



Bill Barrett Corporation

Production Liner Post Job Report

Anschutz State 5-62-26-3240C

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

Quote #:

Execution #:





Bill Barrett Corporation

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

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

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

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

Cementing Treatment



Start Date	4-9-2018	Well	5-62-26-3240C ANSCHUTZ STATE
End Date	4-9-2018	County	WELD
Client	BILL BARRETT CORPORATION	State/Province	CO
Client Field Rep	CHRIS	API	05-123-46081
Service Supervisor	ALBERT SNYDER	Type of Job	Liner
District	Cheyenne, WY		

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)
Previous Casing	6.37	7.00	23.00	6,886.00		
Open Hole	6.13			16,766.00		10.00
Drill Pipe	3.34	4.00	14.00	6,035.00		
Liner	4.00	4.50	11.60	16,766.00		

Shoe Length (ft): 59

HARDWARE

Top Plug Used?	Yes	Max Casing Pressure - Rated (psi)	5350
Top Plug Provided By	Weatherford	Max Casing Pressure - Operated (psi)	3000
Top Plug Size	4.5	Pipe Movement	None
Landing Collar Depth (ft)	16,707	Job Pumped Through	4 in drill pipe
Tool Type	Float Collar	Top Connection Thread	Drill pipe
Tool Depth (ft)	16707	Top Connection Size	4

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud Out	5
Circulation Prior to Job	Yes	YP Mud In	4
Circulation Time (min)	150	YP Mud Out	4
Circulation Rate (bpm)	4.5	Solids Present at End of Circulation	7
Circulation Volume (bbls)	675	10 sec SGS	1
Lost Circulation Prior to Cement Job	No	10 min SGS	1
Mud Density In (ppg)	9.1	30 min SGS	0
Mud Density Out (ppg)	9.1	Flare Prior to/during the Cement Job	No
PV Mud In	5	Gas Present	No

Cementing Treatment



TEMPERATURE

Ambient Temperature (°F)	60	Slurry Cement Temperature (°F)	70
Mix Water Temperature (°F)	70	Flow Line Temperature (°F)	98

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			4,885.00				20.0000
Tail Slurry	BJCem L50.6.01C	13.5000	1.5930	7.95	5,900.00	10,846.00	720	1,135.0000	202.0000
Displacement 1	Retarded Water	8.3300			15,417.00			0.0000	20.0000
Displacement 2	Retarded Water	8.3300			13,577.00	0.00	0	0.0000	20.0000
Displacement 2	Water + Chems	8.3300			6,589.00	0.00	0	0.0000	140.0000
Displacement Final	Water	8.3300			0.00			0.0000	26.00

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	RETARDER, SR-20	0.6000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	GELLANT WATER, GW-86	0.8000	PPB
Tail Slurry	BJCem L50.6.01C	EXTENDER, BENTONITE	4.0000	BWOB
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	FLUID LOSS, FL-24	0.4000	BWOB
Tail Slurry	BJCem L50.6.01C	BONDING AGENT, EC-2	3.0000	BWOB
Tail Slurry	BJCem L50.6.01C	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem L50.6.01C	Foam Preventer, FP-25	0.3000	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
Displacement 1	Retarded Water	CLAY STABILIZER ResCare CS	0.0800	GPB
Displacement 1	Retarded Water	BIOCIDE, BIOC11139W	0.1000	GPB
Displacement 1	Retarded Water	RETARDER, R-8L	0.5000	GPB
Displacement 2	Retarded Water	RETARDER, R-8L	0.5000	GPB
Displacement 2	Water + Chems	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement 2	Water + Chems	CLAY STABILIZER ResCare CS	0.0800	GPB

Cementing Treatment



TREATMENT SUMMARY

Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)
IntegraGuard EZ Spacer	4.00	20.00	2523	2523
BJCem L50.6.01C	6.00	202.00	2500	2500
Retarded Water	6.00	20.00	2500	2500
Water + Chems	6.00	160.00	2700	2700
Retarded Water	3.00	26.00	2000	2000/3000
Water	7.00	170.00	2000	2000

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	0
Calculated Displacement Volume (bbls)	206	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	206	Amount of Spacer to Surface	20 bbls
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0
Bump Plug	Yes	Amount Bled Back After Job	0.5 bbls
Bump Plug Pressure (psi)	3000	Total Volume Pumped (bbls)	569
Were Returns Planned at Surface	No	Top Out Cement Spotted	No
Cement returns During Job	No	Lost Circulation During Cement Job	No



Customer Name BILL BARRETT
 Well Name ANSHUTZ STATE 5-62-26-3240C
 Job Type Liner

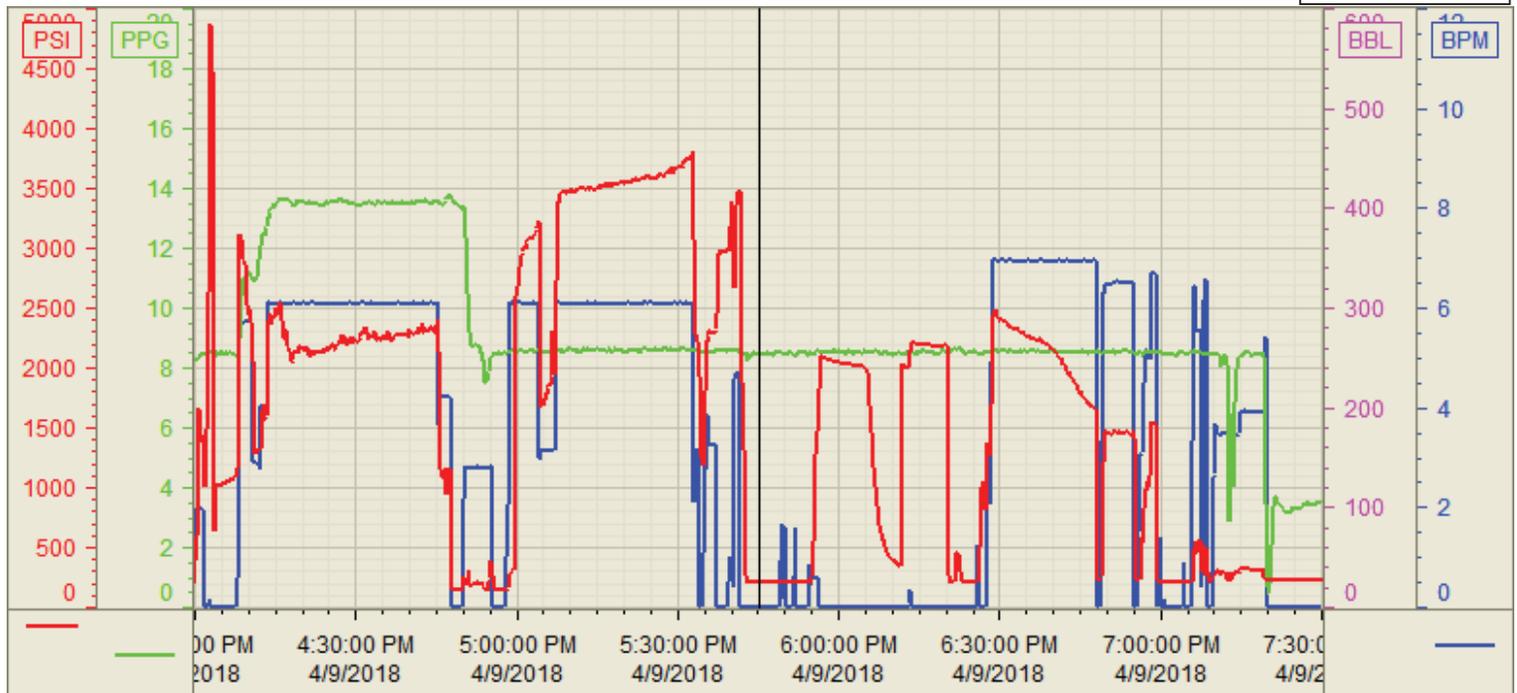
District Cheyenne
 Supervisor ALBERT SNYDER
 Engineer _____

Seq No.	Start Date/Time	Event	Event ID	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbbls)	Pipe Pressure (psi)	Comments
1	4/9/2018 6:30	Called out						Caled out at 6:30 am
2	4/9/2018 7:30	Steacs Journey						Discussed Journey to location
3	4/9/2018 8:10	Depart base						Left at 8:10 am
4	4/9/2018 12:30	Requested on Location						Requested at 12:30
5	4/9/2018 11:10	Arrived on Location						Arrived 11:10 1.5 hours early
6	4/9/2018 11:30	Steacs Briefing						Discussed how to spot and rig up
7	4/9/2018 11:45	Rig up iron						Used teamwork work safely not in a hurry
8	4/9/2018 12:30	Wait while rig circulated						rig circulated for 3.5 hours 5 barrels a minute
9	4/9/2018 15:00	Safet meeting						Discussed with rig crew the job procedure
10	4/9/2018 16:13	Fill Lines		8.33	2	3	800	Use fresh water
11	4/9/2018 16:15	Test lines		8.33	1	1	5000	Lines tested good up to 5000 psi
12	4/9/2018 16:22	Pump spacer	56	11	4	20	2522	Mixed 20 barrels of cd spacer @11#
13	4/9/2018 16:28	Pump cement		13.5	6	203.8	2400	Mixed and pumped 720 sks of bj L50 .601 @13.5 # with 1.59 yield and 7.95 water requirement
14	4/9/2018 17:00	drop plug wash lines						dropped dart from weaferford
15	4/9/2018 17:12	Displace well		8.33	6	20	2500	R8L Water
16	4/9/2018 17:21	displace well		8.33	3	20	2500/3000	39 away dart landed psi up to 3000
17	4/9/2018 17:41	Displace well		8.33	6	140	2700	140 biocide + chems
18	4/9/2018 17:45	Displace well		8.33	3	26	2000	26R8l
19	4/9/2018 17:51	Land the plug					3000	Plug landed on calculated
20	4/9/2018 17:54	Burst sub					3400	Plug burst at 3400 psi
21	4/9/2018 17:55	overdisplace		8.33	6	5	1900	Pumped fresh water
22	4/9/2018 18:00	Check float						Float is holding flowed back .5 barrel 4-9 6:30
23	4/9/2018 18:10	Set Hanger						
24	4/9/2018 18:09	Casing test		8.33	1	2	2009	Casing test sucessful held for 10 minutes
25	4/9/2018 18:40	Roll hole		8.33	7	170	2500	Got back spacer 20 barrels at 128 away no cement back after rolling hole
26	4/9/2018 19:07	Steacs Briefing						Discussed washing up and rigging down
27	4/9/2018 19:30	Rig Down	73					Used team work working safley
28	4/9/2018 20:30	After action Review						Discussed how to make job go better
29	4/9/2018 20:40	Journey Steacs						Discussed traveling back
30	4/9/2018 20:50	Depart location						Left location

Customer: BILL BARRETT
 Well Number: 5-62-26-324OC
 Lease Info: ANSHUTZ STATE



Print Date/Time
 4/9/2018 7:42:42 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	209.6	4/9/2018 5:45:07 PM	Cementer\DS_DISCHARGE_PRESS_DIAL
2	DH - Density (PPG)	8.49 i.	4/9/2018 5:45:05 PM i.	Cementer\DENSITY2_ACTUAL_RATE
3	Combined Rate	0.00	4/9/2018 5:45:01 PM	Cementer\Flow_Combined
4				
5				

Source: Control1 7:42:37 PM