



# Bonanza Creek Energy

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## Production Post-Job Report

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**MUSTANG V41-27-28XRLNB (05-123-45804)**

S:27T:4N R:63W Weld, CO

Quote #:

| Execution #:

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# Bonanza Creek Energy

Joel Dill | (720) 633-5871 | JDill@bonanzacrk.com

Bonanza Creek Energy | 730 17th Street, Suite 610 | Denver, CO 80202

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Dear Mr. Joel Dill,

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,  
Jason Creel  
Field Engineer I | (307) 256-0306 | jason.creel@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** 12/10/2017 **Well** V41-27-28XRLNB MUSTANG V41-27-28XRLNB  
**End Date** 12/10/2017 **County** WELD  
**Client** BONANZA CREEK ENERGY **State/Province** CO  
**API** 05-123-45804  
**District** Cheyenne, WY **Type of Job** Long String

## WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)	Grade	Thread
Previous Casing	8.92	9.63	36.00	1,730.00	1,730.00		J-55	LTC
Open Hole	8.50			16,495.00	6,453.00	10.00		
Casing	4.89	5.50	17.00	16,485.00	6,453.00		P-110	LTC

## HARDWARE

**Bottom Plug Used?** No **Top Connection Thread** LTC  
**Top Plug Used?** Yes **Top Connection Size** 5.5  
**Top Plug Provided By** Tool Hand  
**Landing Collar Depth (ft)** 16,485  
**Max Casing Pressure - Rated (psi)** 8724  
**Max Casing Pressure - Operated (psi)** 3500  
**Pipe Movement** None  
**Job Pumped Through** Cement Head

## CIRCULATION PRIOR TO JOB

**Well Circulated By** Rig **Solids Present at End of Circulation** No  
**Circulation Prior to Job** Yes

# Cementing Treatment



Mud Density In (ppg) 9.6  
 Flare Prior to/during the Cement Job No  
 Gas Present No

## TEMPERATURE

Ambient Temperature (°F) 50  
 Mix Water Temperature (°F) 45

## BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Spacer / Pre Flush / Flush	CD Spacer	11.5000					40.0000
Lead Slurry	P100-X2 (Lead)	12.5000	2.0759	11.84	623	1,289.0000	229.6000
Tail Slurry	P50-X1 (Tail)	13.5000	1.4774	7.45	1,965	2,897.0000	515.8000
Displacement 1	MMCR Water	8.3337				0.0000	90.0000
Displacement Final	Displacement Final (Water)	8.3308				0.0000	292.0000

Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	CD Spacer	EXTENDER, BENTONITE	5.00	PPB
Spacer / Pre Flush / Flush	CD Spacer	SAND, S-8, Silica Flour, 200 Mesh	208.53	PPB
Spacer / Pre Flush / Flush	CD Spacer	SURFACTANT, SS-267, (BJS ONLY)	0.50	GPB
Spacer / Pre Flush / Flush	CD Spacer	RETARDER, HIGH TEMP, R-31 (BJS Only)	0.51	PPB
Spacer / Pre Flush / Flush	CD Spacer	Spacer Surfactant, SS-247, (BJS Only)	0.50	GPB
Spacer / Pre Flush / Flush	CD Spacer	GELLANT WATER, GW-86	0.90	PPB
Lead Slurry	P100-X2 (Lead)	IntegraSeal CELLO	0.13	LBS/SK
Lead Slurry	P100-X2 (Lead)	FLUID LOSS, FL-24, (BJS Only)	0.30	BWOB

# Cementing Treatment



Lead Slurry	P100-X2 (Lead)	SPECIAL ADDITIVE, MPA-300	0.10	BWOB
Lead Slurry	P100-X2 (Lead)	BONDING AGENT, BA-60	0.40	BWOB
Lead Slurry	P100-X2 (Lead)	FP-25, Dry Foam Preventer (BJS Only)	0.30	BWOB
Lead Slurry	P100-X2 (Lead)	CEMENT, ASTM TYPE III	100.00	PCT
Lead Slurry	P100-X2 (Lead)	RETARDER, HIGH TEMP, R-31 (BJS Only)	0.18	BWOB
Tail Slurry	P50-X1 (Tail)	Flyash (Rockies)	50.00	PCT
Tail Slurry	P50-X1 (Tail)	FLUID LOSS, FL-66	0.20	BWOB
Tail Slurry	P50-X1 (Tail)	FP-25, Dry Foam Preventer (BJS Only)	0.30	BWOB
Tail Slurry	P50-X1 (Tail)	AR-20	0.10	BWOB
Tail Slurry	P50-X1 (Tail)	CEMENT, CLASS G	50.00	PCT
Tail Slurry	P50-X1 (Tail)	EXTENDER, BENTONITE	2.00	BWOB
Tail Slurry	P50-X1 (Tail)	GELLANT WATER, GW-86	0.10	BWOB
Displacement 1	MMCR Water	AR-61	0.20	GPB

## TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)
9:19	CD Spacer	5.00	40.00	223
9:35	P100-X2 (Lead)	5.00	229.60	223
10:21	P50-X1 (Tail)	5.10	515.80	249
12:16	MMCR Water	4.10	80.00	78
12:19	Displacement Final (Water)	8.00	305	2560

	Min	Max
Pressure (psi)	78	4847
Rate (bpm)	2	6.2

# Cementing Treatment



## DISPLACEMENT AND END OF JOB SUMMARY

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Displaced By	BJ	Amount of Cement Returned/Reversed	90
Calculated Displacement Volume (bbls)	383	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	385	Amount of Spacer to Surface	40
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0
Bump Plug	No	Amount Bled Back After Job	3
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement returns During Job	Yes	Lost Circulation During Cement Job	No

## CEMENT PLUG

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Bottom of Cement Plug?	No
Wiper Balls Used?	No
Plug Catcher	No

## COMMENTS

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### Job Summary

Our pump rate was limited during displacement, the packing on both the pumps went out at almost the same time. We were only able to pump at 4.1 bbls/min.

We did not bump the plug. Per tool hand we pumped a total of 385 bbls.

We got 90 bbls of cement to surface.



Customer Name Bonanza Creek  
 Well Name Mustang V41-27-28XRLNB  
 Job Type Long String

District Cheyenne  
 Supervisor Eric Dewit  
 Engineer \_\_\_\_\_

Seq No.	Start Date/Time	Category	Event	Equipment	Event ID	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	12/10/2017 0:00	Mobilization	Callout		1					Customer calls with an RTS of 6:00
2	12/10/2017 5:15	Mobilization	Arrive on Location		48					Arrive on location
3	12/10/2017 5:20	Operational	Safety Meeting		53					Have a safety meeting with the crew before spotting trucks on location
4	12/10/2017 5:30	Operational	Spot Units		49					
5	12/10/2017 5:40	Operational	Rig Up		50					Rig up bulk, water, and high pressure lines
6	12/10/2017 8:00	Operational	Safety Meeting		53					Pre-job safety meeting with company, tool hand, and rig crew
7	12/10/2017 8:56	Operational	Start Pumping		55	8.34	2	3	73	Load pumps and lines with fresh water
8	12/10/2017 8:59	Operational	Pressure Test		54	8.34	0	0	4847	Test pumps and lines
9	12/10/2017 9:18	Operational	Pump Spacer		56	11.5	5	40	223	Pump 40 bbls of the CD Spacer
10	12/10/2017 9:35	Operational	Pump Lead Cement		58	12.5	5.1	229	223	Pump 622 sacks of lead cement @12.5 ppg
11	12/10/2017 10:21	Operational	Pump Tail Cement		60	13.5	5	517	249	Pump 1972 sacks of tail cement @13.5 ppg
12	12/10/2017 12:08	Operational	Clean Pumps and Lines		62					
13	12/10/2017 12:12	Operational	Drop Top Plug		63					
14	12/10/2017 12:16	Operational	Pump Displacement			8.35	4.2	0	78	Start displacement with a 10 bbls Gel Pill
15	12/10/2017 12:19	Operational	Pump Displacement			8.34	4.1	10	432	Start fresh water + Biocide + Retarder (our rate was limited to 4 bbls/min due to the pump losing the packing on Both of the strock pumps at nearly the same time)
16	12/10/2017 13:17	Operational	Pump Displacement			8.34	4.1	200	2209	Fresh water displacement
17	12/10/2017 13:29	Operational	Pump Displacement			8.34	4.1	250	2560	Fresh water displacement
18	12/10/2017 13:34	Operational	Spacer Back to Surface		65	8.34	4.1	270	2359	Getting good spacer to surface
19	12/10/2017 13:39	Operational	Cement Back to Surface		66	8.34	4.1	295	2560	Start getting good cement to surface
20	12/10/2017 14:04	Operational	Other (See comments)		76	8.34	0	385	2033	Shut down did not bump the plug, we went over calculated displacement by 2 bbls
21	12/10/2017 14:05	Operational	Check Floats		68	8.34	0	0	0	Check floats (floats held) 3 bbls back
22	12/10/2017 14:10	Operational	Safety Meeting		53					Pre-rig down safety meeting
23	12/10/2017 14:20	Operational	Rig Down		73					Rig everything down
24	12/10/2017 17:00	Mobilization	Leave Location		74					
25										

