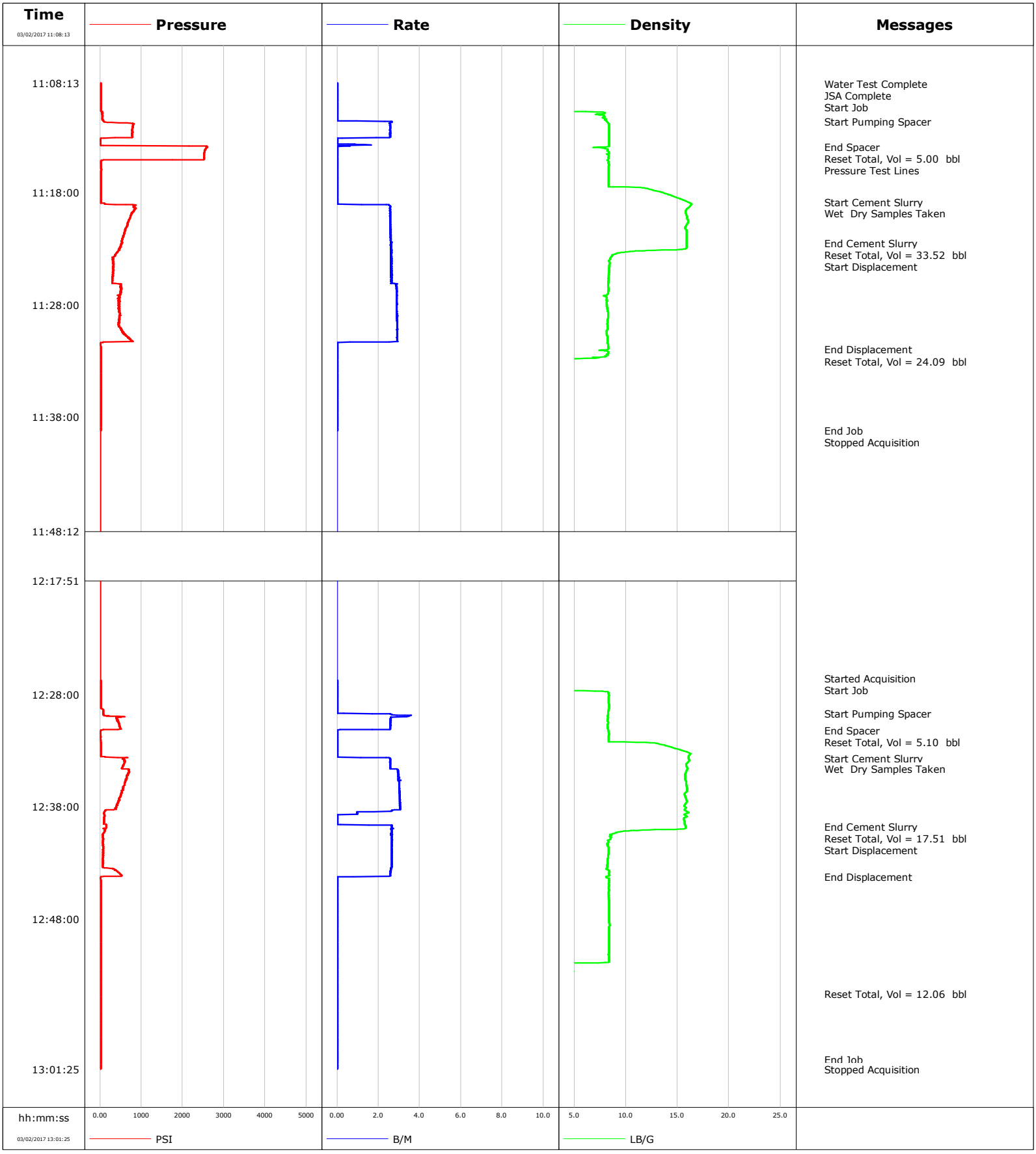
Schlumberger

Cementing Job Report

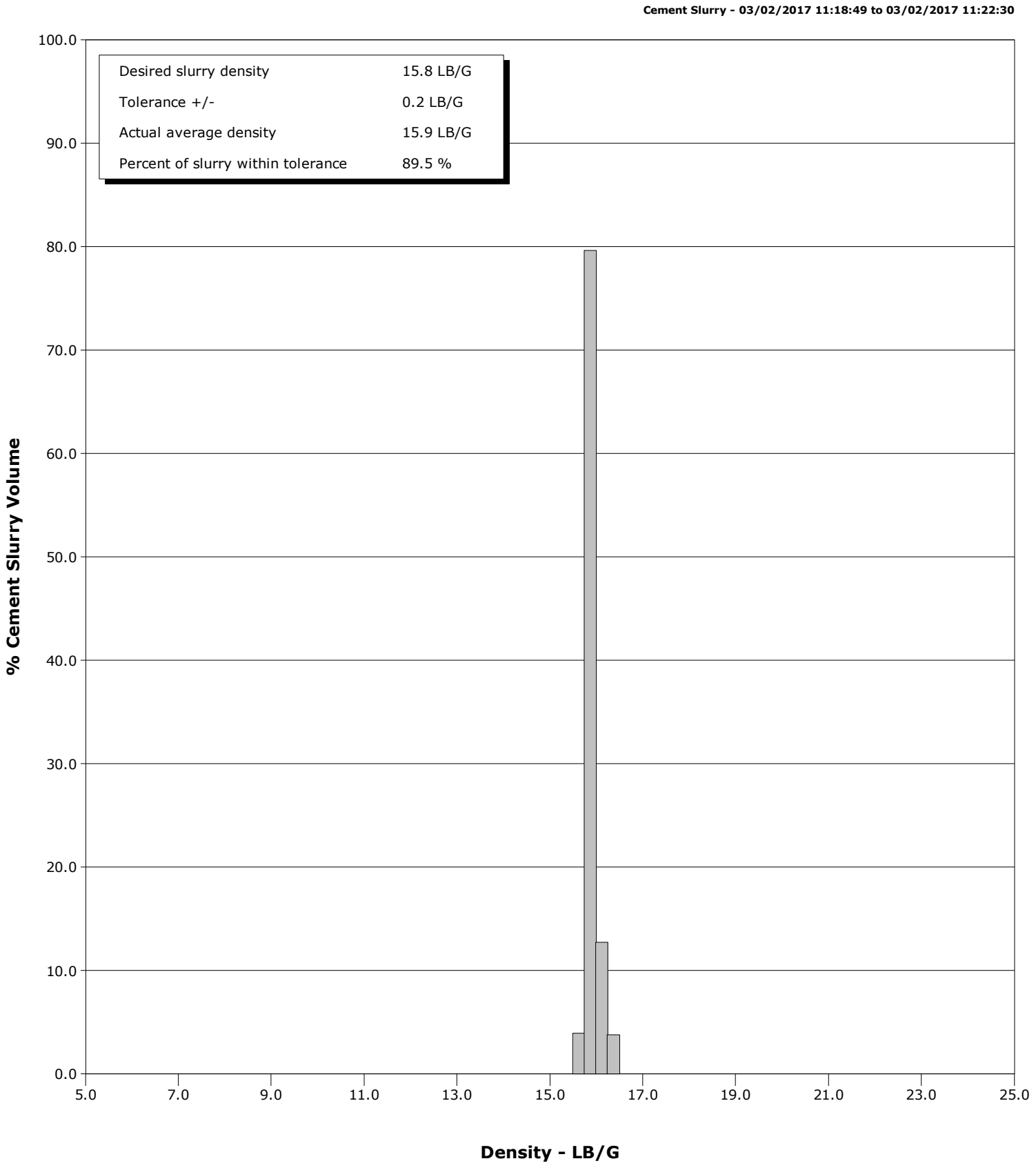
Well	WHISTON 8-4	**Client**	ANADARKO
Field	DJ	**SIR No.**	DA6T-00658
Engineer	Wayne Silvester	**Job Type**	Nio Sussex Plugs
Country	United States	**Job Date**	03-02-2017



Schlumberger

Cementing Qa/Qc Density Report

Well	WHISTON 8-4	**Client**	ANADARKO
Field	DJ	**SIR No.**	DA6T-00658
Engineer	Wayne Silvester	**Job Type**	Nio Sussex Plugs
Country	United States	**Job Date**	03-02-2017



Schlumberger Cementing Service Report

Customer	Job Number
ANADARKO	DA6T-00658

Well	Location (legal)	Schlumberger Location	Job Start
WHISTON 8-4	217304	Cheyenne	Mar/02/2017

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
DJ		deg	in	7385.0 ft	7385.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Weld	Colorado	psi	220 degF	210 degF	lb/gal

Well Master	API/UWI
0630692670	512322951

Rig Name	Drilled For	Service Via
Concord 4	Oil & Gas	Land

Offshore Zone	Well Class	Well Type
	Old	Workover

Drilling Fluid Type	Max. Density	Plastic Viscosity
	lb/gal	cP

Service Line	Job Type
Cementing	Nio & Sussex Plugs

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
psi	psi	2 3/8" 4.7# T/S

Service Instructions

Nio Plug = 40 sks 1.53 ft3/sk 6.350 gps = 10.8 bbls

Est Toc = 6741 ft Spacer 5 bbls CMT 10.8 bbls Displace 24 bbls

Sussex Plug = 64 sks 1.53 ft3/sk 6.354 gps = 17.4 bbls

Est Toc = 3840 ft Spacer 5 bbls CMT 17.4 bbls Displace 12 bbls

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
7385.0	4.5	11.6	N/A	N/A
4960.0	4.5	11.6	N/A	N/A

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
T	7385.0	2.4	4.7	N/A	N/A
T	4960.0	0.0	4.7	N/A	N/A

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	Displacement	Packer Type	Packer Depth
Tubing	36.0 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
36.0 bbl	bbl	bbl	bbl

Casing/Tubing Secured	1 Hole Vol. Circulated prior to Cement
X	X

Lift Pressure	psi

Pipe Rotated	Pipe Reciprocated
☐	☐

No. Centralizers	Top Plugs	Bottom Plugs

Cement Head Type

Job Scheduled For	Arrived on Location	Leave Location
Mar/02/2017	Mar/02/2017	Mar/02/2017

Casing Tools		Squeeze Job	
Shoe Type		Squeeze Type	
Shoe Depth	ft	Tool Type	
Stage Tool Type		Tool Depth	ft
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	Flow Rate B/M	Density LB/G	Volume BBL	Pressure PSI	Message
03/02/2017	11:08:13	0.0	0.01	0.0	17	Started Acquisition
03/02/2017	11:08:16	0.0	0.01	0.0	17	Water Test Complete
03/02/2017	11:08:17	0.0	0.01	0.0	17	Start Job
03/02/2017	11:11:41	2.7	8.15	0.1	95	Start Pumping Spacer
03/02/2017	11:13:14	0.0	8.37	3.8	8	
03/02/2017	11:13:55	0.0	8.31	4.0	2599	End Spacer
03/02/2017	11:14:20	0.0	8.31	4.0	2531	Reset Total, Vol = 5.00 bbl
03/02/2017	11:14:36	0.0	8.26	4.0	2517	Pressure Test Lines
03/02/2017	11:18:15	0.0	14.37	4.0	17	
03/02/2017	11:18:49	0.0	15.94	4.0	17	Start Cement Slurry
03/02/2017	11:18:52	0.0	16.07	4.0	17	Wet Dry Samples Taken
03/02/2017	11:22:30	2.6	15.88	12.9	521	End Cement Slurry
03/02/2017	11:22:38	2.6	15.88	13.2	503	Reset Total, Vol = 33.52 bbl
03/02/2017	11:23:05	2.6	15.23	14.4	452	Start Displacement
03/02/2017	11:23:16	2.6	10.41	14.9	429	
03/02/2017	11:28:17	2.9	8.19	28.7	448	
03/02/2017	11:31:59	0.0	8.30	37.5	17	End Displacement
03/02/2017	11:32:12	0.0	8.31	37.5	17	Reset Total, Vol = 24.09 bbl
03/02/2017	11:33:18	0.0	0.01	37.5	13	
03/02/2017	11:38:19	0.0	0.01	37.5	17	
03/02/2017	11:39:10	0.0	0.01	37.5	17	End Job

Well	Field	Job Start	Customer	Job Number
WHISTON 8-4	DJ	Mar/02/2017	ANADARKO	DA6T-00658

Date	Time 24-hr clock	Flow Rate B/M	Density LB/G	Volume BBL	Pressure PSI	Message
03/02/2017	12:26:47	0.0	0.01	0.0	17	Start Job
03/02/2017	12:28:29	0.0	8.33	0.0	17	
03/02/2017	12:29:40	0.0	8.31	0.0	72	Start Pumping Spacer
03/02/2017	12:31:11	0.0	8.27	3.8	17	End Spacer
03/02/2017	12:31:12	0.0	8.27	3.8	13	Reset Total, Vol = 5.10 bbl
03/02/2017	12:33:30	0.0	16.08	3.8	13	
03/02/2017	12:33:43	2.6	16.10	4.1	576	Start Cement Slurry
03/02/2017	12:34:37	2.6	15.96	6.4	521	Wet Dry Samples Taken
03/02/2017	12:38:31	1.0	16.07	17.9	104	
03/02/2017	12:39:48	2.6	15.78	18.6	155	End Cement Slurry
03/02/2017	12:39:49	2.6	15.78	18.6	159	Reset Total, Vol = 17.51 bbl
03/02/2017	12:40:02	2.6	14.69	19.2	123	Start Displacement
03/02/2017	12:43:32	2.6	8.18	28.4	320	
03/02/2017	12:44:16	0.0	8.09	30.3	13	End Displacement
03/02/2017	12:48:33	0.0	8.41	30.3	17	
03/02/2017	12:53:34	0.0	0.01	30.3	17	
03/02/2017	12:54:42	0.0	0.01	30.3	17	Reset Total, Vol = 12.06 bbl
03/02/2017	12:58:35	0.0	0.01	30.3	22	
03/02/2017	13:00:34	0.0	0.01	30.3	22	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
2.7			3.6	28.5	0.0	10.3	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
709	22	126				bbl	lb/gal

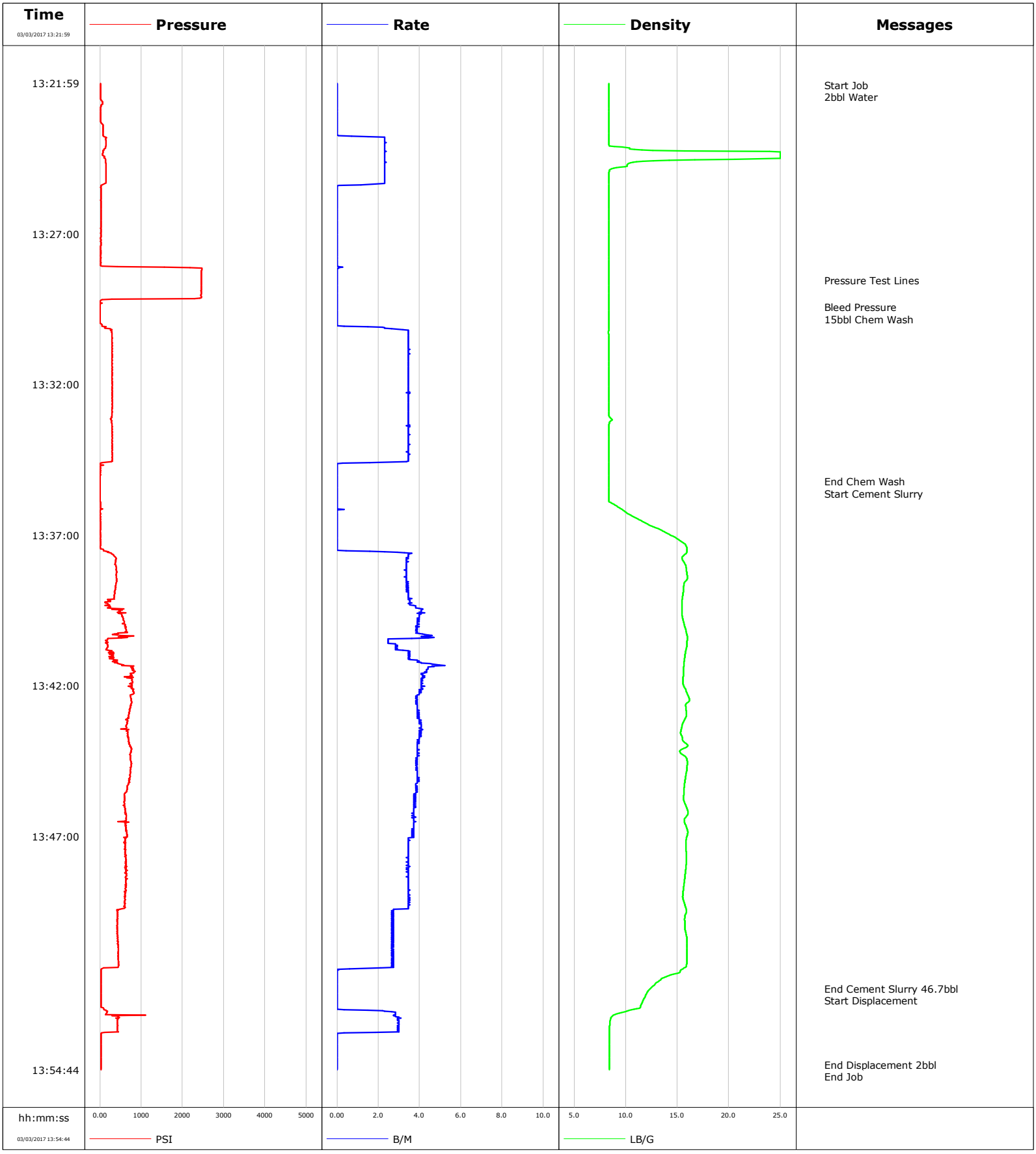
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
%	28.0 bbl	36.0 bbl	50 degF	☐	bbl
				Washed Thru Perfs ☐	To ft

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Socorro Olivas	Wayne Silvester	-	- ☒

Schlumberger

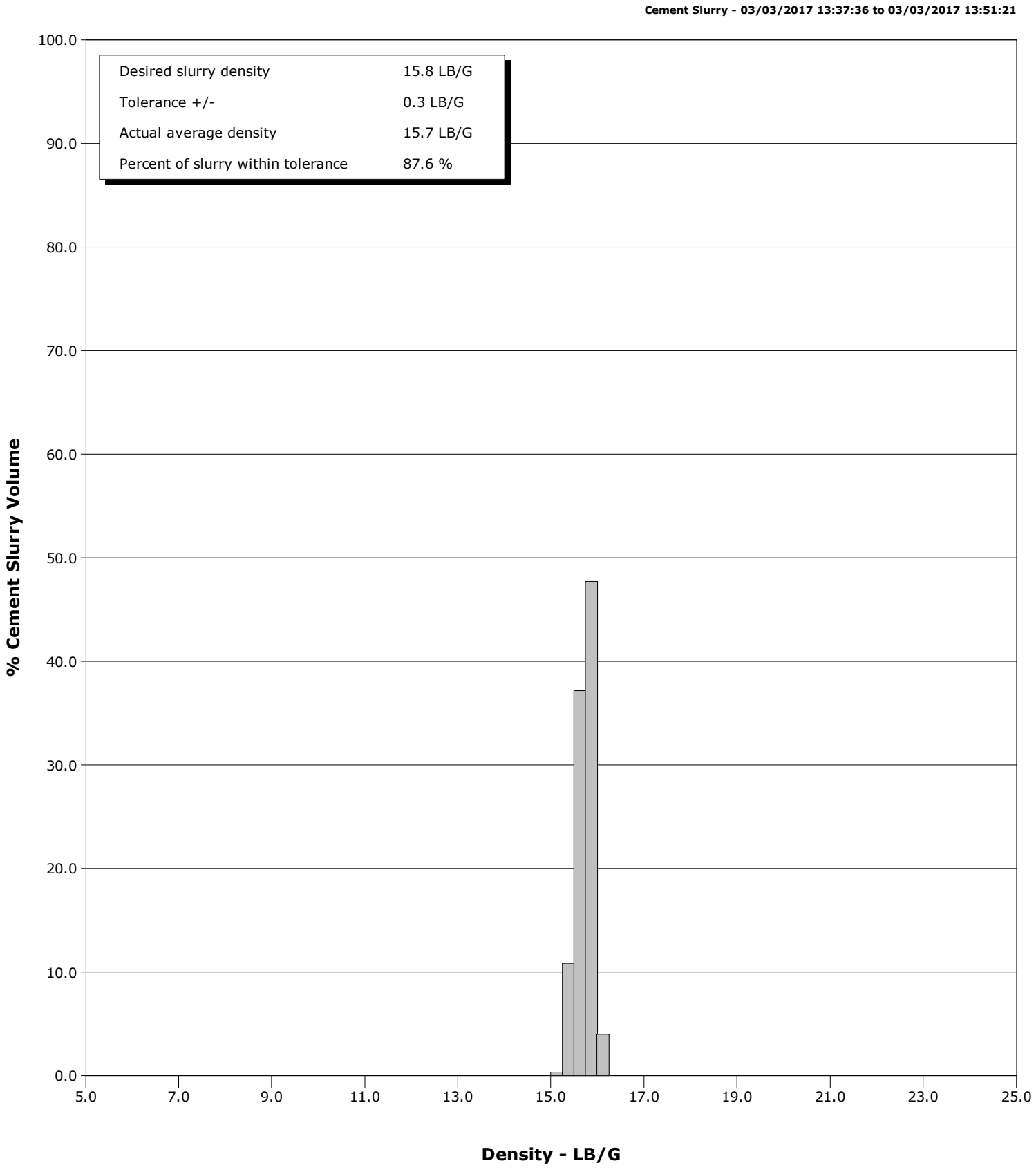
Cementing Job Report

Well	Whiston	**Client**	Anadarko
Field	DJ	**SIR No.**	DA6T-00660
Engineer	Chris Valerio	**Job Type**	Stub Plug
Country	United States	**Job Date**	03-03-2017



Schlumberger Cementing Qa/Qc Density Report

Well	Whiston	**Client**	Anadarko
Field	DJ	**SIR No.**	DA6T-00660
Engineer	Chris Valerio	**Job Type**	Stub Plug
Country	United States	**Job Date**	03-03-2017



Schlumberger Cementing Service Report

Customer	Job Number
Anadarko	DA6T-00660

Well	Location (legal)	Schlumberger Location	Job Start
Whiston 8-4			Mar/03/2017

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
DJ	Shale	deg	7.9 in	1172.0 ft	1172.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Weld	Colorado	psi	90 degF	80 degF	lb/gal

Well Master	API/UWI
0630692670	512322951

Rig Name	Drilled For	Service Via
Concord #4	N/A	Land

Offshore Zone	Well Class	Well Type
	Old	Workover

Drilling Fluid Type	Max. Density	Plastic Viscosity
Other	8.30 lb/gal	cP

Service Line	Job Type
Cementing	Stub Plug

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
1000 psi	psi	2 3/8" 4.7# T/S

Service Instructions

2bbl Water
15bbl Chem Wash
46.7bbl 175sks CMT @ 15.8# 1.5 Yield 6.04 gal/sk water
Displace 2bbl Water
Estimated top of CMT 631'

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
766.0	8.6	24.0	J55	8RD
1172.0	4.5	11.6	M80	8RD

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
T	1172.0	2.4	4.7	J55	8RD
	0.0	0.0	0.0		

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	Displacement	Packer Type	Packer Depth
Tubing	2.0 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
4.5 bbl	bbl	bbl	bbl

Casing/Tubing Secured	1 Hole Vol. Circulated prior to Cement
X	X

Casing Tools	Squeeze Job
Shoe Type	Squeeze Type
Shoe Depth ft	Tool Type
Stage Tool Type	Tool Depth ft
Stage Tool Depth ft	Tail Pipe Size in
Collar Type	Tail Pipe Depth ft
Collar Depth ft	Sqz. Total Vol. bbl

Lift Pressure		Pipe Rotated		Pipe Reciprocated	
	psi		☐		☐

No. Centralizers	Top Plugs	Bottom Plugs

Cement Head Type

Job Scheduled For	Arrived on Location	Leave Location
Mar/03/2017 13:00	Mar/03/2017 13:00	Mar/03/2017 14:30

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stg Volume BBL	Message
03/03/2017	13:21:59	17	0.0	8.37	0.0	Started Acquisition
03/03/2017	13:22:03	17	0.0	8.37	0.0	Start Job
03/03/2017	13:22:09	17	0.0	8.37	0.0	2bbl Water
03/03/2017	13:26:59	22	0.0	8.38	3.7	
03/03/2017	13:28:32	2453	0.0	8.35	3.7	Pressure Test Lines
03/03/2017	13:29:26	8	0.0	8.37	3.7	Bleed Pressure
03/03/2017	13:29:39	4	0.0	8.36	0.0	15bbl Chem Wash
03/03/2017	13:31:59	292	3.5	8.38	6.5	
03/03/2017	13:35:13	8	0.0	8.38	15.5	End Chem Wash
03/03/2017	13:35:21	8	0.0	8.38	0.0	Start Cement Slurry
03/03/2017	13:36:59	8	0.0	14.24	0.0	
03/03/2017	13:41:59	777	4.1	15.59	16.3	
03/03/2017	13:46:59	663	3.7	15.95	35.6	
03/03/2017	13:51:59	27	0.0	12.59	49.3	
03/03/2017	13:52:03	27	0.0	12.38	49.3	End Cement Slurry 46.7bbl
03/03/2017	13:52:11	27	0.0	12.06	0.0	Start Displacement
03/03/2017	13:54:34	31	0.0	8.42	2.1	End Displacement 2bbl

Well	Field	Job Start	Customer	Job Number
Whiston 8-4	DJ	Mar/03/2017	Anadarko	DA6T-00660

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
3.4			5.2	46.7	0.0	19.2	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
819	36	380				bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
%	46.7 bbl	2.0 bbl	60 degF	☐	bbl
				Washed Thru Perfs ☐	To ft

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Socorro Olivas	Chris Valerio	-	- ☒