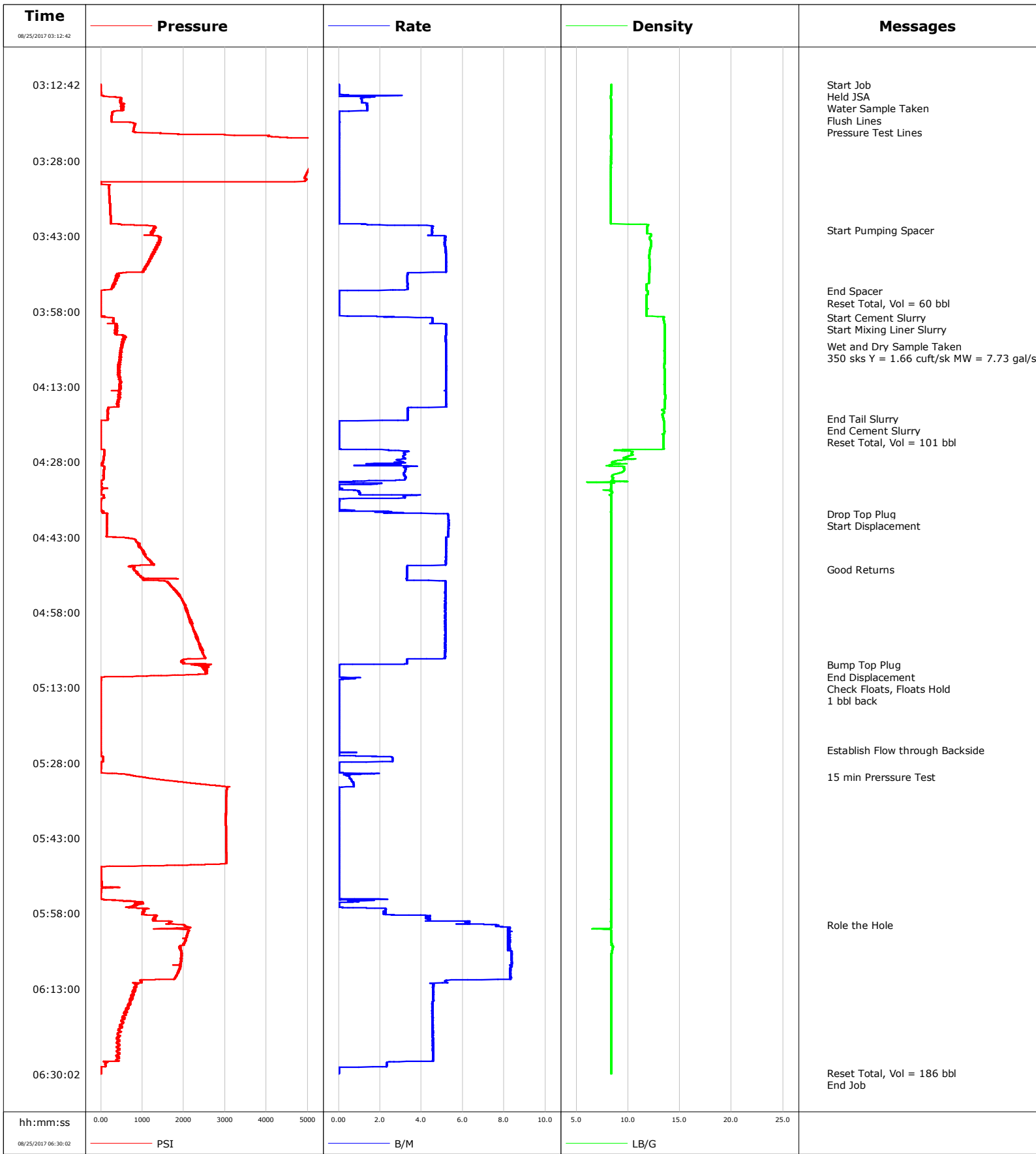


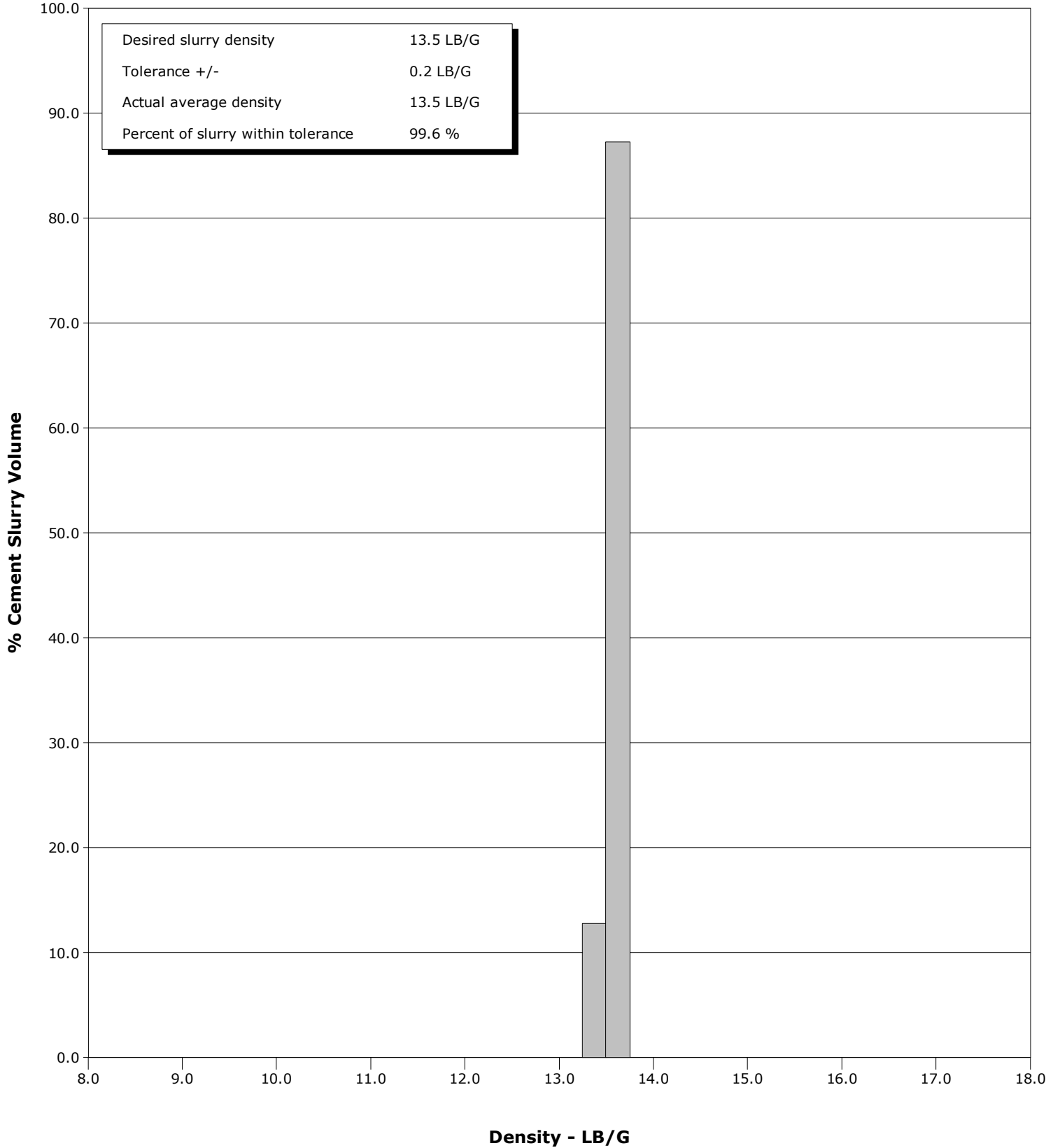
<b>Well</b>	Norden 26N-14HZ	<b>Client</b>	Anadarko
<b>Field</b>	Wattenberg	<b>SIR No.</b>	DMBW-01348
<b>Engineer</b>	Ryan Call	<b>Job Type</b>	Liner
<b>Country</b>	United States	<b>Job Date</b>	08-24-2017



**Well** Norden 26N-14HZ  
**Field** Wattenberg  
**Engineer** Ryan Call  
**Country** United States

**Client** Anadarko  
**SIR No.** DMBW-01348  
**Job Type** Liner  
**Job Date** 08-24-2017

Cement Slurry - 08/25/2017 03:59:08 to 08/25/2017 04:19:21



				Customer			Job Number			
				Anadarko			DMBW-01348			
Well		Location (legal)			Schlumberger Location			Job Start		
Norden 26N-14HZ		X24			CWY			Aug/24/2017		
Field		Formation Name/Type			Deviation	Bit Size		Well MD	Well TVD	
Wattenberg					deg	6.1 in		12183.0 ft	7328.0 ft	
County		State/Province			BHP	BHST	BHCT	Pore Press. Gradient		
		CO			psi	229 degF	224 degF	lb/gal		
Well Master		API/UWI								
0631692082		05123435770000								
Rig Name	Drilled For		Service Via		Casing/Liner					
X24	Oil & Gas		Land		Depth, ft	Size, in	Weight, lb/ft	Grade	Thread	
					6835.0	7.0	26.0	C-90		
Offshore Zone	Well Class		Well Type		12183.0	4.5	11.6	P-110		
	New		Development							
Drilling Fluid Type		Max. Density	Plastic Viscosity		Tubing/Drill Pipe					
		lb/gal	cP		T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
Service Line	Job Type				D	5500.0	4.0	11.8	E75	
Cementing	Liner				D	6632.0	4.0	15.7	E75	
Max. Allowed Tub. Press	Max. Allowed Ann. Press		WH Connection		Perforations/Open Hole					
psi	psi		Swedge		Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval	
					ft	ft			ft	
					ft	ft			Diameter	
					ft	ft			in	
					Treat Down	Displacement	Packer Type	Packer Depth		
					bbl	bbl		ft		
					Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.		
					bbl	bbl	bbl	bbl		
Casing/Tubing Secured		1 Hole Vol. Circulated prior to Cement			Casing Tools			Squeeze Job		
<input type="checkbox"/>		<input type="checkbox"/>								
Lift Pressure		psi			Shoe Type		Squeeze Type			
					Float					
Pipe Rotated		Pipe Reciprocated			Shoe Depth		Tool Type			
<input type="checkbox"/>		<input type="checkbox"/>			12183.0 ft					
No. Centralizers		Top Plugs	Bottom Plugs		Stage Tool Type		Tool Depth			
		1			Liner Hanger		ft			
Cement Head Type					Stage Tool Depth		Tail Pipe Size			
					6632.0 ft		in			
Job Scheduled For		Arrived on Location		Leave Location		Collar Type		Tail Pipe Depth		
Aug/24/2017 22:00		Aug/24/2017 22:00		Aug/25/2017 07:30		Float		ft		
						Collar Depth		Sqz. Total Vol.		
						12092.0 ft		bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
08/25/2017	03:12:42	-1	0.0	8.36	0.0	Started Acquisition				
08/25/2017	03:12:46	-1	0.0	8.36	0.0	Start Job				
08/25/2017	03:12:48	-1	0.0	8.36	0.0	Held JSA				
08/25/2017	03:12:49	-2	0.0	8.36	0.0	Flush Lines				
08/25/2017	03:12:51	-1	0.0	8.36	0.0	Pressure Test Lines				
08/25/2017	03:14:42	1	0.0	8.36	0.0					
08/25/2017	03:16:42	560	1.4	8.35	2.2					
08/25/2017	03:18:42	264	0.0	8.35	4.1					
08/25/2017	03:20:42	822	0.0	8.35	4.1					
08/25/2017	03:22:42	1859	0.0	8.35	4.1					
08/25/2017	03:24:42	5318	0.0	8.35	4.1					
08/25/2017	03:26:42	5187	0.0	8.35	4.1					
08/25/2017	03:28:42	5100	0.0	8.35	4.1					
08/25/2017	03:30:42	4954	0.0	8.35	4.1					
08/25/2017	03:32:42	186	0.0	8.35	4.1					
08/25/2017	03:34:42	201	0.0	8.35	4.1					
08/25/2017	03:36:42	217	0.0	8.35	4.1					
08/25/2017	03:38:42	227	0.0	8.35	4.1					
08/25/2017	03:40:42	497	1.4	11.94	4.3					
08/25/2017	03:41:41	1290	4.5	11.84	8.5	Start Pumping Spacer				
08/25/2017	03:42:42	1210	4.5	12.20	13.1					

Well Norden 26N-14HZ			Field Wattenberg		Job Start Aug/24/2017	Customer Anadarko		Job Number DMBW-01348
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
08/25/2017	03:46:42	1230	5.2	12.04	33.6			
08/25/2017	03:48:42	1089	5.2	12.06	43.9			
08/25/2017	03:50:42	396	3.3	12.03	53.4			
08/25/2017	03:52:42	332	3.3	11.77	60.1			
08/25/2017	03:53:54	-6	0.0	11.91	63.6	End Spacer		
08/25/2017	03:54:04	-5	0.0	11.91	63.6	Reset Total, Vol = 60 bbl		
08/25/2017	03:54:42	-3	0.0	11.78	63.6			
08/25/2017	03:56:42	-3	0.0	11.78	63.6			
08/25/2017	03:58:42	-3	0.0	11.77	63.6			
08/25/2017	03:59:08	107	2.6	13.45	64.1	Start Cement Slurry		
08/25/2017	03:59:13	213	4.2	13.41	64.4	Start Mixing Liner Slurry		
08/25/2017	04:00:42	341	5.2	13.54	71.2			
08/25/2017	04:02:42	509	5.2	13.53	81.6			
08/25/2017	04:04:42	494	5.2	13.55	92.0			
08/25/2017	04:04:58	526	5.2	13.56	93.3	Wet and Dry Sample Taken		
08/25/2017	04:06:42	482	5.2	13.52	102.3			
08/25/2017	04:08:42	415	5.2	13.50	112.7			
08/25/2017	04:10:42	427	5.2	13.55	123.1			
08/25/2017	04:12:42	453	5.2	13.52	133.4			
08/25/2017	04:14:42	417	5.2	13.57	143.8			
08/25/2017	04:16:42	422	5.2	13.53	154.1			
08/25/2017	04:18:42	155	3.3	13.32	161.6			
08/25/2017	04:19:19	170	3.3	13.39	163.6	End Tail Slurry		
08/25/2017	04:19:21	157	3.3	13.39	163.7	End Cement Slurry		
08/25/2017	04:19:30	165	3.3	13.40	164.2	Reset Total, Vol = 101 bbl		
08/25/2017	04:20:42	-5	0.0	13.49	165.1			
08/25/2017	04:22:42	-5	0.0	13.41	165.1			
08/25/2017	04:24:42	-4	0.0	13.42	165.1			
08/25/2017	04:26:42	74	3.1	10.28	168.7			
08/25/2017	04:28:42	3	1.0	8.31	174.3			
08/25/2017	04:30:42	59	3.2	8.47	180.5			
08/25/2017	04:32:42	-1	0.0	8.36	184.6			
08/25/2017	04:34:42	64	3.3	8.36	186.0			
08/25/2017	04:36:42	-2	0.0	8.35	187.9			
08/25/2017	04:38:20	146	5.2	8.38	189.4	Drop Top Plug		
08/25/2017	04:38:23	150	5.3	8.38	189.7	Start Displacement		
08/25/2017	04:38:42	144	5.3	8.38	191.3			
08/25/2017	04:40:42	141	5.3	8.35	202.0			
08/25/2017	04:42:42	142	5.3	8.36	212.6			
08/25/2017	04:44:42	901	5.2	8.35	223.0			
08/25/2017	04:46:42	1064	5.2	8.36	233.4			
08/25/2017	04:48:42	746	3.3	8.36	243.6			
08/25/2017	04:49:24	800	3.3	8.36	245.9	Good Returns		
08/25/2017	04:50:42	968	3.3	8.36	250.2			
08/25/2017	04:52:42	1702	5.2	8.36	258.7			
08/25/2017	04:54:42	1926	5.2	8.36	269.0			
08/25/2017	04:56:42	2050	5.2	8.36	279.3			
08/25/2017	04:58:42	2134	5.1	8.36	289.6			
08/25/2017	05:00:42	2201	5.1	8.36	299.9			
08/25/2017	05:02:42	2285	5.1	8.36	310.2			
08/25/2017	05:04:42	2378	5.1	8.36	320.5			
08/25/2017	05:06:42	2490	5.1	8.36	330.8			
08/25/2017	05:08:26	2177	0.0	8.36	337.2	Bump Top Plug		
08/25/2017	05:08:27	2646	0.0	8.36	337.2	End Displacement		

Well		Field		Job Start		Customer		Job Number	
Norden 26N-14HZ		Wattenberg		Aug/24/2017		Anadarko		DMBW-01348	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
08/25/2017	05:10:07	2555	0.0	8.36	337.2	Check Floats, Floats Hold			
08/25/2017	05:10:42	1103	0.0	8.36	337.2				
08/25/2017	05:12:42	-3	0.0	8.36	337.5				
08/25/2017	05:14:42	-3	0.0	8.36	337.5				
08/25/2017	05:16:42	-3	0.0	8.36	337.5				
08/25/2017	05:18:42	-3	0.0	8.36	337.5				
08/25/2017	05:20:42	-2	0.0	8.36	337.5				
08/25/2017	05:22:42	-2	0.0	8.36	337.5				
08/25/2017	05:24:42	-1	0.0	8.36	337.5				
08/25/2017	05:25:25	-2	0.0	8.36	337.5	Establish Flow through Backside			
08/25/2017	05:26:42	25	1.8	8.36	337.7				
08/25/2017	05:28:42	0	0.0	8.36	340.5				
08/25/2017	05:30:42	880	0.5	8.36	341.1				
08/25/2017	05:30:45	919	0.5	8.36	341.1	15 min Prerssure Test			
08/25/2017	05:32:42	2968	0.7	8.36	342.3				
08/25/2017	05:34:42	3026	0.0	8.36	342.4				
08/25/2017	05:36:42	3018	0.0	8.36	342.4				
08/25/2017	05:38:42	3014	0.0	8.36	342.4				
08/25/2017	05:40:42	3016	0.0	8.36	342.5				
08/25/2017	05:42:42	3017	0.0	8.36	342.5				
08/25/2017	05:44:42	3023	0.0	8.37	342.5				
08/25/2017	05:46:42	3029	0.0	8.36	342.5				
08/25/2017	05:48:42	37	0.0	8.36	342.5				
08/25/2017	05:50:42	9	0.0	8.36	342.5				
08/25/2017	05:52:42	17	0.0	8.35	342.5				
08/25/2017	05:54:42	-0	0.0	8.35	342.5				
08/25/2017	05:56:42	708	0.0	8.36	343.1				
08/25/2017	05:58:42	1306	4.4	8.36	347.8				
08/25/2017	06:00:18	2008	7.6	8.36	356.3	Role the Hole			
08/25/2017	06:00:42	2089	7.9	8.36	359.4				
08/25/2017	06:02:42	2074	8.2	8.37	375.7				
08/25/2017	06:04:42	1885	8.2	8.49	392.1				
08/25/2017	06:06:42	1941	8.4	8.38	408.7				
08/25/2017	06:08:42	1904	8.3	8.37	425.4				
08/25/2017	06:10:42	1810	8.3	8.36	442.0				
08/25/2017	06:12:42	855	4.6	8.36	453.6				
08/25/2017	06:14:42	740	4.6	8.35	462.7				
08/25/2017	06:16:42	636	4.5	8.36	471.8				
08/25/2017	06:18:42	534	4.5	8.36	480.8				
08/25/2017	06:20:42	491	4.5	8.36	489.9				
08/25/2017	06:22:42	388	4.5	8.36	499.0				
08/25/2017	06:24:42	375	4.6	8.36	508.1				
08/25/2017	06:26:42	383	4.6	8.36	517.2				
08/25/2017	06:28:42	11	0.4	8.36	523.7				
08/25/2017	06:29:47	1	0.0	8.36	523.8	Reset Total, Vol = 186 bbl			

<b>Well</b> Norden 26N-14HZ	<b>Field</b> Wattenberg	<b>Job Start</b> Aug/24/2017	<b>Customer</b> Anadarko	<b>Job Number</b> DMBW-01348
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### Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
<b>Slurry</b> 3.8	<b>N2</b>	<b>Mud</b>	<b>Maximum Rate</b> 8.4	<b>Total Slurry</b> 101.0	<b>Mud</b> 0.0	<b>Spacer</b> 60.0	<b>N2</b>	
Treating Pressure Summary, psi					Breakdown Fluid			
<b>Maximum</b> 5463	<b>Final</b> 0	<b>Average</b> 1297	<b>Bump Plug to</b>	<b>Breakdown</b>	<b>Type</b>	<b>Volume</b> bbl	<b>Density</b> lb/gal	
<b>Avg. N2 Percent</b> %	<b>Designed Slurry Volume</b> 101.0 bbl	<b>Displacement</b> 152.0 bbl	<b>Mix Water Temp</b> 71 degF	<b>Cement Circulated to Surface?</b> <input checked="" type="checkbox"/>	<b>Volume</b> 10.0 bbl			
				<b>Washed Thru Perfs</b> <input type="checkbox"/>	<b>To</b> ft			
<b>Customer or Authorized Representative</b>			<b>Schlumberger Supervisor</b> Ryan Call	<b>Circulation Lost</b> <input type="checkbox"/>	<b>Job Completed</b> <input checked="" type="checkbox"/>			
				-	-			