



# Bill Barrett Corporation

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## Liner Post Job Report

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Anschutz State 5-62-26-4841C

S:27 T:5N R:62W Weld CO

Quote #:

Execution #:





# Bill Barrett Corporation

Attention: Mr. Matthew Schwartz | (303) 312-8142 | [maschwartz@billbarrettcorp.com](mailto:maschwartz@billbarrettcorp.com)

Bill Barrett Corporation | 1099 18th St. | Denver, CO. 80202

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Dear Mr. Matthew Schwartz,

Thank you for the opportunity to provide cementing services on this well. BJ Services strives to achieve complete customer satisfaction. If you have any questions regarding the services or data provided, please contact BJ Services at any time.

Sincerely,  
Jacob Ojeda  
Field Engineer I | (763) 516-3012 | [jacob.ojeda@bjservices.com](mailto:jacob.ojeda@bjservices.com)

Field Office 1716 East Allison Rd., Cheyenne WY, 82007  
Phone: (307) 638-5585

Sales Office 999 18th St. Suite 1200 Denver, CO 80202  
Phone: (281) 408-2361

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# Cementing Treatment



**Start Date** 4/23/18 **Well** 5-62-26-4841C ANSCHUTZ STATE  
**End Date** 4/23/18 **County** WELD  
**Client** BILL BARRETT CORPORATION **State/Province** CO  
**Service Supervisor** Andrew Hyde **API** 05-123-46085  
**District** Cheyenne, WY **Type of Job** Liner

## WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)
Previous Casing	6.37	7.00	23.00	6,699.00		
Open Hole	6.13			16,574.00		10.00
Drill Pipe	3.34	4.00	14.00	5,750.00		
Liner	4.00	4.50	11.60	16,569.00		

**Shoe Length (ft):** 62

## CIRCULATION PRIOR TO JOB

**Well Circulated By** Rig **YP Mud In** 2  
**Circulation Prior to Job** Yes **YP Mud Out** 2  
**Lost Circulation Prior to Cement Job** No **Solids Present at End of Circulation** No  
**Mud Density In (ppg)** 8.9 **10 sec SGS** 1  
**Mud Density Out (ppg)** 8.9 **10 min SGS** 2  
**PV Mud In** 3 **Flare Prior to/during the Cement Job** No  
**PV Mud Out** 3 **Gas Present** No

## TEMPERATURE

**Ambient Temperature (°F)** 55 **Mix Water Temperature (°F)** 50

## Cementing Treatment



### BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Planned Top of Fluid (Ft)	Length (Ft)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	11.0000			4,735.00				20.0000
Tail Slurry	BJCem L50.6.01C	13.5000	1.5930	7.95	5,750.00	10,913.00	720	1,141.0000	203.2000
Displacement 1	Retarded Water	8.3300			15,334.00			0.0000	20.0000
Displacement 2	Water + Chems	8.3300			6,589.00	0.00	0	0.0000	140.0000
Displacement 2	Retarded Water	8.3300			13,577.00	0.00	0	0.0000	20.0000
Displacement Final	Water	8.3300			0.00			0.0000	71.2000

Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SAND, S-8, Silica Flour, 200 Mesh	179.4000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	GELLANT WATER, GW-86	0.8000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	RETARDER, SR-20	0.6000	PPB
Tail Slurry	BJCem L50.6.01C	GELLANT WATER, GW-86	0.1000	BWOB
Tail Slurry	BJCem L50.6.01C	CEMENT, CLASS G	50.0000	PCT
Tail Slurry	BJCem L50.6.01C	BONDING AGENT, EC-2	3.0000	BWOB
Tail Slurry	BJCem L50.6.01C	BONDING AGENT, BA-90	3.0000	LBS/SK
Tail Slurry	BJCem L50.6.01C	RETARDER, SR-20	0.2000	BWOB
Tail Slurry	BJCem L50.6.01C	FLUID LOSS, FL-24	0.4000	BWOB
Tail Slurry	BJCem L50.6.01C	Foam Preventer, FP-25	0.3000	BWOB
Tail Slurry	BJCem L50.6.01C	EXTENDER, BENTONITE	4.0000	BWOB
Tail Slurry	BJCem L50.6.01C	Flyash (Rockies)	50.0000	PCT
Displacement 1	Retarded Water	BIOCIDE, BIOC11139W	0.1000	GPB
Displacement 1	Retarded Water	CLAY STABILIZER ResCare CS	0.0800	GPB
Displacement 1	Retarded Water	RETARDER, R-8L	0.5000	GPB
Displacement 2	Water + Chems	CLAY STABILIZER ResCare CS	0.0800	GPB
Displacement 2	Water + Chems	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement 2	Retarded Water	RETARDER, R-8L	0.5000	GPB

# Cementing Treatment



## TREATMENT SUMMARY

Fluid	Rate (bpm)	Fluid Vol. (bbls)
IntegraGuard EZ Spacer	4.00	20.00
BJCem L50.6.01C	6.00	203.20
Retarded Water	5.00	20.00
Water + Chems	5.00	140.00
Retarded Water	5.00	20.00
Water	5.00	71.20

## DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	10
Calculated Displacement Volume (bbls)	205	Amount of Spacer to Surface	10
Actual Displacement Volume (bbls)	205	Pressure Left on Casing (psi)	0
Did Float Hold?	Yes	Amount Bled Back After Job	1
Bump Plug	Yes	Total Volume Pumped (bbls)	598
Bump Plug Pressure (psi)	1600	Top Out Cement Spotted	No
Were Returns Planned at Surface	No	Lost Circulation During Cement Job	No
Cement returns During Job	Yes		

## EVENT LOG

Service Line  
Cementing

Client  
BILL BARRETT CORPORATION

District  
Cheyenne, WY



Quotes:  
Plans:  
Executions:

Seq.	Well	Job Type	BJ Sup.	Start Dt./Time	End Dt./Time	Duration	Category	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol(bbls)	Pipe Pressure(psi)	Comments
1	5-62-26-4841C	Liner	Andrew Hyde	04/23/2018 00:30	04/23/2018 00:35	0.08	Mobilization	Callout					BJ crew gets called out and requested on location at 5:30
2	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 2:30	04/23/2018 3:00	0.50	Operational	Safety Meeting					BJ crew talks about the hazards of driving to location
3	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 3:30	04/23/2018 3:31	0.02	Operational	Other (See comment)					Depart yard
4	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 5:45	04/23/2018 5:46	0.02	Mobilization	Arrive on Location					Arrive on location
5	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 5:50	04/23/2018 6:00	0.17	Operational	Safety Meeting					BJ crew talks about the hazards of spotting in equipment and rigging up
6	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 6:01	04/23/2018 6:30	0.48	Operational	Rig Up					Rig up
7	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 6:31	04/23/2018 6:42	0.18	Operational	Safety Meeting					BJ and rig crew talk about the hazards of pumping the job
8	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 6:48	04/23/2018 6:49	0.02	Operational	Prime Up	8.3300	2.00	3.00	600.00	Pump 3 bbls of water to fill lines
9	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 6:50	04/23/2018 6:53	0.05	Operational	Pressure Test					Pressure test pumps and lines to 5000 psi
10	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 6:57	04/23/2018 7:01	0.07	Operational	Pump Spacer	8.3300	2.00	10.00	600.00	Pump 10 bbls of water spacer
11	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 7:02	04/23/2018 7:06	0.07	Operational	Pump Spacer	11.0000	4.00	20.00	1,800.00	Pump 20 bbls of IntegraGuard EZ spacer at 11 ppg
12	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 7:07	04/23/2018 7:45	0.63	Operational	Pumping Cement	13.5000	6.00	203.00	2,300.00	Mix up and pump 720 sks of BJ Cem L50.6.01C cement at 13.5 ppg, yield 1.59, 7.95 gal/sk, 203 bbls
13	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 7:46	04/23/2018 7:55	0.15	Operational	Clean Pumps and Lines					Shutdown line out manifold to wash pumps and lines to the pit
14	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 7:48	04/23/2018 7:50	0.03	Operational	Drop Top Plug					Tool Hand dropped the plug
15	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 7:56	04/23/2018 8:03	0.12	Operational	Pump Displacement	8.3300	5.00	185.00	2,500.00	Pump 205 bbls of water displacement with 4 gals of Biocide, 13 gals of ASF-50
16	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 8:03	04/23/2018 8:06	0.05	Operational	Other (See comment)	8.3300	3.00	10.00	1,600.00	Slow rate to 3 bpm to watch plug pass through liner
17	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 8:37	04/23/2018 8:39	0.03	Operational	Other (See comment)	8.3300	3.00	10.00	1,914.00	Slow rate the last 10 bbls to 2 bpm

## EVENT LOG

Service Line

Cementing

Client

BILL BARRETT CORPORATION

District

Cheyenne, WY

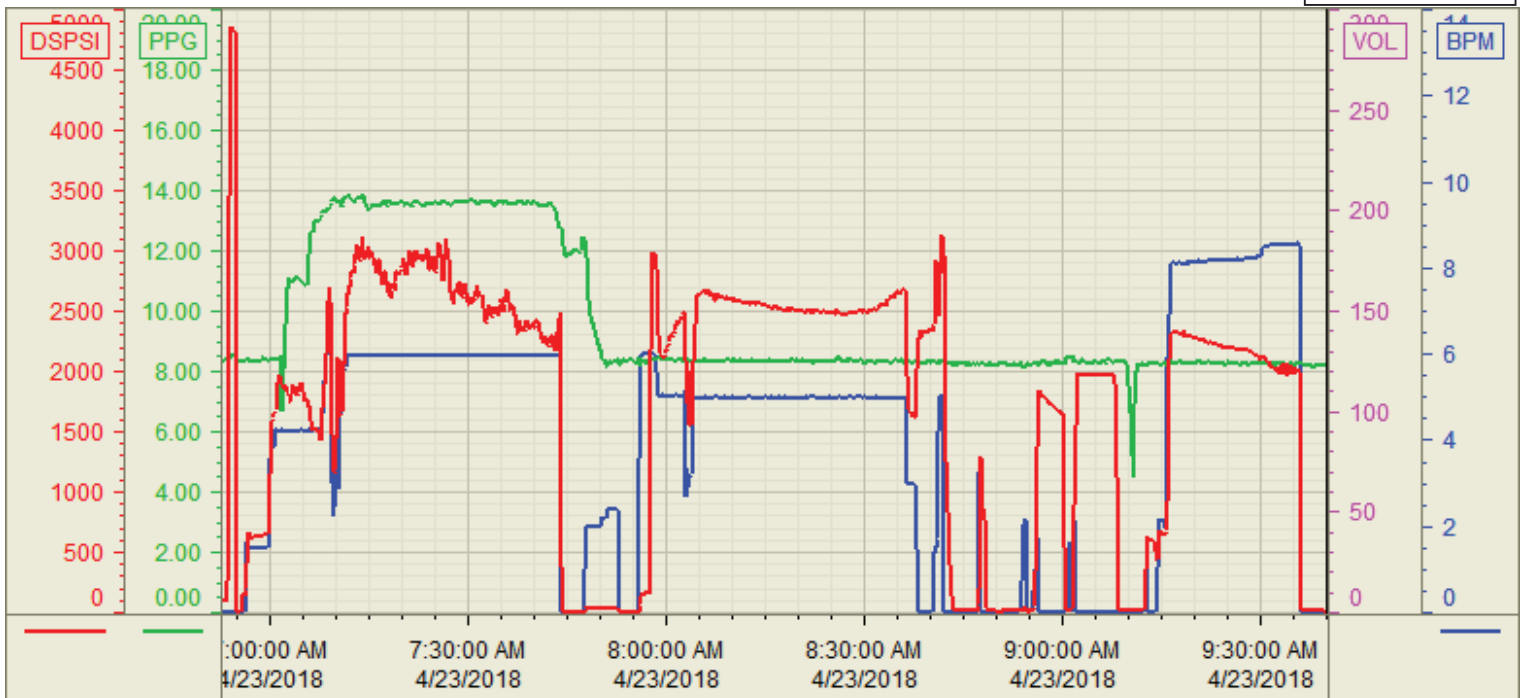


18	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 8:39	04/23/2018 8:40	0.02	Operational	Land Plug						Bump plug at 1600 psi, took it up to 2350 psi
19	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 8:41	04/23/2018 8:41	0.00	Operational	Other (See comment)						Pressure up to 3300 psi to burst plug
20	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 8:41	04/23/2018 8:43	0.03	Operational	Pump Displacement	8.3300	5.00	5.00	2,000.00		Pump 5 bbls of water
21	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 8:44	04/23/2018 8:46	0.03	Operational	Check Floats						Got 1 bbls back to the truck
22	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 9:01	04/23/2018 9:06	0.08	Operational	Pressure Test						Pressure test backside to 2000 psi
23	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 9:17	04/23/2018 9:18	0.02	Operational	Other (See comment)						Pressure up to 700 psi to sting out of the liner
24	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 9:18	04/23/2018 9:34	0.27	Operational	Circulate Well	8.3300	8.00	160.00	2,400.00		Pump 160 bbls of water to clean the drill pipe
25	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 9:35	04/23/2018 9:36	0.02	Operational	Other (See comment)						Shutdown
26	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 9:40	04/23/2018 9:50	0.17	Operational	Safety Meeting						BJ crew talked about the hazards of rigging down
27	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 10:00	04/23/2018 11:00	1.00	Operational	Rig Down						Rig down
28	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 11:05	04/23/2018 11:06	0.02	Mobilization	Leave Location						Depart location
29	5-62-26-4841C ANSCHUTZ STATE	Liner	Andrew Hyde	04/23/2018 11:07	04/23/18 11:07	0.00	Operational	Other (See comment)						estimated top of cement at 5743 ft, got 10 bbls cement to surface

Customer: Bill Barrett  
 Well Number: 5-62-26-484IC  
 Lease Info: Anschutz State



Print Date/Time  
 4/23/2018 9:52:44 AM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press(PSI)		4/23/2018 9:40:00 AM i.	Cementer\DS_DISCHARGE_PRESS_DIAL
2	DH - Density (PPG)	8.25	4/23/2018 9:40:04 AM	Cementer\DENSITY2_ACTUAL_RATE
3	Combined rate (BPM)	0.00	4/23/2018 9:40:04 AM	Cementer\Flow_Combined
4				
5				

Source: Control1 9:52:39 AM