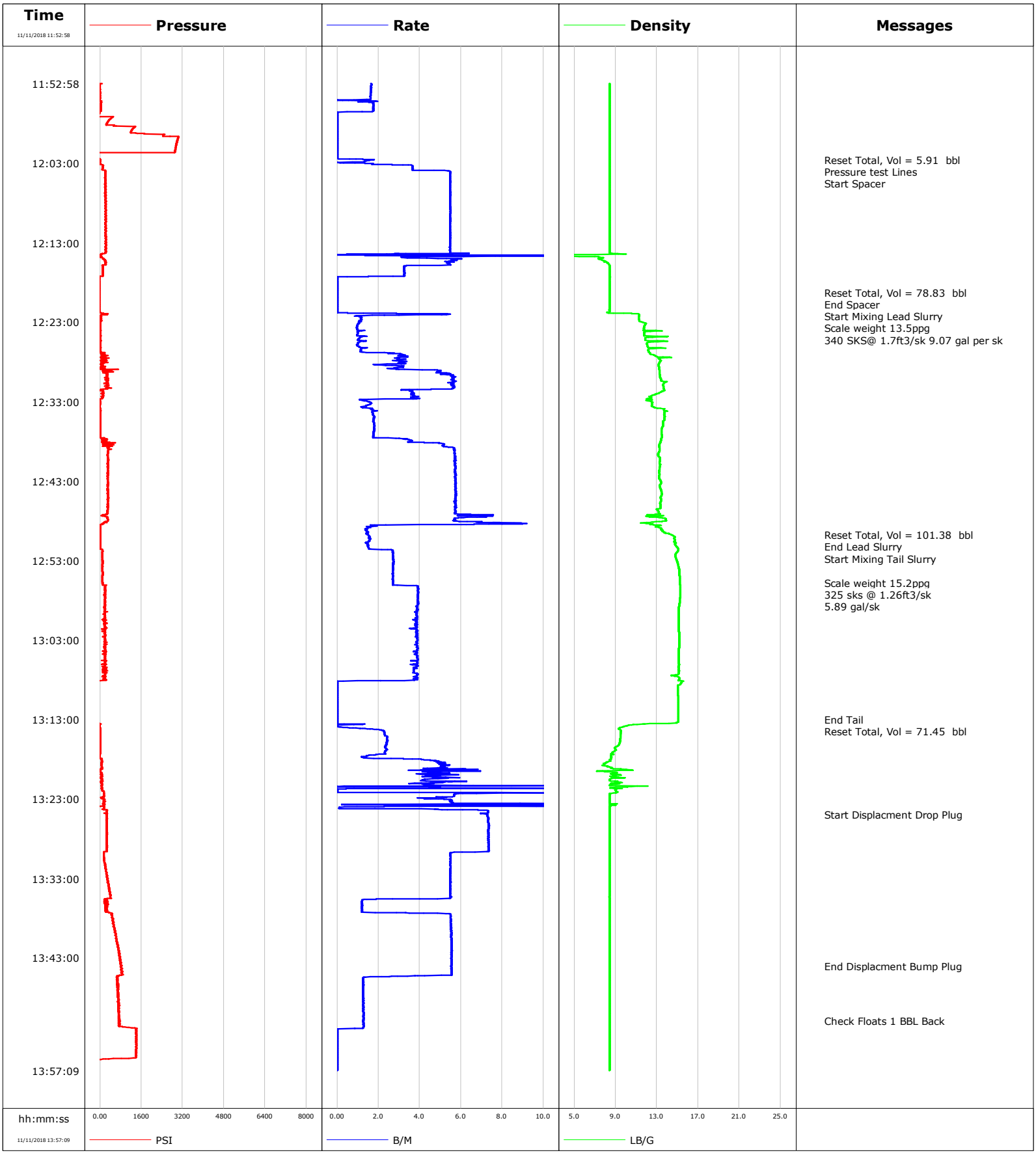
Schlumberger

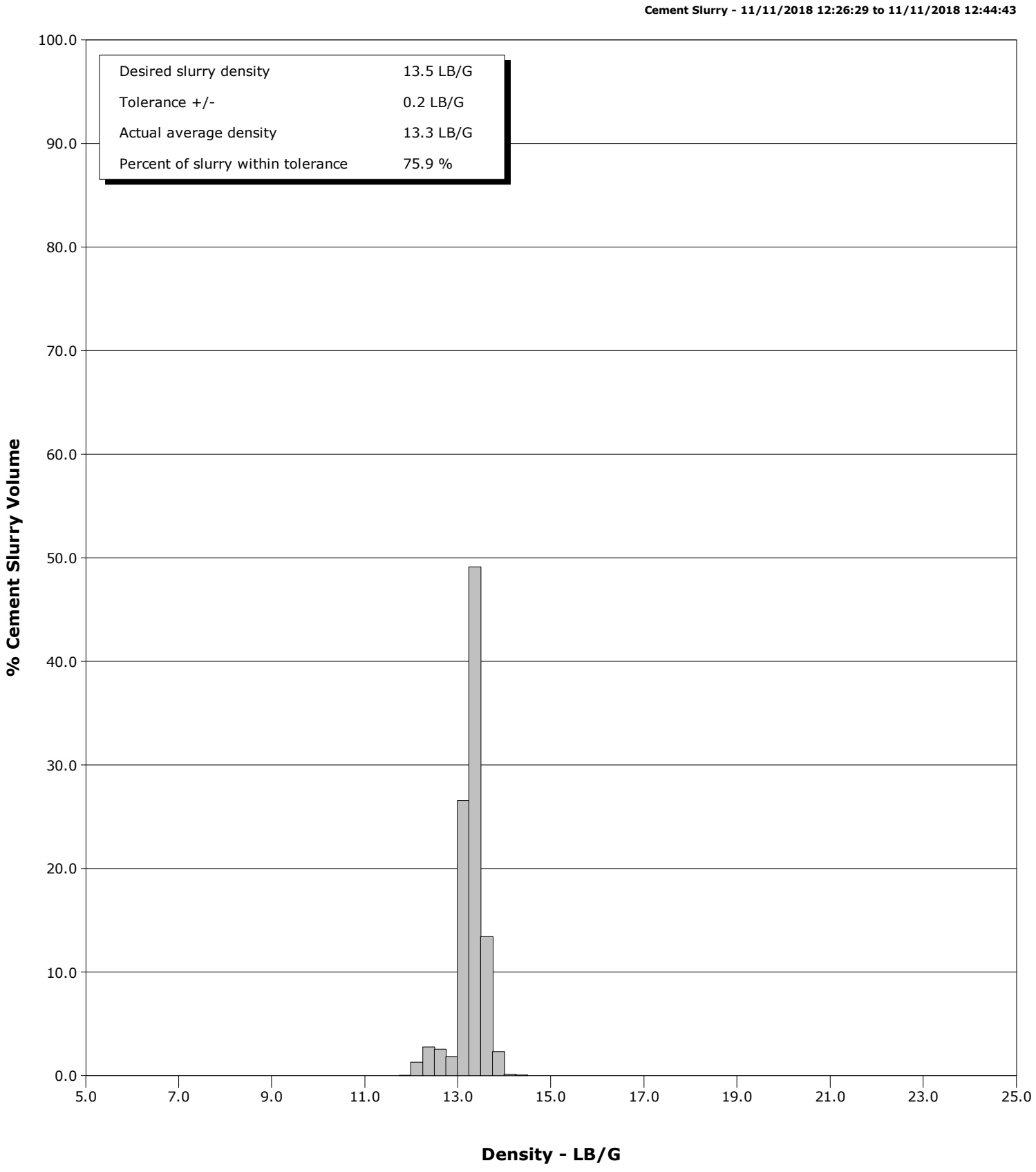
Cementing Job Report

Well	Cosslett 1L 22H B168	**Client**	Crestone Peak
Field	Wattenberg	**SIR No.**	2836906
Engineer	NORM HASLAUER	**Job Type**	Surface
Country		**Job Date**	



Schlumberger Cementing Qa/Qc Density Report

Well	Cosslett 1L 22H B168	**Client**	Crestone Peak
Field	Wattenberg	**SIR No.**	2836906
Engineer	NORM HASLAUER	**Job Type**	Surface
Country		**Job Date**	



Schlumberger Cementing Service Report

Customer	Job Number
Crestone Peak	2836906

Well	Location (legal)	Schlumberger Location	Job Start
Cosslett 1L 22H B168 DN38-00273			Nov/11/2018

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
Wattenberg		deg	in	2579.0 ft	2579.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Weld	Colorado	psi	110 degF	80 degF	lb/gal

Well Master	API/UWI
0631784250	

Rig Name	Drilled For	Service Via
ENSIGN 140	Oil & Gas	Land

Offshore Zone	Well Class	Well Type
	New	Development

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

Service Line	Job Type
Cementing	Surface

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
psi	psi	Single Cement head

Service Instructions

Provide cement and services per client requirements for a surface treatment.
TD = 2500'
Top of lead = 0'
Top of tail = 1500'
12.25" open hole, 25% excess

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
520.0	13.4	54.0		
2579.0	9.6	40.0		

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread

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
Casing	192.3 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
bbl	196.0 bbl	bbl	bbl

Casing/Tubing Secured	1 Hole Vol. Circulated prior to Cement	Casing Tools	Squeeze Job
☐	☒		

Lift Pressure	650 psi	Shoe Type	Float	Squeeze Type	
Pipe Rotated	☐	Pipe Reciprocated	☐	Shoe Depth	2579.0 ft	Tool Type	
No. Centralizers	Top Plugs 1	Bottom Plugs		Stage Tool Type		Tool Depth	ft
Cement Head Type				Stage Tool Depth	ft	Tail Pipe Size	in
Job Scheduled For	Arrived on Location	Leave Location		Collar Type	Float	Tail Pipe Depth	ft
Nov/11/2018	Nov/11/2018	Nov/11/2018		Collar Depth	2536.0 ft	Sqz. Total Vol.	bbl

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
11/11/2018	11:52:58	74	1.6	8.41	0.0	Started Acquisition
11/11/2018	12:02:34	6	1.8	8.42	5.9	Reset Total, Vol = 5.91 bbl
11/11/2018	12:02:40	4	1.5	8.42	6.1	Pressure test Lines
11/11/2018	12:02:41	3	1.5	8.42	6.1	Start Spacer
11/11/2018	12:19:17	-28	0.0	8.42	84.7	Reset Total, Vol = 78.83 bbl
11/11/2018	12:19:41	-29	0.0	8.42	84.7	End Spacer
11/11/2018	12:21:08	-29	0.0	8.41	84.7	Start Mixing Lead Slurry
11/11/2018	12:21:09	-29	0.0	8.41	84.7	Scale weight 13.5ppg
11/11/2018	12:49:45	7	1.5	14.42	206.1	Reset Total, Vol = 101.38 bbl
11/11/2018	12:49:49	8	1.5	14.51	206.2	End Lead Slurry
11/11/2018	12:49:51	6	1.5	14.58	206.3	Start Mixing Tail Slurry
11/11/2018	12:55:47	100	2.7	15.23	223.4	Scale weight 15.2ppg
11/11/2018	12:55:49	105	2.7	15.24	223.5	5.89 gal/sk
11/11/2018	13:13:00	-41	0.0	15.09	277.6	End Tail
11/11/2018	13:13:14	-40	0.0	15.09	277.6	Reset Total, Vol = 71.45 bbl
11/11/2018	13:24:55	257	7.3	8.41	326.6	Start Displacment Drop Plug
11/11/2018	13:44:00	831	5.5	8.42	448.3	End Displacment Bump Plug

Well	Field	Job Start	Customer	Job Number
Cosslett 1L 22H B168 DN38-00273	Wattenberg	Nov/11/2018	Crestone Peak	2836906

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
				174.0		80.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
	0		1400			bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
%	174.0 bbl	193.0 bbl	45 degF	[X]	30.0 bbl
				Washed Thru Perfs [ ]	To ft

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Brent Moon	NORM HASLAUER	[ ]	[X]
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