



# Bonanza Creek Energy

## Production Post Job Report

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**State Antelope O-2-14XRLNB**

S:11 T:5N R:62W Weld CO

Quote #:

Execution #:

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# Bonanza Creek Energy

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

Bonanza Creek Energy | 410 17th St Suite 1400 | 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@bjsservices.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



<b>Start Date</b>	8/7/2018	<b>Well</b>	STATE ANTELOPE O-2-14XRLNB
<b>End Date</b>	8/7/2018	<b>API#</b>	05-123-46743
<b>Client</b>	BONANZA CREEK ENERGY	<b>County</b>	WELD
<b>Client Field Rep.</b>	Sam	<b>State/Province</b>	CO
<b>Service Sup.</b>	Roger Acuna	<b>Formation</b>	NIOBRARA
<b>District</b>	Cheyenne, WY	<b>Rig</b>	Xtreme 19
<b>Type of Job</b>	Long String	<b>Project ID</b>	PRJ1009423
<b>Execution ID</b>	EXC-09567-W2N4R302		

## WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)
Previous Casing	8.92	9.63	36.00	1,640.00	1,640.00	
Open Hole	8.50	0.00	0.00	17,577.00	6,183.00	12.50
Casing	4.89	5.50	17.00	17,577.00	6,183.00	

**Shoe Length (ft):** 42.00

## HARDWARE

<b>Top Plug Used?</b>	Yes	<b>Max Casing Pressure - Rated (psi)</b>	7,460.00
<b>Top Plug Provided By</b>	Rig	<b>Max Casing Pressure - Operated (psi)</b>	3,500.00
<b>Top Plug Size</b>	5.500	<b>Pipe Movement</b>	None
<b>Centralizers Used</b>	Yes	<b>Job Pumped Through</b>	Manifold
<b>Centralizers Quantity</b>	160.00	<b>Top Connection Thread</b>	LTC
<b>Centralizers Type</b>	Rigid	<b>Top Connection Size</b>	5.5
<b>Landing Collar Depth (ft)</b>	17,503		

## CIRCULATION PRIOR TO JOB

<b>Well Circulated By</b>	Rig	<b>PV Mud Out</b>	11
<b>Circulation Prior to Job</b>	Yes	<b>YP Mud In</b>	10
<b>Circulation Time (min)</b>	120.00	<b>YP Mud Out</b>	10
<b>Circulation Rate (bpm)</b>	10.00	<b>Solids Present at End of Circulation</b>	No
<b>Circulation Volume (bbls)</b>	1,200.00	<b>10 sec SGS</b>	7.00
<b>Lost Circulation Prior to Cement Job</b>	No	<b>10 min SGS</b>	9.00
<b>Mud Density In (ppg)</b>	9.40	<b>30 min SGS</b>	13.00
<b>Mud Density Out (ppg)</b>	9.40	<b>Flare Prior to/during the Cement Job</b>	No
<b>PV Mud In</b>	11	<b>Gas Present</b>	No

# Cementing Treatment



## TEMPERATURE

Ambient Temperature (°F)	60.00	Slurry Cement Temperature (°F)	65.00
Mix Water Temperature (°F)	65.00	Flow Line Temperature (°F)	238.00

## 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	12.0000			0.00				60.0000
Lead Slurry	BJCem P100.3.01C	12.5000	2.1535	12.22	0.00	3459	605	1,307.0000	232.6000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4772	7.45	3,459.00	14118	2195	3,239.0000	576.8000
Displacement 2	Retarded Water	8.3337			16715.00	862	0	0.0000	20.0000
Displacement Final	Displacement Final (Water)	8.3308			0.00			0.0000	386.9000

# Cementing Treatment



Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SAND, S-8, Silica Flour, 200 Mesh	242.2100	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	EXTENDER, BENTONITE	5.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SPACER SURFACTANT, SS-247	0.5000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	GELLANT WATER, GW-86	1.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SPACER SURFACTANT, SS-267	0.5000	GPB
Lead Slurry	BJCem P100.3.01C	FLUID LOSS, FL-24	0.3000	BWOB
Lead Slurry	BJCem P100.3.01C	IntegraSeal CELLO	0.1300	LBS/SK
Lead Slurry	BJCem P100.3.01C	GELLANT WATER, GW-86	0.2000	BWOB
Lead Slurry	BJCem P100.3.01C	EXTENDER, BENTONITE	4.0000	BWOB
Lead Slurry	BJCem P100.3.01C	FOAM PREVENTER, FP-25	0.3000	BWOB
Lead Slurry	BJCem P100.3.01C	BONDING AGENT, BA-60	0.4000	BWOB
Lead Slurry	BJCem P100.3.01C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem P100.3.01C	RETARDER, SR-20	0.4000	BWOB
Tail Slurry	BJCem P50.6.02C	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem P50.6.02C	EXTENDER, BENTONITE	2.0000	BWOB
Tail Slurry	BJCem P50.6.02C	GELLANT WATER, GW-86	0.1000	BWOB
Tail Slurry	BJCem P50.6.02C	FLUID LOSS, FL-66	0.2000	BWOB
Tail Slurry	BJCem P50.6.02C	RETARDER, SR-20	0.0700	BWOB
Tail Slurry	BJCem P50.6.02C	CEMENT, CLASS G	50.0000	PCT
Displacement 2	Retarded Water	RETARDER, R-8L	0.5000	GPB
Displacement 2	Retarded Water	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement Final	Displacement Final (Water)	BIOCIDE, BIOC11139W	0.0100	GPB

# Cementing Treatment



## TREATMENT SUMMARY

Fluid	Rate (bpm)	Fluid Vol. (bbls)
IntegraGuard EZ Spacer	5.00	60.00
BJCem P100.3.01C	6.00	232.60
BJCem P50.6.02C	6.00	576.80
Retarded Water	5.00	20.00
Displacement Final (Water)	8.00	386.90

## DISPLACEMENT AND END OF JOB SUMMARY

<b>Displaced By</b>	BJ Services	<b>Amount of Cement Returned/Reversed</b>	93.00
<b>Calculated Displacement Volume (bbls)</b>	407.00	<b>Method Used to Verify Returns</b>	Visual
<b>Actual Displacement Volume (bbls)</b>	407.00	<b>Amount of Spacer to Surface</b>	60.00
<b>Did Float Hold?</b>	Yes	<b>Amount Bled Back After Job</b>	4.50
<b>Bump Plug</b>	Yes	<b>Total Volume Pumped (bbls)</b>	1,277.00
<b>Bump Plug Pressure (psi)</b>	3,500.00	<b>Top Out Cement Spotted</b>	No
<b>Were Returns Planned at Surface</b>	Yes	<b>Lost Circulation During Cement Job</b>	No
<b>Cement returns During Job</b>	Full		

# EVENT LOG



**Customer Name:** BONANZA CREEK ENERGY

**Well Name:** STATE ANTELOPE O-2-14XRLNB

**Job Type:** Long String

**Quote ID:** QUO-16416-C8D9M1

**District:** Cheyenne, WY

**Plan ID:** ORD-09567-W2N4R3

**BJ Supervisor:** Roger Acuna

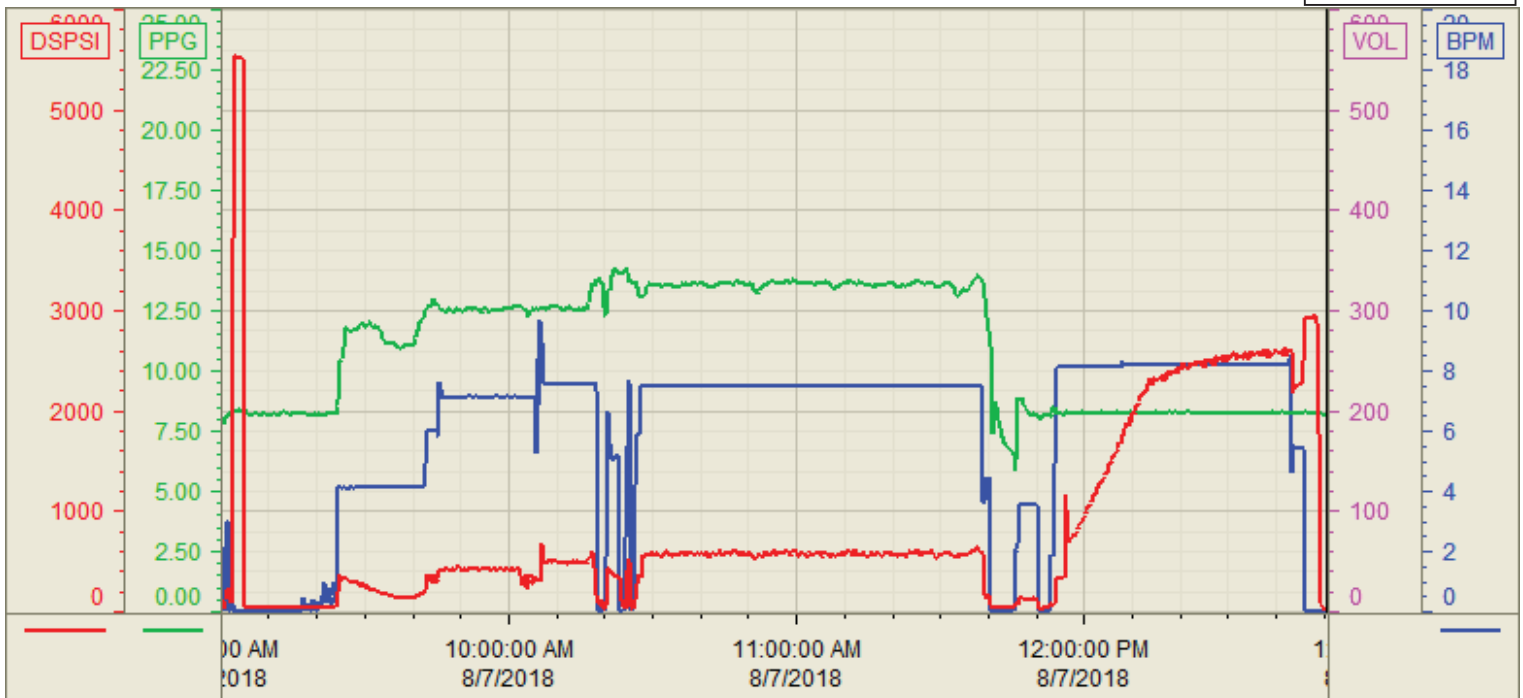
**Execution ID:** EXC-09567-W2N4R302

Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol(bbls)	Pipe Pressure(psi)	Comments
1	08/07/2018 02:05	Callout					CALLED OUT RTS 0800
2	08/07/2018 03:30	Safety Meeting					JOURNEY MANAGEMENT
3	08/07/2018 03:45	Leave Location					DEPART CHEYENNE WY CAMP
4	08/07/2018 05:30	Arrive on Location					ARRIVE TO LOCATION
5	08/07/2018 05:45	Safety Meeting					STEACS RIG IN SAFETY MEETING
6	08/07/2018 06:00	Rig Up					RIG IN IRON AND HOSES
7	08/07/2018 08:30	Safety Meeting					PRE JOB SAFETY MEETING TO
8	08/07/2018 09:00	Start Pumping	8.3300	3.00	3.00	250.00	FILL LINES FRESH WATER
9	08/07/2018 09:02	Pressure Test				5,000.00	TEST LINES 5000
10	08/07/2018 09:23	Pump Spacer	12.0000	5.00	20.00	400.00	PUMP 20BBLS EZ SPACER @ 12PPG
11	08/07/2018 09:30	Pump Spacer	11.5000	5.00	20.00	400.00	PUMP 20BBLS EZ SPACER @ 11.5PPG
12	08/07/2018 09:36	Pump Spacer	11.0000	5.00	20.00	400.00	PUMP 20BBLS EZ SPACER @ 11PPG
13	08/07/2018 09:42	Pump Lead Cement	12.5000	7.00	233.00	500.00	PUMP 233BBLS BJCEM P100.3.01C @ 12.5PPG ( 605SKS 2.15YLD 12.23GPS)
14	08/07/2018 10:16	Pump Tail Cement	13.5000	7.00	577.00	500.00	PUMP 577BBLS BJCEM P50.6.02C @ 13.5PPG ( 2195SKS 1.48YLF 7.45GPS) CALCULATED TOP 3459'
15	08/07/2018 11:44	End Pumping					SHUTDOWN, WASH PUMPS AND LINES TO THE PIT
16	08/07/2018 11:49	Drop Top Plug					DROP TOP PLUG
17	08/07/2018 11:52	Pump Displacement	8.3300	8.00	390.00	3,000.00	PUMP FRESH WATER DISPLACEMENT
18	08/07/2018 12:30	Spacer Back to Surface					SPACER TO SURFACE @ 256BBLS INTO DISPLACEMENT
19	08/07/2018 12:36	Cement Back to Surface					CEMENT TO SURFACE @ 316BBLS INTO DISPLACEMENT
20	08/07/2018 12:44	Pump Displacement	8.3300	5.00	17.00	2,500.00	SLOW RATE TO LAND PLUG
21	08/07/2018 12:46	Land Plug				3,500.00	LAND PLUG 1000PSI OVER FINAL
22	08/07/2018 12:48	Check Floats					CHECK FLOATS, FLOATS HELD
23	08/07/2018 13:00	Safety Meeting					STEACS RIG OUT SAFETY MEETING
24	08/07/2018 13:15	Rig Down					RIG OUT IRON AND HOSES
25	08/07/2018 14:00	Safety Meeting					JOURNEY MANAGEMENT
26	08/07/2018 14:15	Leave Location					DEPART LOCATION

Customer: Bonanza Creek  
 Well Number: O-2-14XPLNB  
 Lease Info: State Antelope



Print Date/Time  
 8/7/2018 1:16:46 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press(PSI)	26.0 i.	8/7/2018 12:50:30 PM i.	Cementer\DS_DISCHARGE_PRESS_DIAL
2	DH - Density (PPG)	8.14	8/7/2018 12:50:32 PM	Cementer\DENSITY2_ACTUAL_RATE
3	Combined rate (BPM)	0.00	8/7/2018 12:50:32 PM	Cementer\Flow_Combined
4				
5				

Source: Control1 1:16:40 PM