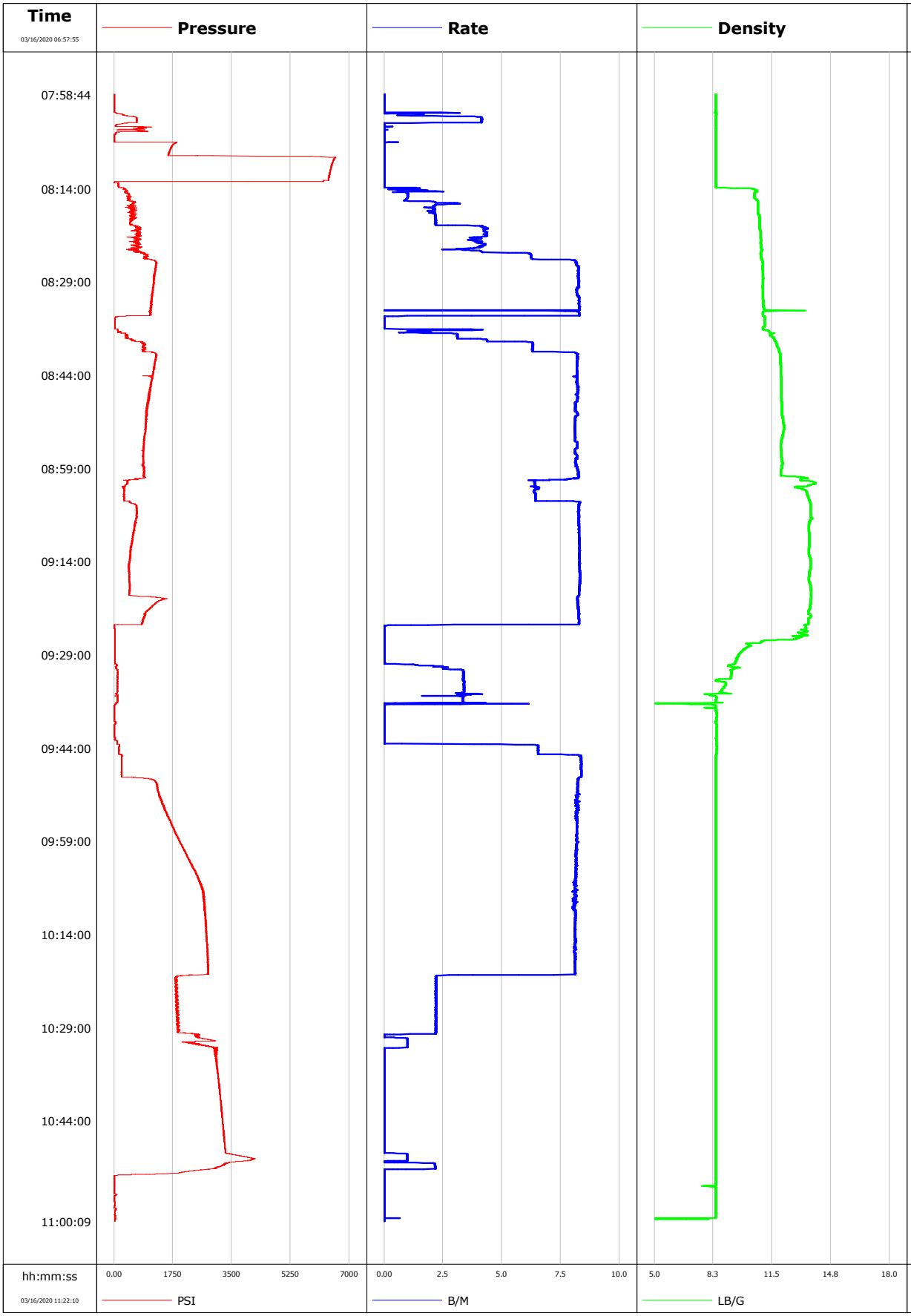
Schlumberger

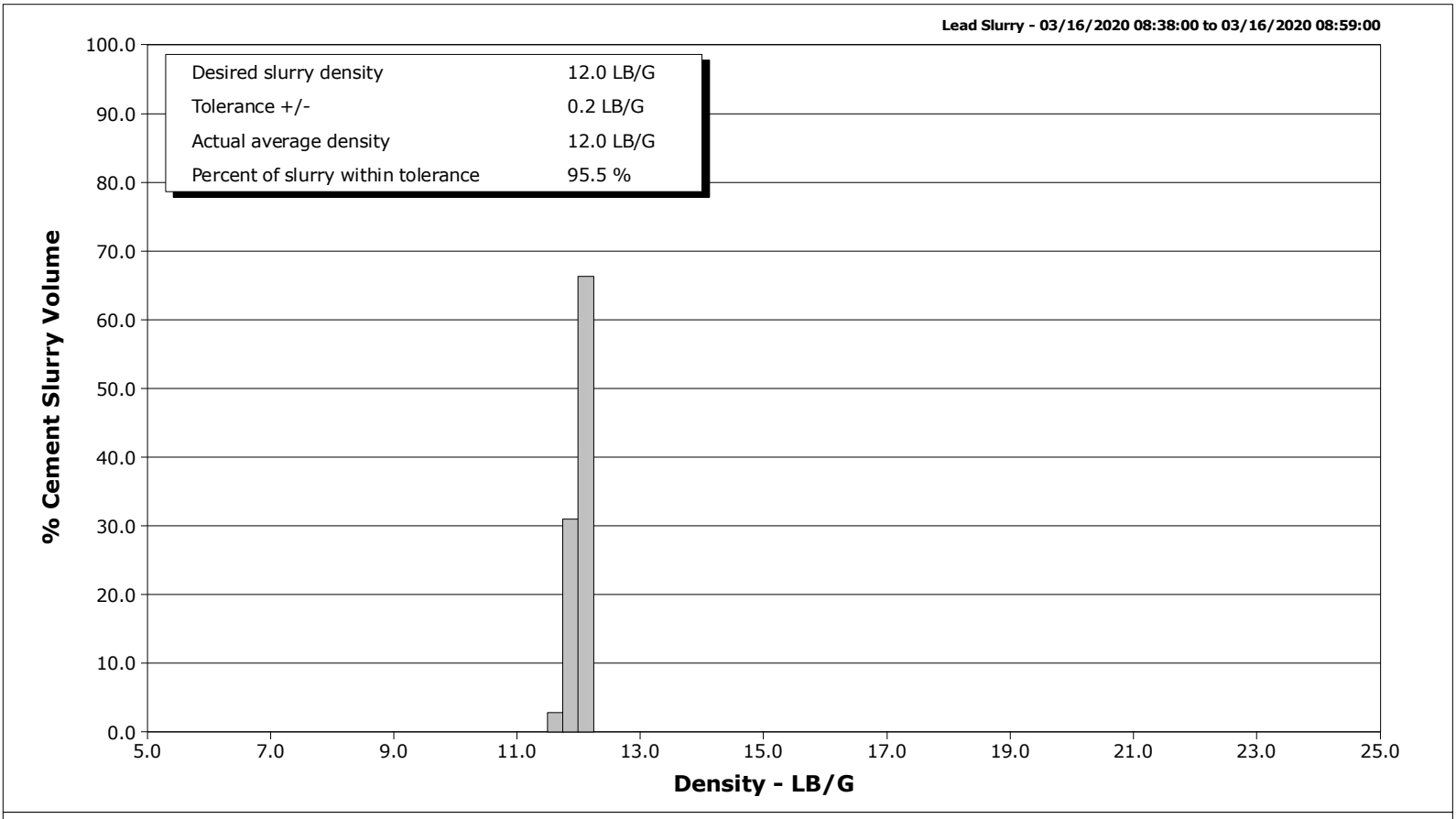
Cementing Job Report

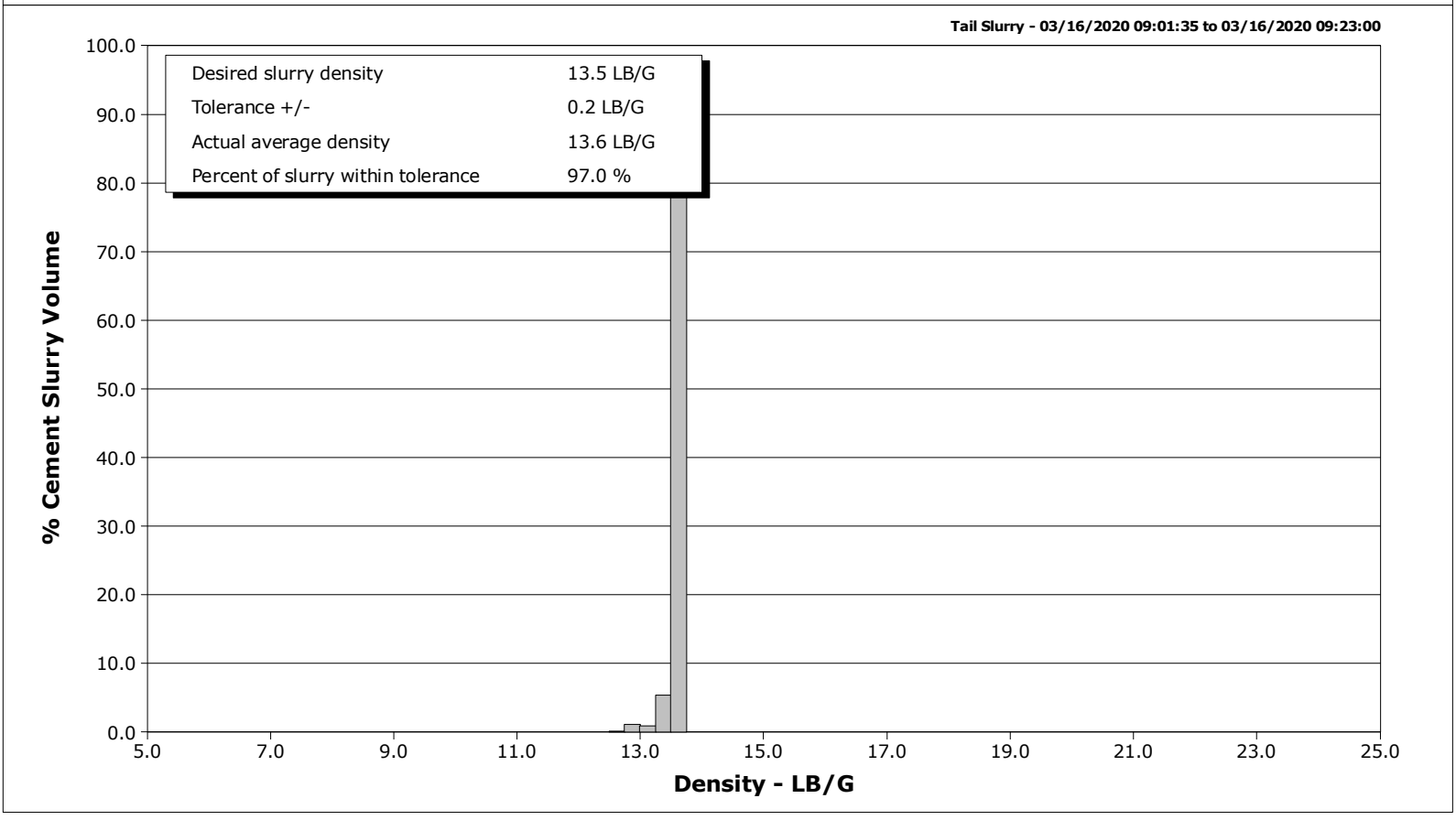
Well	MAE J 8-7HZ	**Client**	ANADARKO
Field	DJ	**SIR No.**	EAJ7-01263
Engineer	Bharatsai Alla	**Job Type**	5.5" Production
Country	United States	**Job Date**	03-16-2020



Schlumberger Cementing Qa/Qc Density Report

Well	MAE J 8-7HZ	**Client**	ANADARKO
Field	DJ	**SIR No.**	EAJ7-01263
Engineer	Bharatsai Alla	**Job Type**	5.5" Production
Country	United States	**Job Date**	03-16-2020





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Cementing Service Report

Customer	Job Number
ANADARKO	EAJ7-01263

Well	Location (legal)	Schlumberger Location	Job Start
MAE J 8-7HZ	WELD		Mar/16/2020

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
DJ		deg	7.9 in	13835.0 ft	ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
WELD	COLORADO	psi	230 degF	230 degF	lb/gal

Well Master	API/UWI
5.5" Production	051235051800

Rig Name	Drilled For	Service Via
PD461		Land

Offshore Zone	Well Class	Well Type
	New	Development

Drilling Fluid Type	Max. Density	Plastic Viscosity
Bentonite	9.40 lb/gal	cP

Service Line	Job Type
Cementing	5.5" Production

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
psi	psi	

Service Instructions

9 5/8" 36# Previous Casing: 1,925'
7 7/8" OH : 4% Excess
Top of Lead Cement: 2,500'
Top of Tail Cement: 8,000'
TD: 13,858' (7,616')
Temp Gradient 2.3 degF/100ft
Bring 5 1/2" Head (Double Plug),
Bowls, Top and Bottom Plugs
Bring Defoamer, 400 lbs Sugar, and
CemPRIME SCRUB Surfactant and

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
1925.0	9.6	36.0	j55	
13835.0	5.5	17.0	P110	

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	321.0 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
bbl	321.0 bbl	420.0 bbl	bbl

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

Lift Pressure	Pipe Rotated	Pipe Reciprocated
1900 psi	☐	☐

No. Centralizers	Top Plugs	Bottom Plugs
	2	1

Cement Head Type
Double

Job Scheduled For	Arrived on Location	Leave Location
Mar/16/2020 06:00	Mar/16/2020 06:00	Mar/16/2020 13:00

Casing Tools

Shoe Type	Float
Shoe Depth	13835.0 ft
Stage Tool Type	
Stage Tool Depth	ft
Collar Type	Float
Collar Depth	13834.0 ft

Squeeze Job

Squeeze Type	
Tool Type	
Tool Depth	ft
Tail Pipe Size	in
Tail Pipe Depth	ft
Sqz. Total Vol.	bbl

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
03/16/2020	06:57:55	4	0.0	8.39	0.0	Started Acquisition
03/16/2020	08:00:00	3	0.0	8.39	0.0	Start Job
03/16/2020	08:02:00	289	1.7	8.42	0.4	Check Fluid: Full/Full
03/16/2020	08:03:00	683	4.1	8.39	3.7	Flush lines
03/16/2020	08:09:00	6565	0.0	8.40	5.2	Pressure Test Lines
03/16/2020	08:10:00	6481	0.0	8.40	5.2	1000/6000 Psi
03/16/2020	08:14:00	286	1.4	10.51	5.5	Start Pumping Spacer
03/16/2020	08:28:00	1183	8.2	10.99	62.6	CemPRIME SCRUB: 60 bbl
03/16/2020	08:32:00	1127	8.3	11.01	95.5	MPE: 51 bbl
03/16/2020	08:33:00	1132	8.3	11.01	103.8	End Spacer
03/16/2020	08:34:00	1096	8.3	10.99	111.6	Reset Total, Vol = 111 bbl
03/16/2020	08:35:00	29	0.0	11.09	115.1	Drop Bottom Plug
03/16/2020	08:38:00	385	3.1	11.58	118.8	Start Mixing Lead Slurry
03/16/2020	08:39:00	863	6.3	11.75	123.9	539 sks @ 12.0 ppg
03/16/2020	08:40:00	837	6.3	11.88	130.2	Yield = 1.84 cf/sk, MF = 7.5 gal/sk
03/16/2020	08:41:00	1259	8.2	11.95	137.9	Dry and Wet Samples collected
03/16/2020	08:42:00	1217	8.2	11.97	146.1	Mud Balance = 12.0 ppg
03/16/2020	08:59:00	900	8.2	12.04	284.9	End Lead Slurry
03/16/2020	08:59:40	919	8.2	11.99	290.3	Reset Total, Vol = 177 bbl
03/16/2020	09:01:35	360	6.4	13.68	304.7	Start Mixing Tail Slurry
03/16/2020	09:01:38	338	6.4	13.62	305.0	644 sks @ 13.5 ppg

Well	Field	Job Start	Customer	Job Number
MAE J 8-7HZ	DJ	Mar/16/2020	ANADARKO	EAJ7-01263

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
03/16/2020	09:01:41	346	6.4	13.57	305.3	Dry and Wet Samples Collected
03/16/2020	09:01:43	334	6.4	13.54	305.5	Mud Balance = 13.5 ppg
03/16/2020	09:23:00	897	8.2	13.60	477.0	End Tail Slurry
03/16/2020	09:24:00	815	8.3	13.50	485.3	Reset Total, Vol = 188 bbl
03/16/2020	09:28:00	18	0.0	10.02	486.6	Washup lines
03/16/2020	09:34:40	102	3.4	8.73	499.7	Drop Top Plug 1
03/16/2020	09:34:46	91	3.4	8.72	500.0	Pump 1 bbl
03/16/2020	09:34:50	104	3.4	8.69	500.2	Drop Top Plug 2
03/16/2020	09:35:00	96	3.4	8.62	500.8	Start Displacement
03/16/2020	09:48:49	884	8.3	8.39	549.6	Lifting Cement @ 40 bbl into
03/16/2020	10:21:00	1873	2.2	8.38	808.9	Slow down
03/16/2020	10:23:32	1859	2.2	8.38	814.5	55 bbl Spacer return
03/16/2020	10:30:38	2513	0.7	8.38	828.8	Bump Plug@ 1900-2500 Psi
03/16/2020	10:30:40	2562	0.9	8.39	828.9	End Displacement
03/16/2020	10:30:42	2617	1.0	8.38	828.9	Reset Totoal, Vol = 321 bbl
03/16/2020	10:30:44	2637	1.0	8.38	828.9	Shear at 3100 Psi
03/16/2020	10:32:45	2983	0.0	8.38	830.5	Casing Pressure Test 3000 Psi, 15 min
03/16/2020	10:49:00	3309	0.0	8.39	830.5	Shear at 4200 Psi
03/16/2020	10:51:00	3316	2.2	8.38	832.2	Pump 2 bbl
03/16/2020	10:53:00	5	0.0	8.39	833.9	Bleed off, 2 bbl back
03/16/2020	10:54:00	5	0.0	8.39	833.9	Floats hold

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
6.5			8.4	833.9	0.0	36.1	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
6586	0	943	2500			bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
%	365.0 bbl	304.0 bbl	65 degF	Cement Circulated to Surface? ☐	Volume bbl
				Washed Thru Perfs ☐	To ft

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Zach Haynes	Bharatsai Alla	☐ -	☒ -