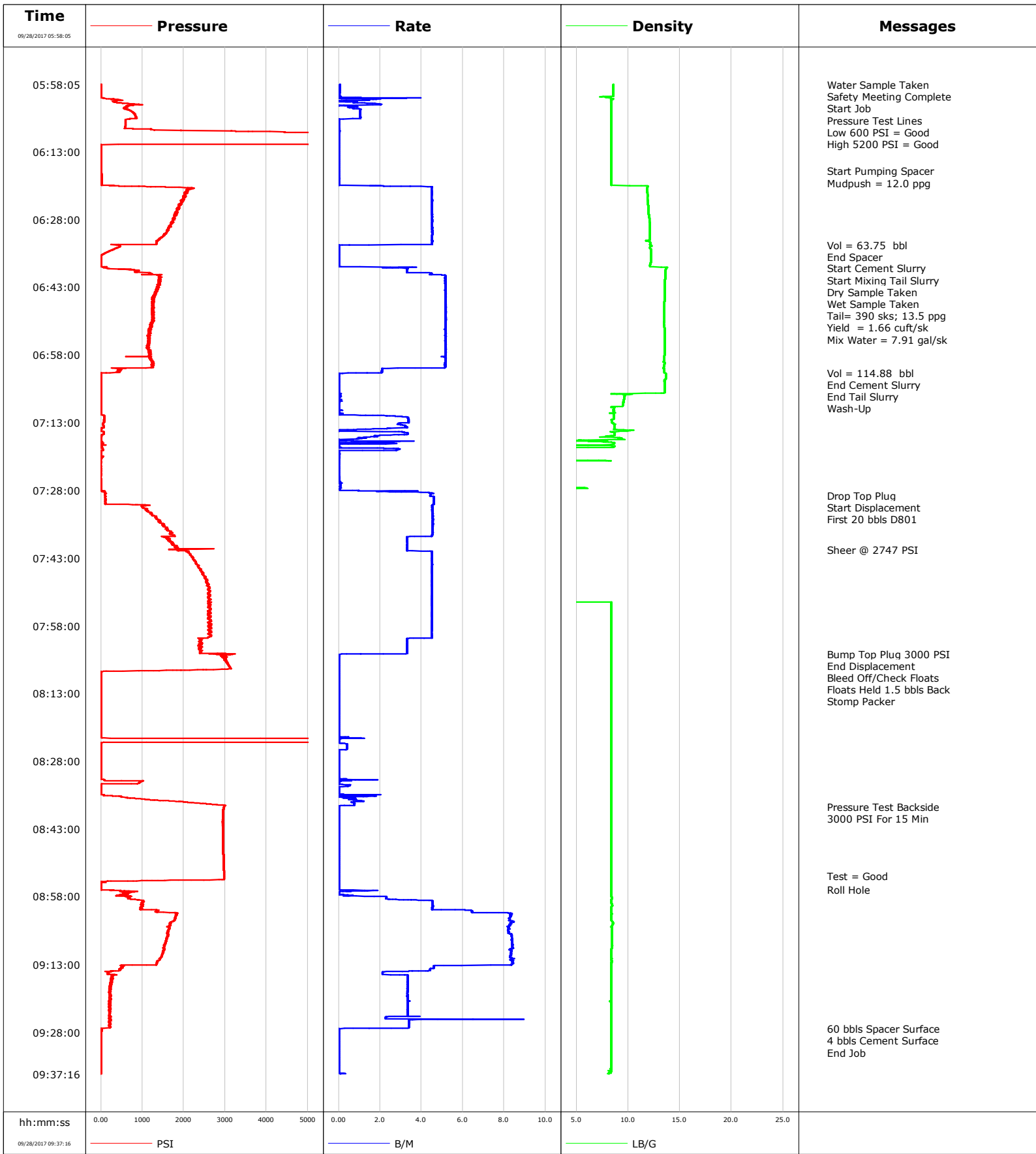


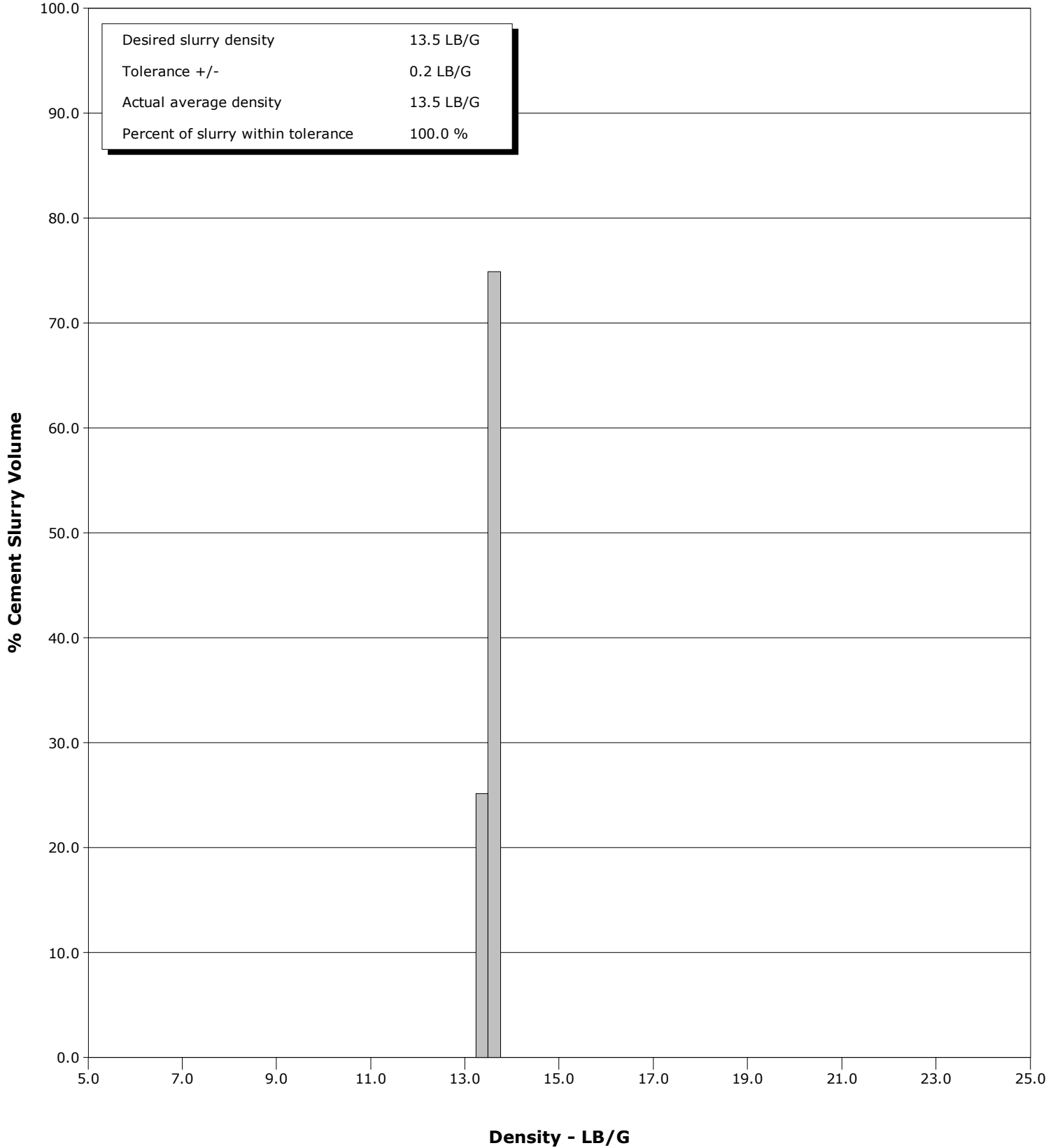
Well	NORDEN 2C-14HZ	Client	ANADARKO PETROLEUM COMPANY
Field	Wattenberg	SIR No.	CSS9-00731
Engineer	Michael Lopez/ Sheldon Bell	Job Type	4.5" Liner
Country	United States	Job Date	09-28-2017



Well NORDEN
Field Wattenberg
Engineer Michael Lopez/ Sheldon Bell
Country United States

Client ANADARKO PETROLEUM COMPANY
SIR No. CSS9-00731
Job Type 4.5" Liner
Job Date 09-28-2017

Cement Slurry - 09/28/2017 06:38:50 to 09/28/2017 07:02:00



				Customer			Job Number	
				ANADARKO PETROLEUM COMPANY			CSS9-00731	
Well		Location (legal)			Schlumberger Location		Job Start	
NORDEN 2C-14HZ					Cheyenne		Sep/28/2017	
Field		Formation Name/Type		Deviation	Bit Size	Well MD	Well TVD	
Wattenberg		Shale		deg	6.1 in	12050.0 ft	7540.0 ft	
County		State/Province		BHP	BHST	BHCT	Pore Press. Gradient	
Weld		Wyoming		psi	232 degF	228 degF	lb/gal	
Well Master		API/UWI						
0631692322		05123435720000						
Rig Name	Drilled For		Service Via	Casing/Liner				
Xtreme 24	Oil & Gas		Land					
	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread			
Offshore Zone	Well Class	Well Type	5894.0	7.0	26.0	90	8RD	
	New	Development	12050.0	4.5	11.6	P110	8RD	
Drilling Fluid Type		Max. Density	Plastic Viscosity	Tubing/Drill Pipe				
OBM		9.30 lb/gal	cP					
T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread			
Service Line	Job Type	D	4433.4	4.0	11.8	E	8RD	
Cementing	4.5" Liner		1235.8	4.0	15.7	E	8RD	
Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection	Perforations/Open Hole					
0 psi	0 psi	4 1/2" IF DP pin						
	Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval			
Service Instructions	7" 26# Previous Casing: 5,875'	ft	ft		ft			
7" 26# Previous Casing: 5,875'	6 1/8" to TD // OH Excess: 6%	ft	ft		Diameter			
Top of Cement: 5,675'	TD: 12,029' (7,322')	ft	ft		in			
Temp Gradient 2.3 degF/100ft from Gradient Ma	Treat Down	Displacement	Packer Type	Packer Depth				
	Casing	154.0 bbl	Other	5659.8 ft				
	Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.				
	56.0 bbl	100.0 bbl	107.0 bbl	103.0 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"/>		12050.0 ft				
No. Centralizers		Top Plugs	Bottom Plugs	Stage Tool Type		Tool Depth		
		1				ft		
Cement Head Type		Single		Stage Tool Depth		Tail Pipe Size		
				ft		in		
Job Scheduled For		Arrived on Location	Leave Location	Collar Type		Tail Pipe Depth		
Sep/28/2017 01:30		Sep/28/2017 12:30	Sep/28/2017 11:30	Float		ft		
				Collar Depth		Sqz. Total Vol.		
				12001.0 ft		bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
09/28/2017	05:58:05	2	0.1	8.56	0.0	Started Acquisition		
09/28/2017	05:58:06	3	0.1	8.56	0.0	Safety Meeting Complete		
09/28/2017	05:58:07	3	0.1	8.56	0.0	Start Job		
09/28/2017	06:00:05	1	0.0	8.56	0.0			
09/28/2017	06:01:00	4	1.0	7.78	0.0	Pressure Test Lines		
09/28/2017	06:02:05	329	0.7	8.38	0.0			
09/28/2017	06:04:05	732	1.0	8.38	2.1			
09/28/2017	06:05:00	828	1.0	8.38	3.0	Low 600 PSI = Good		
09/28/2017	06:06:05	596	0.0	8.38	3.8			
09/28/2017	06:08:05	1205	0.0	8.38	3.8			
09/28/2017	06:09:00	5226	0.0	8.38	3.8	High 5200 PSI = Good		
09/28/2017	06:10:05	5186	0.0	8.38	3.8			
09/28/2017	06:12:05	3	0.0	8.38	3.8			
09/28/2017	06:14:05	5	0.0	8.38	3.8			
09/28/2017	06:16:05	8	0.0	8.38	0.0			
09/28/2017	06:17:16	11	0.0	8.38	0.0	Start Pumping Spacer		
09/28/2017	06:17:17	11	0.0	8.38	0.0	Mudpush = 12.0 ppg		
09/28/2017	06:18:05	12	0.0	8.38	0.0			
09/28/2017	06:20:05	17	0.0	8.38	0.0			
09/28/2017	06:22:05	2019	4.5	11.84	6.7			
09/28/2017	06:24:05	1935	4.5	11.91	15.6			

Well			Field		Job Start	Customer	Job Number
NORDEN 2C-14HZ			Wattenberg		Sep/28/2017	ANADARKO PETROLEUM COMPANY	CSS9-00731
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/28/2017	06:28:05	1771	4.5	12.06	33.7		
09/28/2017	06:30:05	1629	4.5	12.11	42.7		
09/28/2017	06:32:05	1441	4.5	12.09	51.7		
09/28/2017	06:33:43	444	0.0	12.22	58.7	Vol = 63.75 bbl	
09/28/2017	06:33:46	447	0.0	12.23	58.7	End Spacer	
09/28/2017	06:34:05	447	0.0	12.12	58.7		
09/28/2017	06:36:05	4	0.0	12.20	58.7		
09/28/2017	06:38:05	2	0.0	12.12	58.7		
09/28/2017	06:38:50	152	3.3	13.63	59.5	Start Cement Slurry	
09/28/2017	06:38:58	198	3.3	13.63	60.0	Start Mixing Tail Slurry	
09/28/2017	06:39:06	689	3.3	13.63	60.4	Dry Sample Taken	
09/28/2017	06:39:07	689	3.3	13.62	60.5	Wet Sample Taken	
09/28/2017	06:39:08	785	3.3	13.62	60.5	Yield = 1.66 cuft/sk	
09/28/2017	06:39:38	908	3.3	13.58	62.2	Mix Water = 7.91 gal/sk	
09/28/2017	06:40:05	1183	4.5	13.60	64.0		
09/28/2017	06:42:05	1436	5.1	13.54	74.1		
09/28/2017	06:44:05	1298	5.2	13.53	84.4		
09/28/2017	06:46:05	1273	5.2	13.52	94.7		
09/28/2017	06:48:05	1238	5.2	13.48	105.1		
09/28/2017	06:50:05	1272	5.2	13.49	115.4		
09/28/2017	06:52:05	1197	5.2	13.52	125.7		
09/28/2017	06:54:05	1137	5.2	13.56	136.0		
09/28/2017	06:56:05	1142	5.2	13.53	146.3		
09/28/2017	06:58:05	1187	5.2	13.52	156.7		
09/28/2017	07:00:05	1250	5.1	13.52	167.0		
09/28/2017	07:02:00	131	1.4	13.53	173.6	Vol = 114.88 bbl	
09/28/2017	07:02:02	7	0.5	13.57	173.6	End Tail Slurry	
09/28/2017	07:02:05	5	0.1	13.63	173.6		
09/28/2017	07:02:09	5	0.0	13.63	173.6	Wash-Up	
09/28/2017	07:04:05	1	0.0	13.52	173.6		
09/28/2017	07:06:05	2	0.0	13.52	173.6		
09/28/2017	07:08:05	2	0.0	9.58	173.7		
09/28/2017	07:10:05	3	0.0	8.62	173.8		
09/28/2017	07:12:05	74	3.4	8.59	175.9		
09/28/2017	07:14:05	61	3.3	8.67	182.4		
09/28/2017	07:16:05	13	1.9	8.17	186.6		
09/28/2017	07:18:05	5	0.0	5.56	188.5		
09/28/2017	07:20:05	0	0.0	0.04	190.0		
09/28/2017	07:22:05	-1	0.0	0.05	190.1		
09/28/2017	07:24:05	-1	0.0	0.04	190.1		
09/28/2017	07:26:05	0	0.1	0.04	190.1		
09/28/2017	07:28:05	19	1.0	0.05	190.3		
09/28/2017	07:29:09	95	4.4	0.05	194.5	Drop Top Plug	
09/28/2017	07:29:13	97	4.4	0.05	194.8	Start Displacement	
09/28/2017	07:29:34	106	4.6	0.05	196.3	First 20 bbls D801	
09/28/2017	07:30:05	107	4.6	0.05	198.7		
09/28/2017	07:32:05	1098	4.5	0.04	207.8		
09/28/2017	07:34:05	1310	4.5	0.04	216.9		
09/28/2017	07:36:05	1531	4.5	0.04	226.0		
09/28/2017	07:38:05	1767	4.5	0.04	235.1		
09/28/2017	07:40:05	1754	3.3	0.04	241.9		
09/28/2017	07:41:11	1895	3.3	0.04	245.5	Sheer @ 2747 PSI	
09/28/2017	07:42:05	2147	4.5	0.04	249.2		
09/28/2017	07:44:05	2280	4.5	0.04	258.2		

Well NORDEN 2C-14HZ			Field Wattenberg		Job Start Sep/28/2017	Customer ANADARKO PETROLEUM COMPANY	Job Number CSS9-00731
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/28/2017	07:48:05	2558	4.5	0.05	276.3		
09/28/2017	07:50:05	2593	4.5	0.05	285.3		
09/28/2017	07:52:05	2628	4.5	0.05	294.3		
09/28/2017	07:54:05	2618	4.5	8.38	303.3		
09/28/2017	07:56:05	2600	4.5	8.39	312.3		
09/28/2017	07:58:05	2584	4.5	8.39	321.3		
09/28/2017	08:00:05	2660	4.5	8.38	330.3		
09/28/2017	08:02:05	2363	3.3	8.39	337.7		
09/28/2017	08:04:05	2382	3.3	8.38	344.3		
09/28/2017	08:04:13	2720	1.1	8.39	344.7	Bump Top Plug 3000 PSI	
09/28/2017	08:06:05	3038	0.0	8.39	344.8		
09/28/2017	08:08:05	121	0.0	8.39	344.8		
09/28/2017	08:08:17	-3	0.0	8.39	344.8	Bleed Off/Check Floats	
09/28/2017	08:08:40	-1	0.0	8.39	344.8	Floats Held 1.5 bbls Back	
09/28/2017	08:09:32	3	0.0	8.39	344.8	Stomp Packer	
09/28/2017	08:10:05	4	0.0	8.39	344.8		
09/28/2017	08:12:05	3	0.0	8.39	344.8		
09/28/2017	08:14:05	4	0.0	8.39	344.8		
09/28/2017	08:16:05	4	0.0	8.39	344.8		
09/28/2017	08:18:05	2	0.0	8.39	344.8		
09/28/2017	08:20:05	1	0.0	8.39	344.8		
09/28/2017	08:22:05	2	0.0	8.39	344.8		
09/28/2017	08:24:05	5	0.3	8.39	345.1		
09/28/2017	08:26:05	4	0.0	8.39	345.6		
09/28/2017	08:28:05	4	0.0	8.39	345.6		
09/28/2017	08:30:05	4	0.0	8.39	345.6		
09/28/2017	08:32:05	66	1.9	8.39	345.7		
09/28/2017	08:34:05	4	0.0	8.39	346.0		
09/28/2017	08:36:05	641	0.8	8.39	346.5		
09/28/2017	08:38:00	2976	0.0	8.39	347.9	Pressure Test Backside	
09/28/2017	08:38:05	2972	0.0	8.39	347.9		
09/28/2017	08:40:05	2944	0.0	8.39	347.9		
09/28/2017	08:42:05	2943	0.0	8.39	347.9		
09/28/2017	08:44:05	2945	0.0	8.39	347.9		
09/28/2017	08:46:05	2947	0.0	8.39	347.9		
09/28/2017	08:48:05	2951	0.0	8.39	347.9		
09/28/2017	08:50:05	2959	0.0	8.39	347.9		
09/28/2017	08:52:05	2966	0.0	8.39	347.9		
09/28/2017	08:53:31	2972	0.0	8.39	347.9	Test = Good	
09/28/2017	08:54:05	2972	0.0	8.39	347.9		
09/28/2017	08:56:05	3	0.0	8.39	347.9		
09/28/2017	08:56:28	10	0.1	8.39	347.9	Roll Hole	
09/28/2017	08:58:05	676	2.3	8.40	348.8		
09/28/2017	09:00:05	1015	4.5	8.45	356.5		
09/28/2017	09:02:05	1809	8.3	8.39	368.7		
09/28/2017	09:04:05	1670	8.3	8.51	385.3		
09/28/2017	09:06:05	1621	8.2	8.41	401.8		
09/28/2017	09:08:05	1564	8.4	8.42	418.5		
09/28/2017	09:10:05	1510	8.3	8.39	435.2		
09/28/2017	09:12:05	1406	8.3	8.39	451.8		
09/28/2017	09:14:05	467	4.4	8.38	465.3		
09/28/2017	09:16:05	297	3.3	8.38	471.6		
09/28/2017	09:18:05	218	3.3	8.38	478.2		
09/28/2017	09:20:05	250	3.3	8.38	484.9		

Well		Field		Job Start		Customer		Job Number	
NORDEN 2C-14HZ		Wattenberg		Sep/28/2017		ANADARKO PETROLEUM COMPANY		CSS9-00731	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
09/28/2017	09:24:05	196	3.3	8.38	498.2				
09/28/2017	09:26:05	222	3.4	8.39	504.7				
09/28/2017	09:27:18	12	0.0	8.39	508.3	60 bbls Spacer Surface			
09/28/2017	09:27:19	13	0.0	8.38	508.3	4 bbls Cement Surface			
09/28/2017	09:27:20	13	0.0	8.39	508.3	End Job			
09/28/2017	09:28:05	2	0.0	8.39	508.3				
09/28/2017	09:30:05	3	0.0	8.39	508.3				
09/28/2017	09:32:05	3	0.0	8.39	508.3				
09/28/2017	09:34:05	3	0.0	8.39	508.3				

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2	
3.5			9.0	114.0	0.0	60.0		
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density	
5200	3	1130	3000			bbl	lb/gal	
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	<input checked="" type="checkbox"/>	Volume	4.0 bbl	
%	114.0 bbl	154.0 bbl	65 degF	Washed Thru Perfs	<input checked="" type="checkbox"/>	To	ft	
Customer or Authorized Representative	Schlumberger Supervisor			Circulation Lost	<input type="checkbox"/>	Job Completed	<input checked="" type="checkbox"/>	
Rick Duran	Michael Lopez/ Sheldon Bell			-		-		

Client:	ANADARKO PETROLEUM COMPANY
Field:	Wattenberg
Rig:	Xtreme 24
Well:	NORDEN
Service Line:	Cementing
Job Type:	4.5" Liner

Service Order #:	
Date:	Sep/28/2017
Operating Time (hh:mm):	00:00
Client Rep:	Rick Duran
Schlumberger Engineer:	Michael Lopez/ 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: