



Bonanza Creek Energy

State Antelope W42-C12-13HNB

API # 05-123-50293

Production

January 22, 2020

Quote #: QUO-41509-L7Y9L5

Execution #: EXC-24041-C9G0D102



Bonanza Creek Energy

Attention: Mr. Adam Conry | (303) 883.3351 | AConry@bonanzacrk.com

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

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

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

BJ Cementing Treatment Report

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

WELL GEOMETRY

TYPE	ID (in)	OD (in)	WEIGHT (lb/ft)	MD (ft)	TVD (ft)	EXCESS (%)	GRADE	THREAD
Previous Casing	8.92	9.63	36.00	1,602.00	1,602.00			
Open Hole	8.50	0.00	0.00	11,265.00	6,140.00	7.00		
Casing	4.78	5.50	20.00	11,258.00	6,140.00		N-80	BTC

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)	7000.00
Top Plug Provided By	Non BJ	Max Casing Pressure - Operated (psi)	5500.00
Top Plug Size	5.500	Pipe Movement	None
Centralizers Used	Yes	Job Pumped Through	Manifold
Centralizers Quantity	223.00	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

Client: Bonanza Creek Energy

Well: STATE ANTELOPE W42-C12-13HNB

Well API: 05-123-50293

Start Date: 1/22/2020

End Date: 1/22/2020



TEMPERATURE

Ambient Temperature (°F)	32.00	Slurry Cement Temperature (°F)	56.00
Mix Water Temperature (°F)	55.00		

FLUID DETAILS

FLUID TYPE	FLUID NAME	DENSITY (ppg)	YIELD (Cu Ft/sk)	H ₂ 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	11,208.00	1955	2791.0000	497.0000
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	227.7000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
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-31	0.5000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-7C	2.0000	PPB
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	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	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	WEIGHTING ADDITIVE, W-11	243.3100	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-31	0.5000	PPB
Tail Slurry	IntegraCem LITE B03-CY02X	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X		100.0000	PCT
Tail Slurry	IntegraCem LITE B03-CY02X	FLUID LOSS, FL-66	0.2000	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X	IntegraCare EC-2	3.0000	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X	RETARDER, SR-20	0.7000	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X	IntegraGuard GW-86	0.1500	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X	FLUID LOSS, FL-24	0.2000	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X	RETARDER, R-6	0.6000	BWOB
Displacement 2	Retarded Water	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement 2	Retarded Water	RETARDER, SR-61L	0.1000	GPB
Displacement Final	Displacement Final (Water)	BIOCIDE, BIOC11139W	0.0100	GPB

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	50.00
Calculated Displacement Vol (bbls)	253.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	253.00	Amt of Spacer to Surface	80.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amt Bled Back After Job	1.50
Bump Plug Pressure (psi)	3461.00	Total Volume Pumped (bbls)	810.00
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement Returns During Job	Full	Lost Circulation During Cement Job	No

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Well: STATE ANTELOPE W42-C12-13HNB

Well API: 05-123-50293

Start Date: 1/22/2020

End Date: 1/22/2020



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	01/22/2020 10:00	Callout					Customer calls with an RTS of 16:00 on 1/22/20
2	01/22/2020 13:00	Depart for Location					Crew leaves the yard to travel to location
3	01/22/2020 15:00	Rig					Waiting on rig to finish running casing and circulate
4	01/22/2020 16:30	Spot Units					
5	01/22/2020 16:40	Rig Up					Rig up everything on the ground
6	01/22/2020 18:00	Rig					Waiting on rig to finish circulating
7	01/22/2020 18:52	STEACS Briefing					Pre-job safety meeting with BJ crew, rig crew, and company man
8	01/22/2020 19:05	Rig Up					Rig up stand pipe and hose on the rig floor
9	01/22/2020 19:14	Other (See comment)	8.3400	2.60	2.00	172.00	Load lines with 2 bbls of fresh water
10	01/22/2020 19:15	Pressure Test	8.3400	0.00	0.00	5684.00	Test pumps and lines
11	01/22/2020 19:30	Pump Spacer	11.0000	4.00	20.00	124.00	Pump 20 bbls of spacer @11 ppg
12	01/22/2020 19:39	Pump Spacer	12.0000	4.00	20.00	151.00	Pump 20 bbls of spacer @12 ppg
13	01/22/2020 19:44	Pump Spacer	11.0000	4.00	20.00	111.00	Pump 20 bbls of spacer @11 ppg
14	01/22/2020 19:51	Pumping Cement	13.5000	5.70	497.00	316.00	Pump 1,955 sks of cement @13.5 ppg (Yield: 1.42 Mix Water: 7.10)
15	01/22/2020 21:21	Wash Pumps and Lines					Wash pumps and lines
16	01/22/2020 21:42	Pump Displacement	8.3400	2.60	0.00	21.00	Pump 2 bbls of retarded water ahead of the first plug
17	01/22/2020 21:44	Drop Bottom Plug	8.3400	0.00	2.00	0.00	Shut down and drop the first plug
18	01/22/2020 21:49	Pump Displacement	8.3400	2.60	2.00	22.00	Pump 3 bbls retarded water ahead of the second plug
19	01/22/2020 21:51	Drop Top Plug	8.3400	0.00	5.00	0.00	Shut down and drop the second plug
20	01/22/2020 21:53	Pump Displacement	8.3400	7.50	20.00	1024.00	Fresh water + Biocide
21	01/22/2020 22:10	Spacer Back-to-Surface	8.3400	6.00	120.00	2210.00	
22	01/22/2020 22:29	Cement Back-to-Surface	8.3400	5.50	200.00	2439.00	53 bbls cement to surface
23	01/22/2020 22:36	Other (See comment)	8.3400	2.70	238.00	2103.00	Drop rate to land the plug

Client: Bonanza Creek Energy

Well Name / API: STATE ANTELOPE W42-
C12-13HNB / 05-123-50293

Well 11208
MD:



Quote #: QUO-41509-L7Y9L5

Plan #: ORD-24041-C9G0D1

Execution #: EXC-24041-C9G0D102

24	01/22/2020 22:40	Other (See comment)	8.3400	2.70	250.00	3300.00	Burst 1st plug
25	01/22/2020 22:42	Land Plug	8.3400	2.70	253.00	3461.00	Land second plug
26	01/22/2020 22:45	Other (See comment)	8.3400	2.60	0.00	5100.00	Burst 2nd plug
27	01/22/2020 22:46	Check Floats	8.3400	0.00	0.00	0.00	Floats held (1.5 bbls back)
28	01/22/2020 22:48	STEACS Briefing					Pre-rig down safety meeting
29	01/22/2020 22:56	Rig Down					





JobMaster Program Version 5.00C1
Job Number:
Customer: Bonanza Creek
Well Name: State Antelope W42-C12-13HNB

