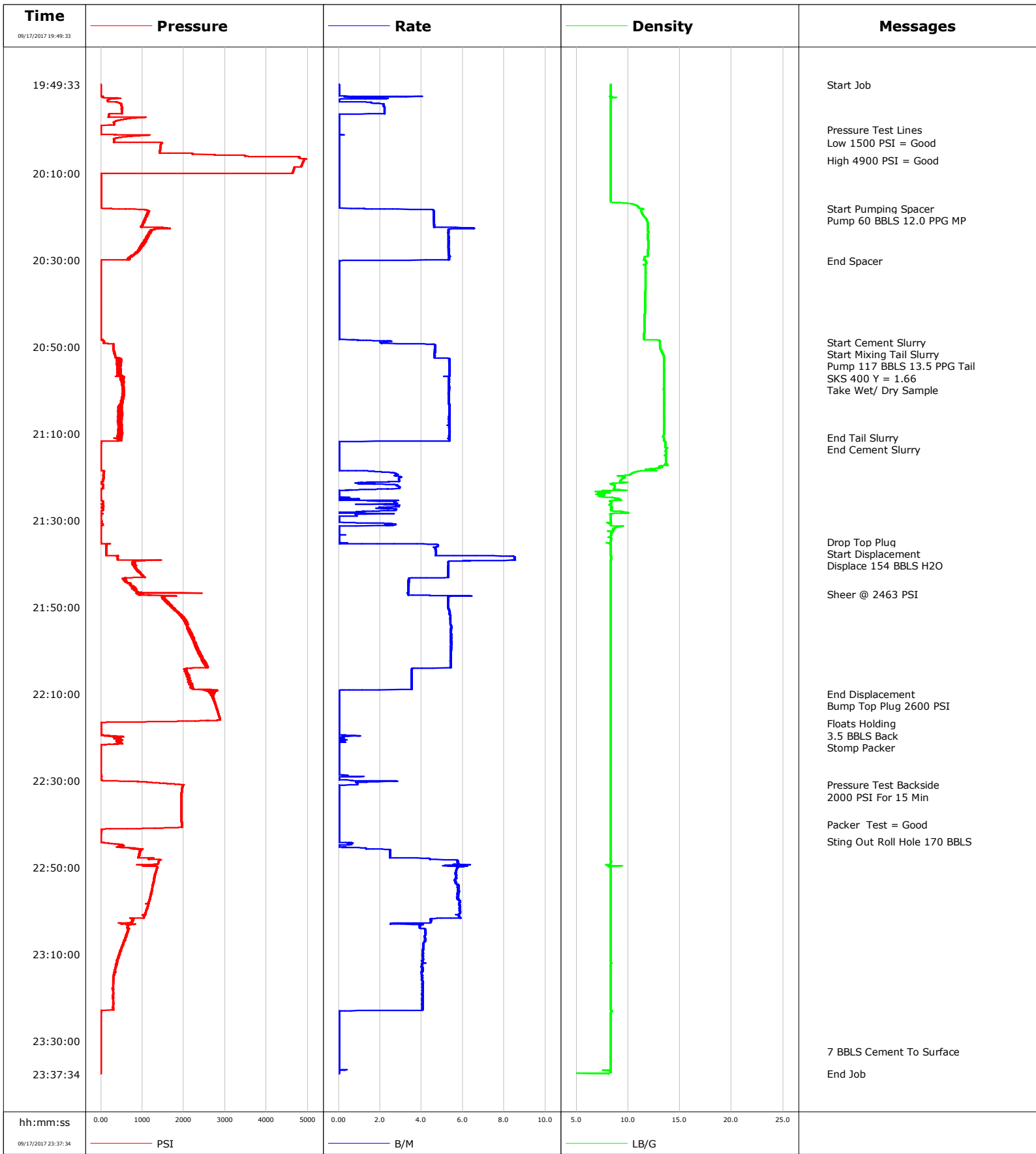


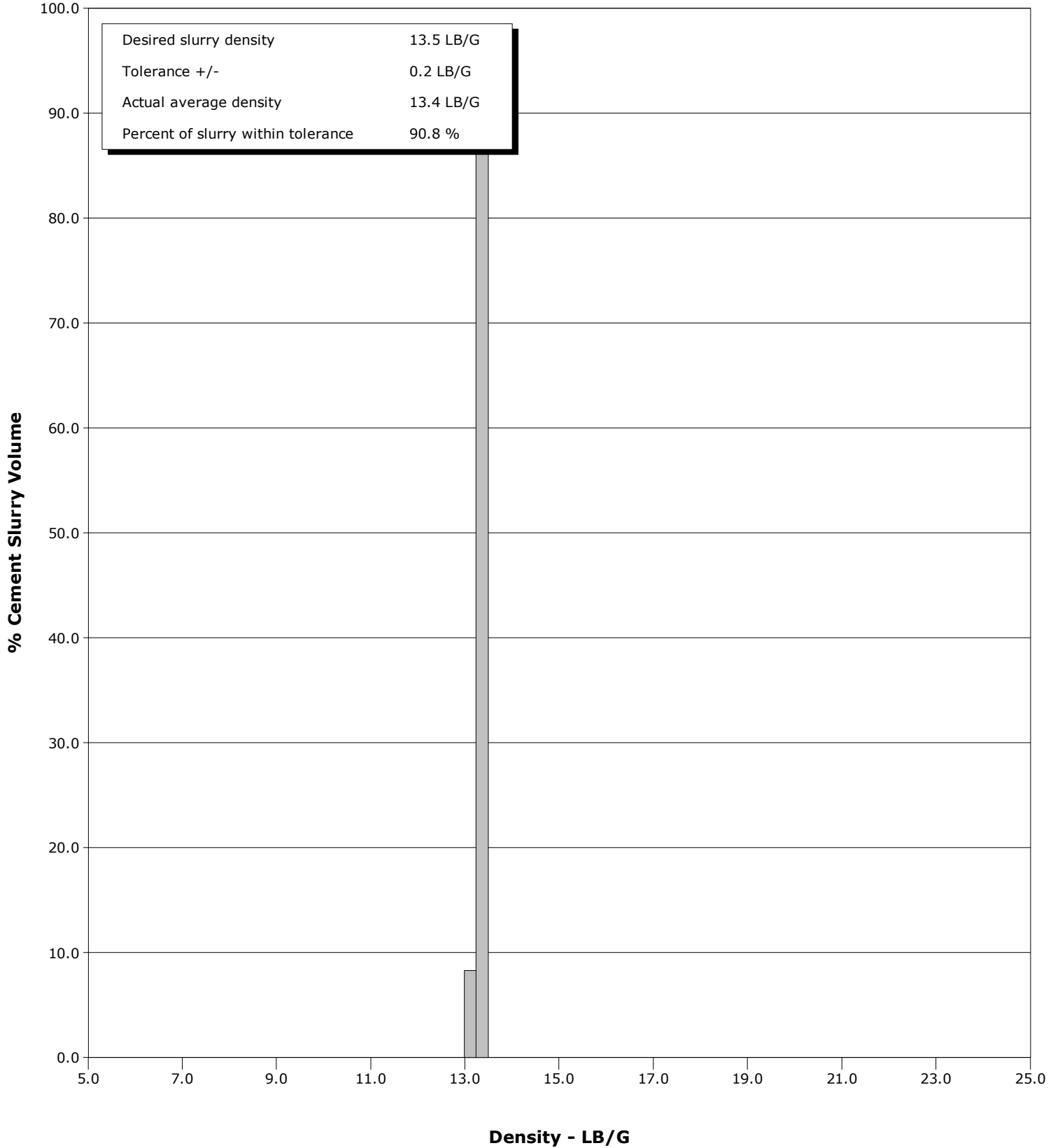
Well	Norden 27N-14HZ	Client	Anadarko
Field	Wattenberg	SIR No.	2578591
Engineer	Conley Jensen/ Sheldon Bell	Job Type	4.5" Liner
Country	United States	Job Date	09-17-2017



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

Client Anadarko
SIR No. 2578591
Job Type 4.5" Liner
Job Date 09-17-2017

Cement Slurry - 09/17/2017 20:49:00 to 09/17/2017 21:11:00



				Customer			Job Number		
				Anadarko			2578591		
Well		Location (legal)			Schlumberger Location		Job Start		
Norden 27N-14HZ					CWY		Sep/17/2017		
Field		Formation Name/Type		Deviation	Bit Size	Well MD	Well TVD		
Wattenberg		Shale		deg	6.1 in	12162.0 ft	7322.0 ft		
County		State/Province		BHP	BHST	BHCT	Pore Press. Gradient		
Juneau		Colorado		psi	228 degF	225 degF	lb/gal		
Well Master		API/UWI							
0631692263		05123435740000							
Rig Name	Drilled For	Service Via		Casing/Liner					
Xtreme 24	Oil	Land		Depth, ft	Size, in	Weight, lb/ft	Grade	Thread	
Offshore Zone	Well Class	Well Type		5838.0	7.0	26.0	P110	8RD	
	New	Development		6552.0	4.5	11.6	P110		
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								
Cementing	4.5" Liner								
Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection		Perforations/Open Hole					
psi	psi	2 3/8" 4.7# T/S		Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval	
Service Instructions Perform 4.5" Liner Per Proposal Design.				ft	ft			ft	
				ft	ft			Diameter	
				ft	ft			in	
Treat Down		Displacement		Packer Type		Packer Depth			
Casing		154.0 bbl				ft			
Tubing Vol.		Casing Vol.		Annular Vol.		Openhole Vol.			
53.0 bbl		101.0 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		psi		Shoe Type		Squeeze Type			
				Float					
Pipe Rotated		Pipe Reciprocated		Shoe Depth		Tool Type			
<input type="checkbox"/>		<input type="checkbox"/>		12162.0 ft					
No. Centralizers		Top Plugs	Bottom Plugs	Stage Tool Type		Tool Depth			
		1				ft			
Cement Head Type				Stage Tool Depth		Tail Pipe Size			
				ft		in			
Job Scheduled For		Arrived on Location	Leave Location	Collar Type		Tail Pipe Depth			
Sep/17/2017 18:00		Sep/17/2017 18:00	Sep/17/2017 02:00	Float		ft			
				Collar Depth		Sqz. Total Vol.			
				12113.0 ft		bbl			
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
09/17/2017	19:49:33	-4	0.0	8.34	0.0	Started Acquisition			
09/17/2017	19:49:35	-3	0.0	8.34	0.0	Start Job			
09/17/2017	19:51:33	-7	0.0	8.34	0.0				
09/17/2017	19:53:33	219	0.2	8.33	1.0				
09/17/2017	19:55:33	503	2.2	8.33	5.1				
09/17/2017	19:57:33	604	0.0	8.33	6.9				
09/17/2017	19:59:33	-3	0.0	8.33	6.9				
09/17/2017	20:00:00	-4	0.0	8.33	6.9	Pressure Test Lines			
09/17/2017	20:01:33	693	0.0	8.33	6.9				
09/17/2017	20:03:00	1474	0.0	8.33	6.9	Low 1500 PSI = Good			
09/17/2017	20:03:33	1443	0.0	8.33	6.9				
09/17/2017	20:05:33	2216	0.0	8.34	6.9				
09/17/2017	20:07:00	4905	0.0	8.34	6.9	High 4900 PSI = Good			
09/17/2017	20:07:33	4877	0.0	8.34	6.9				
09/17/2017	20:09:33	4643	0.0	8.34	6.9				
09/17/2017	20:11:33	3	0.0	8.34	6.9				
09/17/2017	20:13:33	3	0.0	8.33	6.9				
09/17/2017	20:15:33	5	0.0	8.34	6.9				
09/17/2017	20:17:33	7	0.0	10.88	6.9				
09/17/2017	20:18:10	256	1.2	11.27	7.0	Start Pumping Spacer			
09/17/2017	20:19:33	1136	4.6	11.40	5.8				

Well			Field		Job Start	Customer		Job Number
Norden 27N-14HZ			Wattenberg		Sep/17/2017	Anadarko		2578591
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
09/17/2017	20:21:33	1015	4.6	11.89	15.0			
09/17/2017	20:23:33	1201	5.3	11.94	25.3			
09/17/2017	20:25:33	1106	5.3	11.94	35.9			
09/17/2017	20:27:33	931	5.3	11.94	46.5			
09/17/2017	20:29:33	693	5.3	11.59	57.2			
09/17/2017	20:30:04	9	2.7	11.52	59.9	End Spacer		
09/17/2017	20:31:33	-4	0.0	11.69	60.0			
09/17/2017	20:33:33	-4	0.0	11.69	60.0			
09/17/2017	20:35:33	-5	0.0	11.67	60.0			
09/17/2017	20:37:33	-5	0.0	11.65	60.0			
09/17/2017	20:39:33	-5	0.0	11.63	60.0			
09/17/2017	20:41:33	-5	0.0	11.61	60.0			
09/17/2017	20:43:33	-5	0.0	11.60	60.0			
09/17/2017	20:45:33	-6	0.0	11.58	60.0			
09/17/2017	20:47:33	-5	0.0	11.51	60.0			
09/17/2017	20:49:00	66	2.0	13.06	61.2	Start Cement Slurry		
09/17/2017	20:49:33	298	4.6	13.05	62.8			
09/17/2017	20:50:00	298	4.7	13.09	64.9	Start Mixing Tail Slurry		
09/17/2017	20:51:33	330	4.6	13.33	72.1			
09/17/2017	20:53:33	463	5.3	13.46	82.0			
09/17/2017	20:53:52	412	5.3	13.46	83.7	Pump 117 BBLs 13.5 PPG Tail		
09/17/2017	20:54:09	486	5.3	13.46	85.2	SKS 400 Y = 1.66		
09/17/2017	20:54:24	414	5.3	13.46	86.6	Take Wet/ Dry Sample		
09/17/2017	20:55:33	492	5.3	13.47	92.7			
09/17/2017	20:57:33	546	5.3	13.44	103.4			
09/17/2017	20:59:33	558	5.3	13.43	114.1			
09/17/2017	21:01:33	537	5.3	13.48	124.7			
09/17/2017	21:03:33	449	5.3	13.47	135.4			
09/17/2017	21:05:33	464	5.3	13.45	146.1			
09/17/2017	21:07:33	505	5.3	13.47	156.7			
09/17/2017	21:09:33	417	5.4	13.46	167.4			
09/17/2017	21:11:00	517	5.4	13.43	175.2	End Tail Slurry		
09/17/2017	21:11:33	402	5.3	13.44	178.1			
09/17/2017	21:13:33	-2	0.0	13.66	179.4			
09/17/2017	21:15:33	-1	0.0	13.66	179.4			
09/17/2017	21:17:33	-1	0.0	13.09	179.4			
09/17/2017	21:19:33	63	2.9	10.16	181.7			
09/17/2017	21:21:33	13	1.6	8.30	186.9			
09/17/2017	21:23:33	-4	0.0	7.60	190.6			
09/17/2017	21:25:33	12	1.4	8.25	191.1			
09/17/2017	21:27:33	55	2.7	8.34	196.2			
09/17/2017	21:29:33	-2	0.0	8.33	198.1			
09/17/2017	21:31:33	-3	0.0	9.06	199.7			
09/17/2017	21:33:33	-3	0.0	8.34	199.7			
09/17/2017	21:35:00	-2	0.0	8.32	199.7	Drop Top Plug		
09/17/2017	21:35:33	141	4.7	8.32	200.3			
09/17/2017	21:37:33	130	4.7	8.35	209.8			
09/17/2017	21:37:47	128	4.7	8.35	210.9	Displace 154 BBLs H2O		
09/17/2017	21:39:33	766	5.3	8.33	223.5			
09/17/2017	21:41:33	906	5.3	8.33	234.1			
09/17/2017	21:43:33	594	3.4	8.33	244.1			
09/17/2017	21:45:33	742	3.4	8.33	250.9			
09/17/2017	21:46:59	884	3.4	8.33	255.7	Sheer @ 2463 PSI		
09/17/2017	21:47:33	1544	5.3	8.33	258.2			

Well			Field		Job Start	Customer	Job Number
Norden 27N-14HZ			Wattenberg		Sep/17/2017	Anadarko	2578591
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/17/2017	21:51:33	1893	5.4	8.33	279.4		
09/17/2017	21:53:33	2022	5.4	8.34	290.2		
09/17/2017	21:55:33	2127	5.4	8.33	301.1		
09/17/2017	21:57:33	2242	5.4	8.33	311.9		
09/17/2017	21:59:33	2319	5.4	8.33	322.8		
09/17/2017	22:01:33	2437	5.4	8.33	333.6		
09/17/2017	22:03:33	2517	5.4	8.33	344.4		
09/17/2017	22:05:33	2110	3.5	8.33	352.5		
09/17/2017	22:07:33	2183	3.5	8.33	359.5		
09/17/2017	22:09:33	2656	0.0	8.33	364.9		
09/17/2017	22:10:00	2657	0.0	8.33	364.9	End Displacement	
09/17/2017	22:11:33	2729	0.0	8.33	364.9		
09/17/2017	22:13:33	2804	0.0	8.33	364.9		
09/17/2017	22:15:33	2863	0.0	8.33	364.9		
09/17/2017	22:16:48	-1	0.0	8.33	364.9	Floats Holding	
09/17/2017	22:16:49	-0	0.0	8.33	364.9	3.5 BBLs Back	
09/17/2017	22:17:33	-1	0.0	8.33	364.9		
09/17/2017	22:19:00	6	0.0	8.33	364.9	Stomp Packer	
09/17/2017	22:19:33	11	0.2	8.33	364.9		
09/17/2017	22:21:33	396	0.0	8.33	365.2		
09/17/2017	22:23:33	-2	0.0	8.33	365.2		
09/17/2017	22:25:33	-1	0.0	8.33	365.2		
09/17/2017	22:27:33	-3	0.0	8.33	365.2		
09/17/2017	22:29:33	9	0.0	8.33	365.4		
09/17/2017	22:31:00	1985	0.3	8.33	366.8	Pressure Test Backside	
09/17/2017	22:31:33	1965	0.0	8.33	366.8		
09/17/2017	22:33:33	1946	0.0	8.33	366.8		
09/17/2017	22:35:33	1944	0.0	8.33	366.8		
09/17/2017	22:37:33	1945	0.0	8.33	366.8		
09/17/2017	22:39:33	1949	0.0	8.33	366.8		
09/17/2017	22:40:00	1952	0.0	8.33	366.8	Packer Test = Good	
09/17/2017	22:41:33	13	0.0	8.33	366.8		
09/17/2017	22:43:33	-1	0.0	8.33	366.8		
09/17/2017	22:44:00	-1	0.0	8.33	366.8	Sting Out Roll Hole 170 BBLs	
09/17/2017	22:45:33	827	1.3	8.33	367.3		
09/17/2017	22:47:33	904	2.5	8.33	372.0		
09/17/2017	22:49:33	1302	5.6	8.32	382.1		
09/17/2017	22:51:33	1309	5.7	8.34	393.4		
09/17/2017	22:53:33	1260	5.7	8.33	404.8		
09/17/2017	22:55:33	1217	5.8	8.33	416.3		
09/17/2017	22:57:33	1172	5.9	8.34	427.8		
09/17/2017	22:59:33	1112	5.8	8.34	439.5		
09/17/2017	23:01:33	1035	5.9	8.34	451.2		
09/17/2017	23:03:33	659	3.9	8.33	459.5		
09/17/2017	23:05:33	620	4.2	8.33	467.7		
09/17/2017	23:07:33	548	4.1	8.33	476.1		
09/17/2017	23:09:33	467	4.0	8.33	484.2		
09/17/2017	23:11:33	395	4.0	8.33	492.3		
09/17/2017	23:13:33	347	4.1	8.34	500.4		
09/17/2017	23:15:33	309	4.0	8.33	508.5		
09/17/2017	23:17:33	299	4.0	8.34	516.6		
09/17/2017	23:19:33	299	4.0	8.34	524.7		
09/17/2017	23:21:33	302	4.0	8.34	532.8		
09/17/2017	23:23:33	-4	0.0	8.34	538.5		

Well		Field		Job Start		Customer		Job Number	
Norden 27N-14HZ		Wattenberg		Sep/17/2017		Anadarko		2578591	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
09/17/2017	23:27:33	-5	0.0	8.33	538.5				
09/17/2017	23:29:33	-5	0.0	8.33	538.5				
09/17/2017	23:31:33	-6	0.0	8.33	538.5				
09/17/2017	23:32:20	-6	0.0	8.33	538.5	7 BBLs Cement To Surface			
09/17/2017	23:33:33	-6	0.0	8.31	538.5				
09/17/2017	23:35:33	-7	0.0	8.33	538.5				
09/17/2017	23:37:32	-8	0.0	7.86	538.5	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	
4.4			8.5	117.0	0.0	60.0		
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density	
4959	-8	1052	2600			bbl	lb/gal	
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	<input checked="" type="checkbox"/>	Volume	7.0 bbl	
%	117.0 bbl	155.5 bbl	72 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"/>	
John truett	Conley Jensen/ Sheldon Bell			-		-		



Service Quality Evaluation

Client:	Anadarko
Field:	Wattenberg
Rig:	Xtreme 24
Well:	Norden
Service Line:	Cementing
Job Type:	4.5" Liner

Service Order #:	
Date:	Sep/17/2017
Operating Time (hh:mm):	00:00
Client Rep:	John truett
Schlumberger Engineer:	Conley Jensen/ Sheldon Bell
Schlumberger FSM:	

Main Objective:

To be completed by Company Rep. Please answer Y (Yes) or N (No) and add any comments below.

		Score	Yes / No		Result
1	HSE				
1a	Free of lost time injury and compliance with SLB and loc. spec. HSE practice	5	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
1b	Free of environmental spill or non-compliant discharge	5	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
1c	Wellsite left clean	4	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
Sub-total					0%

2	Design / Preparation				
2a	Program incl. job simulation (CemCADE) & pump schedule / tool hydraulic calcs	3	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
2b	Equipment maintenance schedule completed / Green tagged	2	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
2c	All materials and equipment required for job/contingency checked & on location	2	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
2d	Safety / pre-job meeting conducted with all involved present	2	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
Sub-total					0%

3	Execution				
3a	Lost time < 30 mins	3	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
3b	Equipment pressure tested successfully	3	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
3c	All key parameters monitored and recorded accurately (Pressure, Rate, Density)	2	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
3d	Plugs / darts released and tested successfully	2	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
3e	Density variation met expectations	2	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
3f	Personnel performed as per expectations	2	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
3g	Equipment performed as per expectations	2	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
3h	Job pumped as per design	3	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
3i	Did job start on time	2	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
3j	Free of Operational failures (screen out, Cementing Example, etc.)	3	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	0
Sub-total					0%

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%

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: