49:30	201	3.3	13.40	147.0			
01/02/2018	14:50:00	312	4.6	13.39	149.1	Pump 137 BBLs 13.5 PPG Tail		
01/02/2018	14:51:00	637	4.6	13.43	153.7			
01/02/2018	14:52:30	651	4.6	13.46	160.7			
01/02/2018	14:54:00	581	4.7	13.45	167.6			
01/02/2018	14:55:00	539	4.6	13.45	172.3	SKS =464 Y =1.66		
01/02/2018	14:55:30	504	4.6	13.45	174.6			
01/02/2018	14:57:00	564	4.7	13.44	181.5			

Well Yellowhammer 34N-17HZ			Field Wattenberg		Job Start Jan/02/2018	Customer Anadarko	Job Number 2647039
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
01/02/2018	15:00:00	946	4.7	13.49	195.4	Take Wet/ Dry Sample	
01/02/2018	15:01:30	634	4.7	13.52	202.4		
01/02/2018	15:03:00	626	4.6	13.51	209.3		
01/02/2018	15:04:30	687	4.6	13.51	216.3		
01/02/2018	15:06:00	1021	4.6	13.52	223.2		
01/02/2018	15:07:30	1787	4.6	13.50	230.2		
01/02/2018	15:09:00	193	3.4	13.33	236.3		
01/02/2018	15:10:30	200	3.3	13.44	241.4		
01/02/2018	15:12:00	211	3.4	13.47	246.4		
01/02/2018	15:13:30	209	3.4	13.49	251.5		
01/02/2018	15:15:00	223	3.3	13.48	256.6		
01/02/2018	15:16:30	208	3.4	13.46	261.7		
01/02/2018	15:18:00	210	3.3	13.46	266.7		
01/02/2018	15:19:30	190	3.5	13.29	271.8		
01/02/2018	15:21:00	28	1.2	13.39	276.8	End Tail Slurry	
01/02/2018	15:22:30	14	0.0	13.37	276.8		
01/02/2018	15:24:00	12	0.0	13.08	276.8		
01/02/2018	15:25:30	11	0.0	13.18	276.8		
01/02/2018	15:27:00	11	0.0	13.17	276.8		
01/02/2018	15:28:30	11	0.0	13.19	276.8		
01/02/2018	15:30:00	11	0.0	13.17	276.8		
01/02/2018	15:31:30	18	0.7	9.72	276.9		
01/02/2018	15:33:00	70	1.1	8.68	278.5		
01/02/2018	15:34:30	77	1.1	9.13	280.1		
01/02/2018	15:36:00	35	1.1	8.93	281.6		
01/02/2018	15:37:30	66	1.1	8.80	283.3		
01/02/2018	15:39:00	16	0.1	8.78	284.8		
01/02/2018	15:40:30	12	0.0	8.40	284.8		
01/02/2018	15:42:00	20	0.0	8.38	284.8	Start Displacement	
01/02/2018	15:43:30	54	1.3	8.38	285.5		
01/02/2018	15:45:00	144	4.5	8.40	289.0		
01/02/2018	15:46:30	142	4.6	8.39	296.0		
01/02/2018	15:48:00	141	4.6	8.39	302.9		
01/02/2018	15:49:30	984	4.7	8.38	309.9		
01/02/2018	15:51:00	1217	4.7	8.38	316.9		
01/02/2018	15:52:30	1376	4.6	8.38	323.8		
01/02/2018	15:54:00	1387	4.5	8.38	330.8		
01/02/2018	15:55:30	1142	3.3	8.38	335.8		
01/02/2018	15:56:42	1386	3.4	8.38	339.9	Sheer @ 2160 PSI	
01/02/2018	15:57:00	1683	4.5	8.38	341.2		
01/02/2018	15:58:30	1877	4.6	8.38	348.2		
01/02/2018	16:00:00	1860	4.6	8.38	355.1		
01/02/2018	16:01:30	1991	4.7	8.38	362.0		
01/02/2018	16:03:00	2108	4.7	8.37	369.1		
01/02/2018	16:04:30	2188	4.6	8.38	376.0		
01/02/2018	16:06:00	2206	4.7	8.38	383.0		
01/02/2018	16:07:30	2280	4.6	8.38	389.9		
01/02/2018	16:09:00	2337	4.7	8.40	396.9		
01/02/2018	16:10:30	2365	4.6	8.40	403.8		
01/02/2018	16:12:00	2437	4.6	8.41	410.8		
01/02/2018	16:13:30	2489	4.6	8.41	417.8		
01/02/2018	16:15:00	2593	4.7	8.41	424.8		
01/02/2018	16:16:30	2602	4.6	8.41	431.7		
01/02/2018	16:18:00	2619	4.7	8.41	438.6		

Well		Field		Job Start		Customer		Job Number	
Yellowhammer 34N-17HZ		Wattenberg		Jan/02/2018		Anadarko		2647039	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
01/02/2018	16:21:00	2504	3.3	8.41	452.4				
01/02/2018	16:22:30	2222	3.4	8.41	455.2				
01/02/2018	16:24:00	2258	3.4	8.41	460.3				
01/02/2018	16:25:30	2320	3.4	8.41	465.4				
01/02/2018	16:25:56	2965	0.0	8.41	465.9	Bump Top Plug 3000 PSI			
01/02/2018	16:25:57	3090	0.0	8.41	465.9	End Displacement			
01/02/2018	16:27:00	3007	0.0	8.41	465.9				
01/02/2018	16:28:30	3022	0.0	8.41	465.9				
01/02/2018	16:29:20	-8	0.0	8.41	465.9	Floats Holding			
01/02/2018	16:29:21	-5	0.0	8.41	465.9	2 BBLS Back			
01/02/2018	16:30:00	-4	0.0	8.42	465.9				
01/02/2018	16:31:30	-3	0.0	8.42	465.9				
01/02/2018	16:33:00	-4	0.0	8.42	465.9				
01/02/2018	16:34:30	-4	0.0	8.42	465.9				
01/02/2018	16:36:00	-3	0.0	8.42	465.9				
01/02/2018	16:37:30	-3	0.0	8.42	465.9				
01/02/2018	16:39:00	-3	0.0	8.42	465.9				
01/02/2018	16:40:30	-3	0.0	8.42	465.9				
01/02/2018	16:42:00	-2	0.0	8.42	465.9				
01/02/2018	16:43:30	-3	0.0	8.42	465.9				
01/02/2018	16:45:00	-3	0.0	8.42	465.9				
01/02/2018	16:46:30	-6	0.0	8.42	467.5				
01/02/2018	16:48:00	-3	0.0	8.42	467.5				
01/02/2018	16:49:30	1111	1.0	8.42	468.1				
01/02/2018	16:51:00	2826	0.0	8.42	469.1	Pressure Test Backside			
01/02/2018	16:52:30	2974	0.0	8.42	469.2				
01/02/2018	16:54:00	2963	0.0	8.42	469.2				
01/02/2018	16:55:30	2959	0.0	8.42	469.2				
01/02/2018	16:58:30	2956	0.0	8.42	469.2				
01/02/2018	17:00:00	2957	0.0	8.42	469.2				
01/02/2018	17:01:30	2958	0.0	8.42	469.2				
01/02/2018	17:03:00	2960	0.0	8.42	469.2				
01/02/2018	17:04:30	2962	0.0	8.42	469.2				
01/02/2018	17:06:00	2965	0.0	8.42	469.2				
01/02/2018	17:07:30	2967	0.0	8.42	469.2				
01/02/2018	17:08:14	2174	0.0	8.42	469.2	Casign Test = Good			
01/02/2018	17:09:00	-2	0.0	8.42	469.2				
01/02/2018	17:10:30	-1	0.0	8.42	469.2				
01/02/2018	17:12:00	0	0.0	8.42	469.2				
01/02/2018	17:13:30	1	0.0	8.42	469.2				
01/02/2018	17:14:00	1	0.0	8.42	469.2	Sting Out			
01/02/2018	17:15:00	8	0.0	8.42	469.4				
01/02/2018	17:16:30	1034	0.0	8.42	470.1				
01/02/2018	17:18:00	806	2.0	8.42	471.4				
01/02/2018	17:19:30	1015	4.3	8.45	476.3				
01/02/2018	17:21:00	975	4.3	8.44	482.6				
01/02/2018	17:22:30	1243	6.2	8.46	491.6				
01/02/2018	17:24:00	1216	6.2	8.43	500.9				
01/02/2018	17:25:30	1146	6.2	8.44	510.1				
01/02/2018	17:27:00	1035	6.3	8.50	519.4				
01/02/2018	17:28:30	1087	6.3	8.43	528.6				
01/02/2018	17:30:00	1036	6.2	8.46	537.9				
01/02/2018	17:31:30	1070	6.3	8.44	547.2				
01/02/2018	17:33:00	1022	6.2	8.44	556.4				

Well		Field		Job Start		Customer		Job Number	
Yellowhammer 34N-17HZ		Wattenberg		Jan/02/2018		Anadarko		2647039	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
01/02/2018	17:36:00	876	6.2	8.44	574.9				
01/02/2018	17:37:30	781	6.2	8.49	584.2				
01/02/2018	17:39:00	714	6.2	8.46	593.5				
01/02/2018	17:40:30	651	6.2	8.42	602.7				
01/02/2018	17:42:00	625	6.2	8.43	612.0				
01/02/2018	17:43:30	586	6.2	8.43	621.2				
01/02/2018	17:45:00	615	6.2	8.40	630.5				
01/02/2018	17:46:30	9	0.0	8.40	632.6				
01/02/2018	17:48:00	9	0.0	8.41	632.6				
01/02/2018	17:49:30	8	0.0	8.41	632.6				
01/02/2018	17:51:00	86	0.0	8.41	632.6				
01/02/2018	17:51:09	48	0.0	8.41	632.6	5 BBLs Cement To Surface			
01/02/2018	17:52:07	4	0.0	8.41	632.6	End Job			

### Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2	
3.3			25.0	646.0	0.0	150.2		
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density	
5084	4	1014	3000			bbl	lb/gal	
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	<input checked="" type="checkbox"/>	Volume	5.0 bbl	
%	137.0 bbl	150.7 bbl	70 degF	Washed Thru Perfs	<input type="checkbox"/>	To	ft	
Customer or Authorized Representative	Schlumberger Supervisor			Circulation Lost	<input type="checkbox"/>	Job Completed	<input checked="" type="checkbox"/>	
Travis Krukenerg	Conley Jensen/ Jett Stanley			-		-		