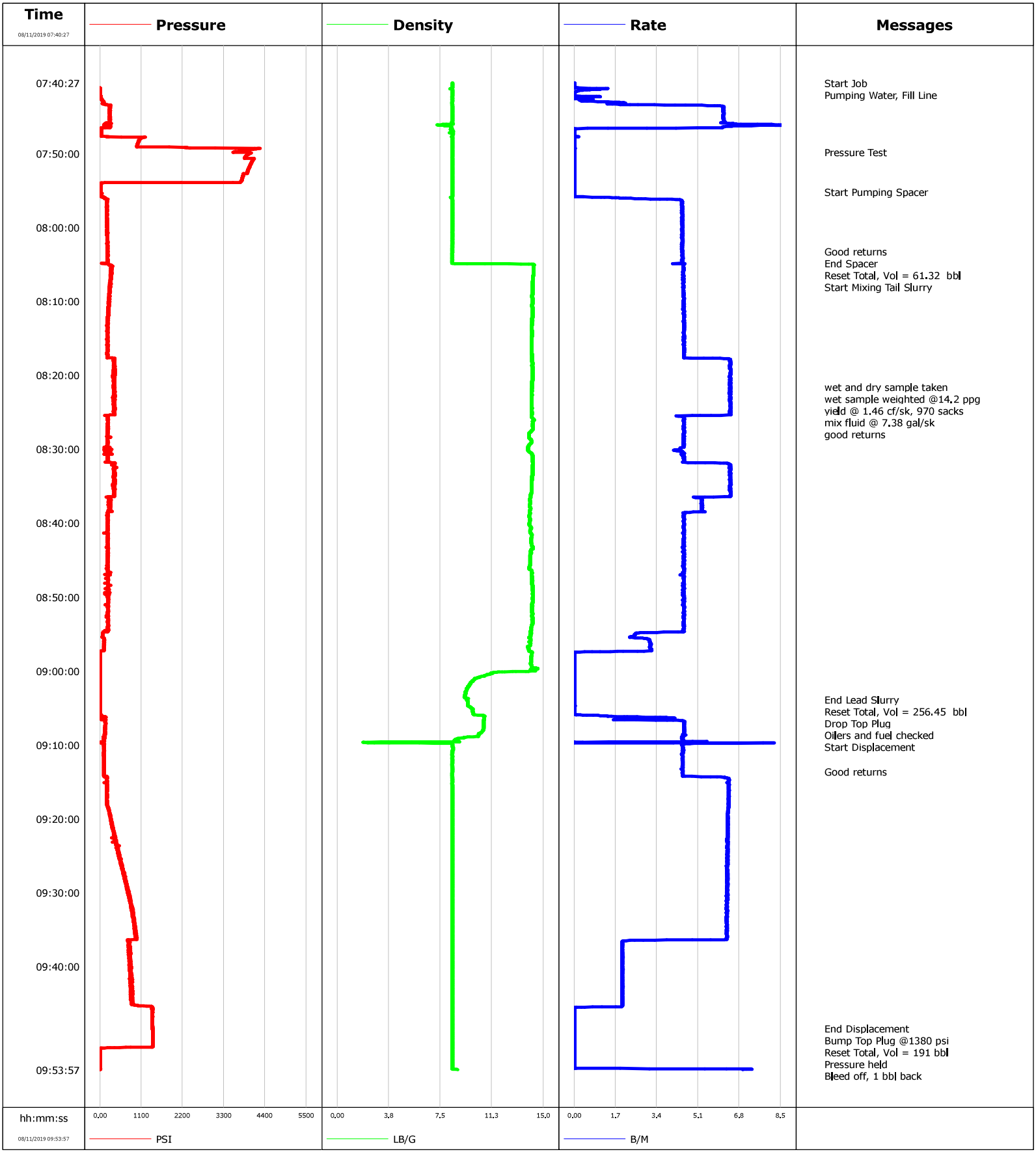
Schlumberger

Cementing Job Report

CemCAT v1.7

Well	HINGLEY 1K-18H-A167	**Client**	CRESTONE
Field		**SIR No.**	3023818
Engineer	LAN PHAM	**Job Type**	SURFACE
Country	United States	**Job Date**	08-11-2019



Schlumberger Cementing Service Report

Customer	Job Number
CRESTONE	3023818

Well	Location (legal)	Schlumberger Location	Job Start
HINGLEY 1K-18H-A167 1K-18H-A167			Aug/11/2019

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
		deg	in	2564.4 ft	2564.4 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
WELD	CO	psi	115 degF	85 degF	lb/gal

Well Master	API/UWI
0064730902	05-123-47172-00-00

Rig Name	Drilled For	Service Via
E122	Oil and Gas	Land

Offshore Zone	Well Class	Well Type
	New	Exploration

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	9 5/8" 8RD

Service Instructions

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
100.0	16.0	55.0	F25	
2564.4	9.6	40.0	J55	

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	191.0 bbl		ft

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

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

Lift Pressure	820 psi

Pipe Rotated	Pipe Reciprocated
☐	☐

No. Centralizers	Top Plugs	Bottom Plugs
	1	

Cement Head Type	Single

Job Scheduled For	Arrived on Location	Leave Location
Aug/11/2019 06:00	Aug/11/2019 06:00	Aug/11/2019 11:00

Casing Tools		Squeeze Job	
Shoe Type	FLOAT	Squeeze Type	
Shoe Depth	2564.4 ft	Tool Type	
Stage Tool Type		Tool Depth	ft
Stage Tool Depth	ft	Tail Pipe Size	in
Collar Type	FLOAT	Tail Pipe Depth	ft
Collar Depth	2522.7 ft	Sqz. Total Vol.	bbl

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Pressure PSI	Message
08/11/2019	07:40:27	-2	0.0	8.37	-1	Started Acquisition
08/11/2019	07:40:28	-3	0.0	8.37	-2	Start Job
08/11/2019	07:40:34	-3	0.0	8.37	-2	Pumping Water, Fill Line
08/11/2019	07:49:50	3602	0.0	8.39	3571	Pressure Test
08/11/2019	07:55:13	17	0.0	8.37	16	Start Pumping Spacer
08/11/2019	08:03:15	199	4.5	8.36	206	Good returns
08/11/2019	08:04:14	193	4.5	8.36	211	End Spacer
08/11/2019	08:04:15	210	4.4	8.36	201	Reset Total, Vol = 61.32 bbl
08/11/2019	08:04:20	203	4.5	8.36	209	Start Mixing Tail Slurry
08/11/2019	08:21:36	368	6.4	14.15	391	wet and dry sample taken
08/11/2019	08:21:37	398	6.4	14.15	381	mix fluid @ 7.38 gal/sk
08/11/2019	08:21:38	395	6.4	14.15	370	good returns
08/11/2019	09:03:52	5	0.0	9.39	7	End Lead Slurry
08/11/2019	09:03:53	5	0.0	9.39	7	Reset Total, Vol = 256.45 bbl
08/11/2019	09:03:54	5	0.0	9.40	7	Drop Top Plug
08/11/2019	09:03:55	5	0.0	9.41	7	Oilers and fuel checked
08/11/2019	09:03:57	5	0.0	9.43	7	Start Displacement
08/11/2019	09:13:35	85	4.5	8.36	96	Good returns
08/11/2019	09:48:25	1401	0.0	8.37	1394	End Displacement
08/11/2019	09:48:26	1401	0.0	8.37	1395	Bump Top Plug @1380 psi
08/11/2019	09:48:27	1401	0.0	8.37	1394	Reset Total, Vol = 191 bbl

Well	Field	Job Start	Customer	Job Number
HINGLEY 1K-18H-A167 1K-18H-A167		Aug/11/2019	CRESTONE	3023818

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
				256.0		50.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
	0		1380			bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
%	252.0 bbl	291.0 bbl	70 degF	[X]	51.0 bbl
				Washed Thru Perfs [ ]	To ft

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
RANDY LANTZ	LAN PHAM	[ ] -	[X] -