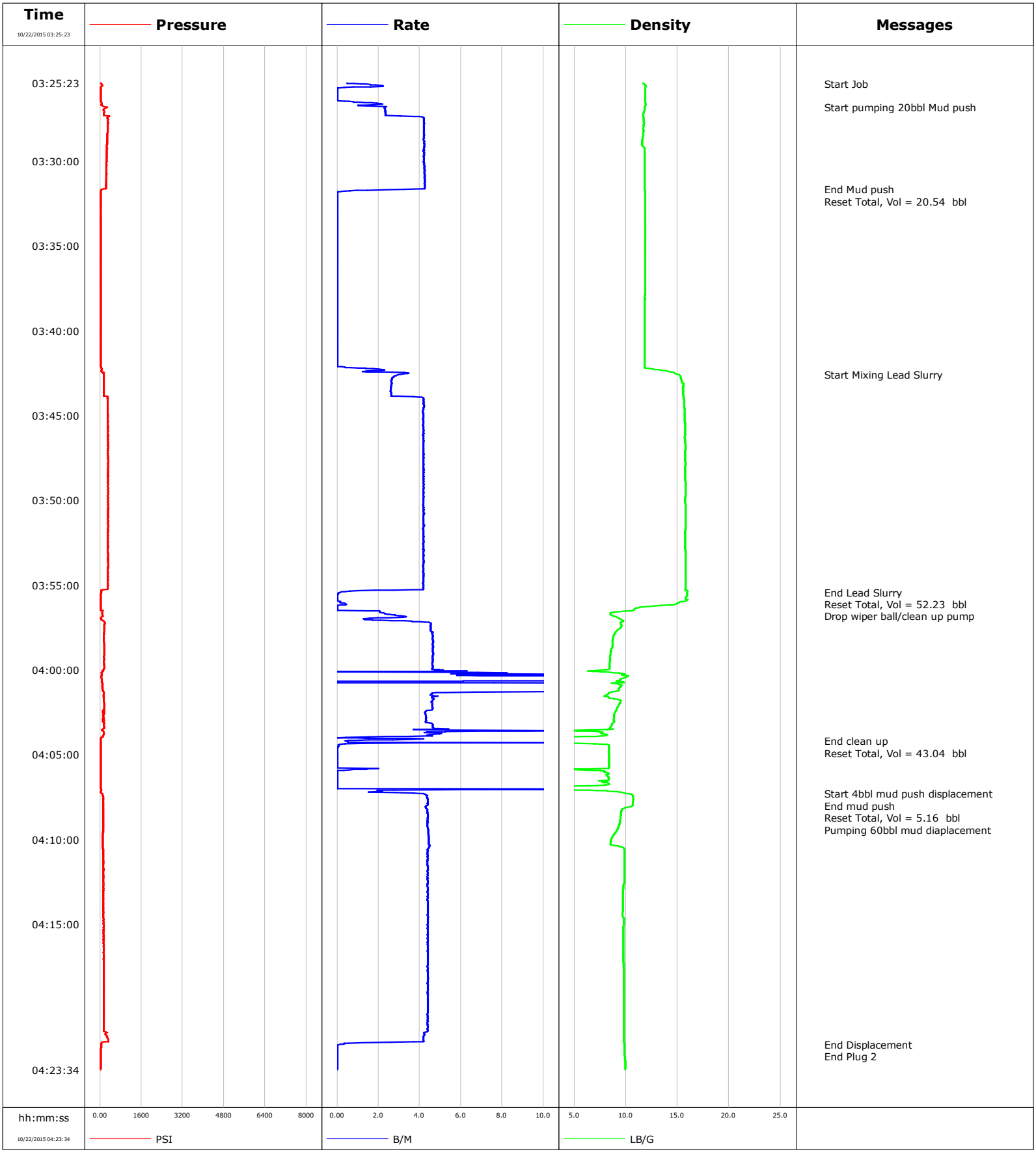
Schlumberger

Cementing Job Report

Well	Thermo	**Client**	Anadarko
Field	Wattenberg	**SIR No.**	CWJN-01443
Engineer	Chris Valerio/Taylor Baird	**Job Type**	PA
Country	United States	**Job Date**	10-22-2015



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Cementing Service Report

Customer	Job Number
Anadarko	CWJN-01443

Well	Location (legal)	Schlumberger Location	Job Start
Thermo 38N-33HZ			Oct/22/2015

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
Wattenberg	Shale	deg	8.8 in	4984.0 ft	4977.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Weld	Colorado	psi	166 degF	121 degF	lb/gal

Well Master	API/UWI
0631652607	05123420970000

Rig Name	Drilled For	Service Via
Xtreme #24	Oil	Land

Offshore Zone	Well Class	Well Type
	Old	Development

Drilling Fluid Type	Max. Density	Plastic Viscosity
Other	9.80 lb/gal	cP

Service Line	Job Type
Cementing	P&A

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
3500 psi	psi	5" IF DP pin

Service Instructions

Plug 2 24bbl Mud push @ 12# 53bbl 257sks CMT @ 15.8# 1.16 Yield 5.09 gal/sk water

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
1883.0	9.6	36.0	J55	8RD
0.0	0.0	0.0		

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
D	4184.0	5.0	19.5	S135	MIJ
T	4984.0	2.9	6.5	J55	8RD

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
Drill Pipe	64.6 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
78.9 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
Oct/21/2015 11:00	Oct/21/2015 11:00	Oct/22/2015 08:00

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	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
10/22/2015	03:25:23	35	0.2	11.67	442.7	Started Acquisition
10/22/2015	03:25:25	45	0.5	11.67	442.7	Start Job
10/22/2015	03:26:50	291	2.3	11.83	443.6	Start pumping 20bbl Mud push
10/22/2015	03:30:23	256	4.2	11.80	457.6	
10/22/2015	03:31:41	46	3.3	11.80	463.1	End Mud push
10/22/2015	03:31:44	41	1.0	11.87	463.2	Reset Total, Vol = 20.54 bbl
10/22/2015	03:35:23	29	0.0	11.85	463.3	
10/22/2015	03:40:23	30	0.0	11.84	463.3	
10/22/2015	03:42:35	140	3.1	15.00	464.1	Start Mixing Lead Slurry
10/22/2015	03:45:23	307	4.2	15.72	473.8	
10/22/2015	03:50:23	313	4.2	15.79	494.7	
10/22/2015	03:55:23	42	0.4	15.96	515.4	
10/22/2015	03:55:25	41	0.2	15.94	515.5	End Lead Slurry
10/22/2015	03:55:38	38	0.0	15.93	515.5	Reset Total, Vol = 52.23 bbl
10/22/2015	03:56:00	31	0.1	15.19	515.5	Drop wiper ball/clean up pump
10/22/2015	04:00:23	57	10.8	10.16	532.3	
10/22/2015	04:04:12	26	0.4	0.11	558.5	End clean up
10/22/2015	04:04:14	26	0.5	0.09	558.5	Reset Total, Vol = 43.04 bbl
10/22/2015	04:05:23	35	0.0	8.35	558.9	
10/22/2015	04:07:18	83	4.2	10.29	560.2	Start 4bbl mud push displacement
10/22/2015	04:08:01	125	4.3	10.64	563.3	End mud push

Well	Field	Job Start	Customer	Job Number
Thermo 38N-33HZ	Wattenberg	Oct/22/2015	Anadarko	CWJN-01443

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
10/22/2015	04:08:23	122	4.4	9.54	564.9	Pumping 60bbl mud diaplacement
10/22/2015	04:10:23	100	4.5	9.26	573.7	
10/22/2015	04:15:23	134	4.4	9.76	595.7	
10/22/2015	04:20:23	144	4.4	9.79	617.6	
10/22/2015	04:22:06	48	0.1	9.85	624.5	End Displacement

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
4.1			4.5	53.0	0.0	24.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
376	32	148				bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
%	53.0 bbl	60.0 bbl	55 degF	☐	bbl
				Washed Thru Perfs ☐	To ft

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Tobin Sinclair	Chris Valerio/Taylor Baird	☐ -	☒ -