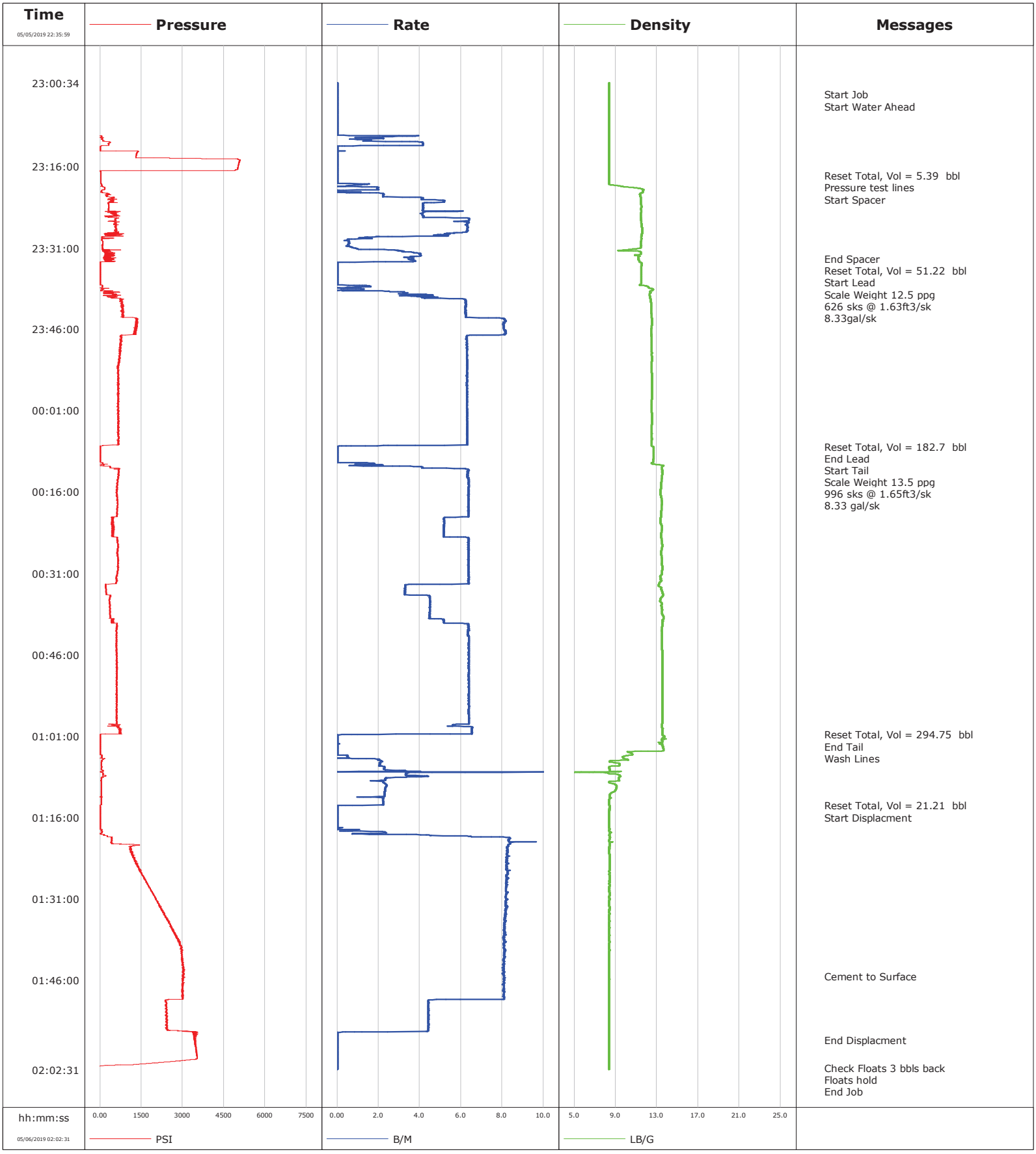
Schlumberger

Cementing Job Report

CemCAT v1.7

Well	Echeverria 2D 2H d267	**Client**	Crestone Peak
Field	Wattenburg	**SIR No.**	18087
Engineer	Norm Haslauer	**Job Type**	Production
Country	United States	**Job Date**	05-06-2019



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Cementing Service Report

Customer	Job Number
Crestone Peak	18087

Well	Location (legal)	Schlumberger Location	Job Start
Echeverria 2D 2H d267 EAHN-00142			May/06/2019

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
Wattenburg	Clean-Sandstone	deg	in	12132.0 ft	7170.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Weld	Colorado	psi	231 degF	210 degF	lb/gal

Well Master	API/UWI
0064745775	

Rig Name	Drilled For	Service Via
Ensign 142	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	Production

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

Service Instructions

Cement 5 1/2" Production Casing at 12,132 ft
in a 8 1/2" Open Hole
60 bbls MUDPUSH Express w CemPRIME
Top of 12.5 Lead: surface | 10% Excess
Top of 13.5 Tail: 5,000 ft | 0% Excess

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
2322.0	9.6	40.0		
12132.0	5.5	20.0		

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	269.0 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
bbl	273.0 bbl	509.0 bbl	bbl

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

Lift Pressure	2350 psi

Pipe Rotated	Pipe Reciprocated
☐	☐

No. Centralizers	Top Plugs	Bottom Plugs
	1	

Cement Head Type

Job Scheduled For	Arrived on Location	Leave Location
May/06/2019	May/06/2019	May/06/2019

Casing Tools		Squeeze Job	
Shoe Type	Float	Squeeze Type	
Shoe Depth	12164.0 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	12149.0 ft	Sqz. Total Vol.	bbl

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
05/05/2019	22:35:59	-1	0.0	8.37	0.0	Started Acquisition
05/05/2019	23:02:42	-7	0.0	8.37	0.0	Start Job
05/05/2019	23:17:43	20	0.0	8.37	5.4	Reset Total, Vol = 5.39 bbl
05/05/2019	23:17:46	20	0.0	8.37	5.4	Pressure test lines
05/05/2019	23:18:00	19	0.0	8.37	5.4	Start Spacer
05/05/2019	23:33:00	194	3.7	11.24	54.3	End Spacer
05/05/2019	23:33:38	14	0.6	11.35	56.6	Reset Total, Vol = 51.22 bbl
05/05/2019	23:33:43	12	0.0	11.48	56.6	Start Lead
05/05/2019	23:33:44	12	0.0	11.50	56.6	Scale Weight 12.5 ppg
05/05/2019	23:33:46	11	0.0	11.51	56.6	8.33gal/sk
05/06/2019	00:07:37	11	0.0	12.62	238.8	Reset Total, Vol = 182.7 bbl
05/06/2019	00:07:38	11	0.0	12.63	238.8	End Lead
05/06/2019	00:07:39	11	0.0	12.64	238.8	Start Tail
05/06/2019	00:10:00	8	0.0	12.66	238.8	Scale Weight 13.5 ppg
05/06/2019	00:13:00	665	6.3	13.51	249.8	996 sks @ 1.65ft3/sk
05/06/2019	00:13:53	642	6.3	13.44	255.4	8.33 gal/sk
05/06/2019	01:00:44	17	0.7	13.54	533.5	Reset Total, Vol = 294.75 bbl
05/06/2019	01:00:46	15	0.2	13.55	533.5	End Tail
05/06/2019	01:13:51	4	0.0	8.40	554.7	Reset Total, Vol = 21.21 bbl
05/06/2019	01:13:52	-13	0.0	8.40	554.7	Start Displacment
05/06/2019	01:45:17	3018	8.1	8.39	767.8	Cement to Surface

Well	Field	Job Start	Customer	Job Number
Echeverria 2D 2H d267 EAHN-00142	Wattenburg	May/06/2019	Crestone Peak	18087

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
05/06/2019	02:02:14	-14	0.0	8.39	829.1	Check Floats 3 bbls back
05/06/2019	02:02:15	-14	0.0	8.39	829.1	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
				476.0		51.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
	0		3450			bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
%	473.0 bbl	269.0 bbl	60 degF	Cement Circulated to Surface? [X]	Volume 34.0 bbl
				Washed Thru Perfs [ ]	To ft

Customer or Authorized Representative	Schlumberger Supervisor		
Buddy Burke	Norm Haslauer	Circulation Lost [ ]	Job Completed [X]
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