



# Bonanza Creek Energy

State Antelope 42-12-13HNC

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API # 05-123-50290

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## Production

January 25, 2020

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**Quote #:** QUO-41510-S6B2G7

**Execution #:** EXC-24138-P2B9M202



# Bonanza Creek Energy

Attention: Mr. Adam Conry | (303) 883.3351 | [AConry@bonanzacrck.com](mailto:AConry@bonanzacrck.com)

Bonanza Creek Energy | 410 17th St Suite 1400 | Denver, CO. 80202

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Dear Mr. Adam Conry,

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,  
Gage Putnam  
Field Engineer I | (307) 887-4243 | [Gage.Putnam@bjservices.com](mailto:Gage.Putnam@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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# BJ Cementing Treatment Report

SERVICE SUPERVISOR	Eric Dewit	RIG	Akita 519
DISTRICT	Cheyenne, WY	COUNTY	WELD
SERVICE	Cementing	STATE / PROVINCE	CO

## WELL GEOMETRY

TYPE	ID (in)	OD (in)	WEIGHT (lb/ft)	MD (ft)	TVD (ft)	EXCESS (%)	GRADE	THREAD
Open Hole	8.50	0.00	0.00	11,364.00	6,185.00	7.00		
Casing	4.78	5.50	20.00	11,354.00	6,185.00		N-80	BTC
Previous Casing	8.92	9.63	36.00	1,610.00	1,610.00			

## HARDWARE

Bottom Plug Used?	Yes	Landing Collar Depth (ft)	
Bottom Plug Provided By	Non BJ	Tool Type	Float Collar
Bottom Plug Size	5.500	Tool Depth (ft)	
Top Plug Used?	Yes	Max Casing Pressure - Rated (psi)	7352.00
Top Plug Provided By	Non BJ	Max Casing Pressure - Operated (psi)	5000.00
Top Plug Size	5.500	Pipe Movement	None
Centralizers Used	Yes	Job Pumped Through	Manifold
Centralizers Quantity	229.00	Top Connection Thread	BTC
Centralizers Type	Bow	Top Connection Size	5.5

## CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	YP Mud In	3
Circulation Prior to Job	Yes	YP Mud Out	3
Circulation Time (min)	120.00	Solids Present at End of Circulation	No
Lost Circulation Prior to Cement Job	No	10 sec SGS	2
Mud Density In (ppg)	9.60	10 min SGS	3
Mud Density Out (ppg)	9.60	30 min SGS	4
PV Mud In	9	Flare Prior to / during the Cement Job	No
PV Mud Out	9	Gas Present	No

## TEMPERATURE

Ambient Temperature (°F)	37.00	Slurry Cement Temperature (°F)	62.00
Mix Water Temperature (°F)	61.00		

## FLUID DETAILS

FLUID TYPE	FLUID NAME	DENSITY (ppg)	YIELD (Cu Ft/sk)	H <sub>2</sub> O REQ (gals/sk)	PLN TOP FLD (ft)	LENGTH (ft)	VOL (sk)	VOL (Cu Ft)	VOL (bbls)
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	11.0000			0.00				20.0000
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	12.0000			0.00				20.0000
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	11.0000			0.00				20.0000
Tail Slurry	IntegraCem LITE B03-CY02X	13.5000	1.4274	7.10	0.00	11,227.00	1960	2798.0000	498.3000
Displacement 2	Retarded Water	8.3337			13,244.00	0.00	0	0.0000	20.0000
Displacement Final	Displacement Final (Water)	8.3308			0.00			0.0000	228.1000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	WEIGHTING ADDITIVE, W-11	243.3100	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	SPACER SURFACTANT, SS-267	1.0000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	IntegraGuard GW-86	1.2000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-7C	2.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-31	0.5000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-31	0.5000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	IntegraGuard GW-86	1.2000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	WEIGHTING ADDITIVE, W-11	243.3100	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-7C	2.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	SPACER SURFACTANT, SS-267	1.0000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-7C	2.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	IntegraGuard GW-86	1.2000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	SPACER SURFACTANT, SS-267	1.0000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-31	0.5000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	WEIGHTING ADDITIVE, W-11	243.3100	PPB
Tail Slurry	IntegraCem LITE B03-CY02X	FLUID LOSS, FL-66	0.2000	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X	IntegraCem LITE B03-CY02X	100.0000	PCT
Tail Slurry	IntegraCem LITE B03-CY02X	FLUID LOSS, FL-24	0.2000	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X	IntegraCare EC-2	3.0000	BWOB

Client: Bonanza Creek Energy

Well: STATE ANTELOPE 42-12-13HNC

Well API: 05-123-50290

Start Date: 1/25/2020

End Date: 1/25/2020



Tail Slurry	IntegraCem LITE B03-CY02X	RETARDER, R-6	0.6000	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X	IntegraGuard GW-86	0.1500	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X	RETARDER, SR-20	0.7000	BWOB
Displacement 2	Retarded Water	RETARDER, SR-61L	0.1000	GPB
Displacement 2	Retarded Water	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement Final	Displacement Final (Water)	BIOCIDE, BIOC11139W	0.0100	GPB

## DISPLACEMENT AND END OF JOB SUMMARY

<b>Displaced By</b>	BJ	<b>Amt of Cement Returned / Reversed</b>	40.00
<b>Calculated Displacement Vol (bbls)</b>	251.00	<b>Method Used to Verify Returns</b>	Visual
<b>Actual Displacement Vol (bbls)</b>	251.00	<b>Amt of Spacer to Surface</b>	60.00
<b>Did Float Hold?</b>	Yes	<b>Pressure Left on Casing (psi)</b>	0.00
<b>Bump Plug</b>	Yes	<b>Amt Bled Back After Job</b>	2.00
<b>Bump Plug Pressure (psi)</b>	3386.00	<b>Total Volume Pumped (bbls)</b>	811.00
<b>Were Returns Planned at Surface</b>	Yes	<b>Top Out Cement Spotted</b>	No
<b>Cement Returns During Job</b>	Full	<b>Lost Circulation During Cement Job</b>	No

# BJ Cementing Event Log

Long String - Cheyenne, WY - Eric Dewit

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	01/25/2020 06:00	Callout					Customer calls with an O/L time of 12:00 on 1/25/20
2	01/25/2020 10:00	Depart for Location					Leave yard to travel to location
3	01/25/2020 12:00	Arrive on Location					Arrive on location rig is still running casing
4	01/25/2020 13:00	Spot Units					Spot trucks, Pre-rig up safety meeting
5	01/25/2020 13:20	Rig Up					
6	01/25/2020 15:00	Rig					Waiting on rig to finish circulating
7	01/25/2020 15:45	STEACS Briefing					Pre-Job up safety meeting
8	01/25/2020 16:08	Other (See comment)	8.3400	4.00	2.00	76.00	Pump 2 bbls of fresh water to load lines
9	01/25/2020 16:09	Pressure Test	8.3400	0.00	0.00	7223.00	
10	01/25/2020 16:16	Pump Spacer	11.0000	4.00	20.00	158.00	
11	01/25/2020 16:23	Pump Spacer	12.0000	4.00	20.00	153.00	
12	01/25/2020 16:28	Pump Spacer	11.0000	4.00	20.00	150.00	
13	01/25/2020 16:34	Pumping Cement	13.5000	6.00	498.00	444.00	Pump 1,960 sks of cement @13.5 ppg
14	01/25/2020 18:06	Wash Pumps and Lines					
15	01/25/2020 18:14	Other (See comment)	8.3400	4.70	2.00	89.00	Pump 2 bbls of retarded water ahead of the 1st plug
16	01/25/2020 18:15	Drop Bottom Plug					
17	01/25/2020 18:16	Other (See comment)	8.3400	4.70	3.00	86.00	Pump 3 bbls of retarded water ahead of the 2nd plug
18	01/25/2020 18:18	Drop Top Plug					
19	01/25/2020 18:20	Pump Displacement	8.3400	7.70	0.00	862.00	Send 2nd plug start fresh water + Biocide displacement
20	01/25/2020 18:33	Pump Displacement	8.3400	7.70	100.00	2090.00	
21	01/25/2020 18:40	Spacer Back-to-Surface	8.3400	7.70	150.00	2650.00	
22	01/25/2020 18:48	Cement Back-to-Surface	8.3400	7.70	210.00	2709.00	
23	01/25/2020 18:51	Other (See comment)	8.3400	2.70	240.00	2052.00	Drop rate to land the plug
24	01/25/2020 18:55	Other (See comment)	8.3400	2.70	248.00	3500.00	Burst 1st plug, continue pumping to land the 2nd plug

Client: Bonanza Creek Energy

Well Name / API: STATE ANTELOPE  
42-12-13HNC / 05-123-50290

Well 11227  
MD:



Quote #: QUO-41510-S6B2G7

Plan #: ORD-24138-P2B9M2

Execution #: EXC-24138-P2B9M202

25	01/25/2020 18:57	Land Plug	8.3400	2.70	251.00	3386.00	Land 2nd plug, hold for 3 min before bursting and checking floats
26	01/25/2020 19:00	Other (See comment)	8.3400	2.70	1.00	4959.00	Burst 2nd plug, and shut down
27	01/25/2020 19:01	Check Floats	8.3400	0.00	0.00	0.00	Floats held (2 bbls back
28	01/25/2020 19:03	STEACS Briefing					Pre-rig down safety meeting
29	01/25/2020 19:10	Rig Down					
30	01/25/2020 20:00	Leave Location					





JobMaster Program Version 5.00C1

Job Number:

Customer: Bo Creek

Well Name: State Antelope 42-12-13HNC

