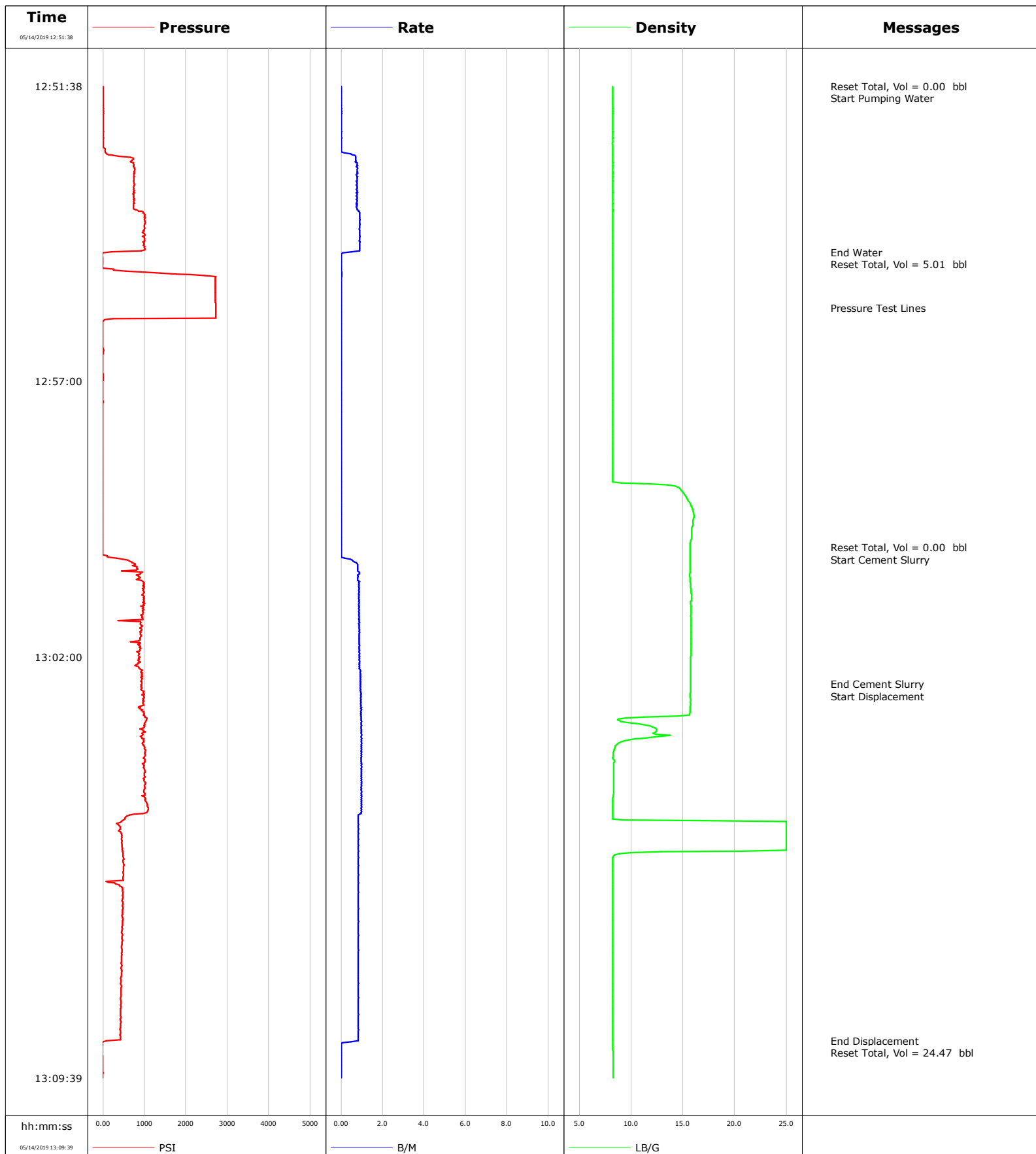


**Well** Starck 18-18  
**Field** DJ  
**Engineer** Richard White  
**Country** United States

**Client** Anadarko  
**SIR No.** EAJ7-00383  
**Job Type** P A Nio Plug  
**Job Date** 05-14-2019



# Cementing Service Report

				Customer Anadarko			Job Number EAJ7-00383		
Well <b>Starck 18-18</b>		Location (legal) CWY		Schlumberger Location Cheyenne			Job Start <b>May/14/2019</b>		
Field DJ		Formation Name/Type		Deviation deg		Bit Size in		Well MD 7120.0 ft	
County Weld		State/Province Colorado		BHP psi		BHST 220 degF		BHCT 210 degF	
Well Master 1234		API/UWI						Pore Press. Gradient lb/gal	
Rig Name Ensign 320		Drilled For Oil and Gas		Service Via Land		Casing/ Liner			
						Depth, ft		Size, in	
						Weight, lb/ft		Grade	
						Thread			
Offshore Zone		Well Class Old		Well Type Other		7120.0		4.5	
						11.6		n/a	
						0.0		0.0	
Drilling Fluid Type Other		Max. Density 8.40 lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe			
						T/D		Depth, ft	
						Size, in		Weight, lb/ft	
						Grade		Thread	
Service Line Cementing		Job Type P & A Nio Plug				T		<b>7120.0</b>	
						0.0		2.4	
						0.0		4.7	
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection 2 3/8" 4.7# T/S		Perforations/Open Hole			
						Top, ft		Bottom, ft	
						shot/ft		No. of Shots	
						ft		ft	
						ft		ft	
						ft		ft	
						Treat Down Tubing		Displacement 24.0 bbl	
						Packer Type		Packer Depth ft	
						Tubing Vol. bbl		Casing Vol. bbl	
						Annular Vol. bbl		Openhole Vol. bbl	
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>		Casing Tools		Squeeze Job			
Lift Pressure psi				Shoe Type		Squeeze Type			
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth ft		Tool Type			
No. Centralizers		Top Plugs		Bottom Plugs		Stage Tool Type		Tool Depth ft	
Cement Head Type				Stage Tool Depth ft		Tail Pipe Size in			
Job Scheduled For May/14/2019		Arrived on Location May/14/2019		Leave Location May/14/2019		Collar Type		Tail Pipe Depth ft	
						Collar Depth ft		Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Message				
05/14/2019	12:51:38	0	0.0	8.25	Started Acquisition				
05/14/2019	12:51:40	0	0.0	8.25	Start Pumping Water				
05/14/2019	12:54:39	215	0.5	8.24	End Water				
05/14/2019	12:54:40	-9	0.1	8.23	Reset Total, Vol = 5.01 bbl				
05/14/2019	12:55:40	2719	0.0	8.25	Pressure Test Lines				
05/14/2019	13:00:01	-5	0.0	15.71	Reset Total, Vol = 0.00 bbl				
05/14/2019	13:00:02	-5	0.0	15.70	Start Cement Slurry				
05/14/2019	13:02:30	938	0.9	15.73	End Cement Slurry				
05/14/2019	13:02:31	920	0.9	15.73	Start Displacement				
05/14/2019	13:08:59	92	0.8	8.23	End Displacement				

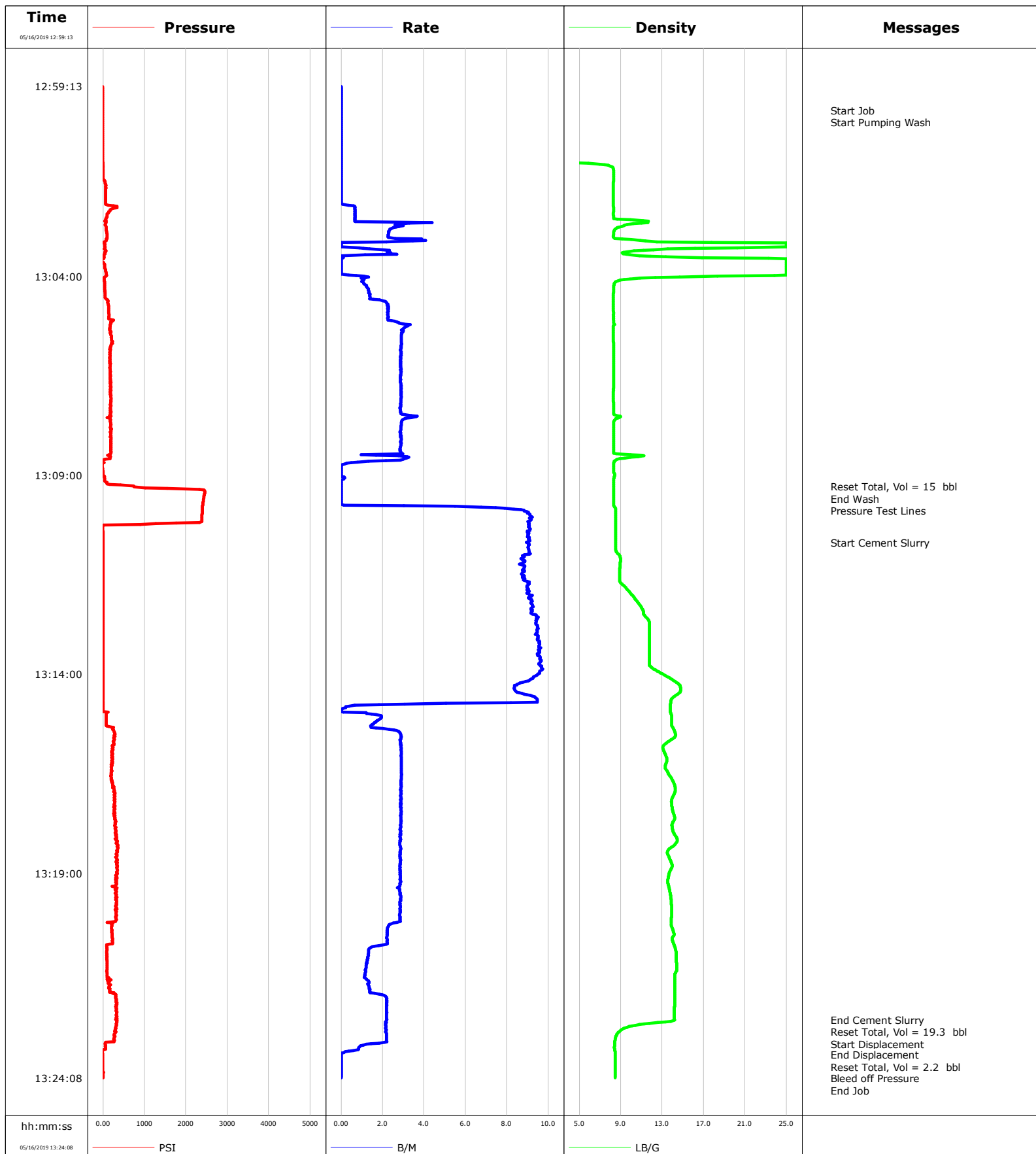
<b>Well</b> Starck 18-18	<b>Field</b> DJ	<b>Job Start</b> May/14/2019	<b>Customer</b> Anadarko	<b>Job Number</b> EAJ7-00383
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 2.7	N2	Mud	Maximum Rate 7.9		Total Slurry 8.2	Mud 0.0	Spacer 5.0	N2
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 2724	Final 0	Average 845	Bump Plug to	Breakdown	Type	Volume bbl		Density lb/gal
Avg. N2 Percent %	Designed Slurry Volume 0.0 bbl	Displacement 24.5 bbl	Mix Water Temp degF	Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl		
				Washed Thru Perfs <input type="checkbox"/>		To ft		
Customer or Authorized Representative Socorro O.			Schlumberger Supervisor Richard White			Circulation Lost <input type="checkbox"/>		Job Completed <input type="checkbox"/>
						-		-

**Well** STARCK 18-18  
**Field** DJ  
**Engineer** LUIS JIMENEZ  
**Country** United States

**Client** ANADARKO PETROLEUM  
**SIR No.** 2982999  
**Job Type** STUB PLUG  
**Job Date** 05-16-2019



# Cementing Service Report

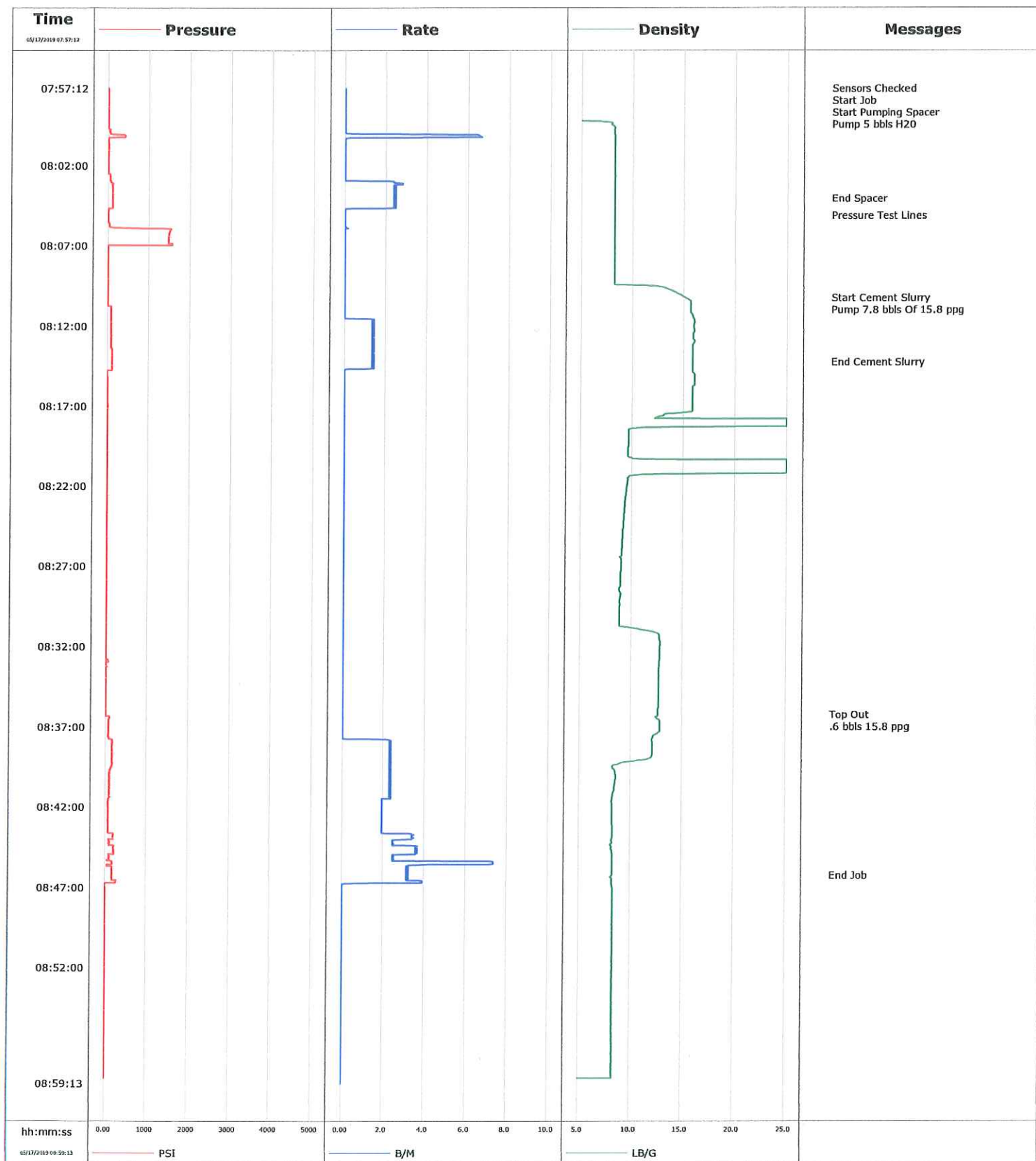
				Customer ANADARKO PETROLEUM			Job Number 2982999	
Well STARCK 18-18 0630797641			Location (legal) WELD		Schlumberger Location CHEYENNE		Job Start May/16/2019	
Field DJ		Formation Name/Type		Deviation deg	Bit Size in	Well MD 940.0 ft		Well TVD 940.0 ft
County WELD		State/Province Colorado		BHP psi	BHST degF	BHCT degF	Pore Press. Gradient lb/gal	
Well Master		API/UWI						
Rig Name ENSIGN# 320	Drilled For Oil & Gas	Service Via Land	Casing/ Liner					
			Depth, ft	Size, in	Weight, lb/ft	Grade	Thread	
Offshore Zone N/A	Well Class Old	Well Type Workover	825.0	8.6	24.0	J55	N/A	
			840.0	4.5	11.6	N80	N/A	
Drilling Fluid Type		Max. Density lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe				
				T/D	Depth, ft	Size, in	Weight, lb/ft	Grade
Service Line Cementing	Job Type STUB PLUG			T	940.0	2.4	4.7	J55
					0.0	0.0	0.0	
Max. Allowed Tub. Press psi	Max. Allowed Ann. Press psi	WH Connection 2 3/8" 4.7# T/S	Perforations/Open Hole					
			Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval	
			ft	ft			ft	
			ft	ft			Diameter	
			ft	ft			in	
			Treat Down Tubing	Displacement 2.2 bbl	Packer Type	Packer Depth ft		
			Tubing Vol. 15.0 bbl	Casing Vol. bbl	Annular Vol. bbl	Openhole Vol. bbl		
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>		Casing Tools			Squeeze Job	
Lift Pressure psi				Shoe Type			Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth ft			Tool Type	
No. Centralizers		Top Plugs	Bottom Plugs	Stage Tool Type			Tool Depth ft	
Cement Head Type				Stage Tool Depth ft			Tail Pipe Size in	
Job Scheduled For May/16/2019		Arrived on Location May/16/2019	Leave Location May/16/2019	Collar Type			Tail Pipe Depth ft	
				Collar Depth ft			Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume B/M	Message		
05/16/2019	12:59:50	-5	0.0	0.11	0.0	Start Job		
05/16/2019	12:59:54	-5	0.0	0.11	0.0	Start Pumping Wash		
05/16/2019	13:09:17	746	0.0	8.32	0.0	Reset Total, Vol = 15 bbl		
05/16/2019	13:09:20	1552	0.1	8.32	0.0	End Wash		
05/16/2019	13:09:22	2435	0.0	8.32	0.0	Pressure Test Lines		
05/16/2019	13:10:41	0	0.0	8.53	0.0	Start Cement Slurry		
05/16/2019	13:22:41	339	0.7	14.20	0.0	End Cement Slurry		
05/16/2019	13:22:42	343	0.7	14.14	0.0	Reset Total, Vol = 19.3 bbl		
05/16/2019	13:23:03	270	0.7	8.63	0.0	Start Displacement		
05/16/2019	13:23:33	-9	0.0	8.48	0.0	End Displacement		
05/16/2019	13:23:34	-9	0.0	8.49	0.0	Reset Total, Vol = 2.2 bbl		
05/16/2019	13:23:45	-9	0.0	8.48	0.0	Bleed off Pressure		

<b>Well</b> STARCK 18-18 0630797641	<b>Field</b> DJ	<b>Job Start</b> May/16/2019	<b>Customer</b> ANADARKO PETROLEUM	<b>Job Number</b> 2982999
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl					
Slurry 2.3	N2	Mud	Maximum Rate 3.1		Total Slurry 19.3	Mud 0.0	Spacer 15.0	N2		
Treating Pressure Summary, psi					Breakdown Fluid					
Maximum 2458	Final 0	Average 311	Bump Plug to	Breakdown	Type		Volume bbl		Density lb/gal	
Avg. N2 Percent %		Designed Slurry Volume 19.3 bbl		Displacement 2.2 bbl		Mix Water Temp 52 degF		Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl
								Washed Thru Perfs <input type="checkbox"/>		To ft
Customer or Authorized Representative SOCORRO OLIVAS				Schlumberger Supervisor LUIS JIMENEZ				Circulation Lost <input type="checkbox"/>		Job Completed <input checked="" type="checkbox"/>
								-		-

<b>Well</b>	Starck 18-18	<b>Client</b>	Anadarko
<b>Field</b>	DJ	<b>SIR No.</b>	
<b>Engineer</b>	Justin Zika	<b>Job Type</b>	Weld
<b>Country</b>	United States	<b>Job Date</b>	05-17-2019





# Cementing Service Report

				Customer Anadarko		Job Number	
Well Starck 18-18		Location (legal)		Schlumberger Location		Job Start May/17/2019	
Field DJ		Formation Name/Type		Deviation deg		Well MD ft	
County Weld		State/Province Colorado		Bit Size in		Well TVD ft	
Well Master 64929996		API/UWI 512323734		BHP psi		BHST degF	
Rig Name Ensign 320		Drilled For Oil		Service Via Land		BHCT degF	
Offshore Zone		Well Class Old		Well Type Workover		Pore Press. Gradient lb/gal	
Drilling Fluid Type		Max. Density lb/gal		Plastic Viscosity cP		Casing/Liner	
						Depth, ft	
						Size, in	
						Weight, lb/ft	
						Grade	
						Thread	
Service Line Cementing		Job Type Weld		T/D T		Depth, ft 154.0	
						Size, in 2.4	
						Weight, lb/ft 4.6	
						Grade J55	
						Thread 8RD	
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection 2 3/8" 4.7# T/S		Perforations/Open Hole	
						Top, ft	
						Bottom, ft	
						shot/ft	
						No. of Shots	
						Total Interval ft	
Service Instructions Sensors Checked Pump 5 bbls H2O Psi Test Pump 7.8 bbls Of 15.8 ppg @ 38 sks @ 1.17 Y Mix H2O 5.31 gps Estimated TOC Surface Bottom Plug 154' Top Out .6 Of A bbl						ft	
						ft	
						ft	
						Diameter in	
						Treat Down Tubing	
						Displacement bbl	
						Packer Type	
						Packer Depth ft	
						Tubing Vol. bbl	
						Casing Vol. bbl	
						Annular Vol. bbl	
						Openhole Vol. bbl	
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>		Casing Tools		Squeeze Job	
Lift Pressure psi				Shoe Type		Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth ft		Tool Type	
No. Centralizers		Top Plugs		Bottom Plugs		Stage Tool Type	
Cement Head Type						Tool Depth ft	
Job Scheduled For May/17/2019		Arrived on Location May/17/2019		Leave Location May/17/2019		Stage Tool Depth ft	
						Tail Pipe Size in	
						Collar Type	
						Tail Pipe Depth ft	
						Collar Depth ft	
						Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
05/17/2019	07:57:12	0	0.0	0.34	0.0	Started Acquisition	
05/17/2019	07:57:13	0	0.0	0.34	0.0	Sensors Checked	
05/17/2019	07:57:16	0	0.0	0.34	0.0	Start Job	
05/17/2019	07:57:22	0	0.0	0.34	0.0	Start Pumping Spacer	
05/17/2019	07:57:23	0	0.0	0.34	0.0	Pump 5 bbls H2O	
05/17/2019	08:02:12	5	0.0	8.25	1.4		
05/17/2019	08:04:04	114	2.4	8.25	4.1	End Spacer	
05/17/2019	08:05:07	5	0.0	8.25	5.6	Pressure Test Lines	
05/17/2019	08:07:12	5	0.0	8.24	5.6		
05/17/2019	08:10:15	5	0.0	15.14	5.6	Start Cement Slurry	
05/17/2019	08:12:12	92	1.4	15.97	6.5		
05/17/2019	08:14:15	114	1.4	15.84	9.4	End Cement Slurry	
05/17/2019	08:17:12	0	0.0	15.84	9.9		
05/17/2019	08:22:12	0	0.0	9.46	9.9		
05/17/2019	08:27:12	0	0.0	8.98	9.9		
05/17/2019	08:32:12	0	0.0	12.79	9.9		
05/17/2019	08:36:15	0	0.0	12.62	9.9	Top Out	
05/17/2019	08:37:12	78	0.0	12.85	9.9		
05/17/2019	08:42:12	73	2.0	8.23	20.1		
05/17/2019	08:46:15	179	3.2	8.26	31.9	End Job	
05/17/2019	08:47:12	0	0.0	8.31	33.6		



Well Starck 18-18	Field DJ	Job Start May/17/2019	Customer Anadarko	Job Number
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### Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 2.3	N2	Mud	Maximum Rate 7.3	Total Slurry 7.8	Mud 0.0	Spacer 5.0	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 1561	Final -4340	Average 105	Bump Plug to	Breakdown	Type	Volume bbl	Density lb/gal	
Avg. N2 Percent %	Designed Slurry Volume 7.8 bbl	Displacement 0.0 bbl	Mix Water Temp degF	Cement Circulated to Surface? <input type="checkbox"/>	Volume bbl	Washed Thru Perfs <input type="checkbox"/>	To ft	
Customer or Authorized Representative Socorro			Schlumberger Supervisor Justin Zika			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
						-	-	