



Bonanza Creek Energy

State Antelope V-B-13HNB

API # 05-123-50288

Production

January 28, 2020

Quote #: QUO-41511-X1N4Q5

Execution #: EXC-24147-T8F6T002



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
CLIENT FIELD REPRESENTATIVE	Company Man	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	11,376.00	6,174.00	7.00		
Casing	4.78	5.50	20.00	11,366.00	6,174.00		P-110	BTC
Previous Casing	8.92	9.63	36.00	1,608.00	1,606.00		J-55	LTC

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)	5000.00
Top Plug Size	5.500	Pipe Movement	None
Centralizers Used	Yes	Job Pumped Through	Manifold
Centralizers Quantity	224.00	Top Connection Thread	BTC
Centralizers Type	Bow	Top Connection Size	5.5

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	YP Mud In	4
Circulation Prior to Job	Yes	YP Mud Out	4
Circulation Time (min)	3.50	Solids Present at End of Circulation	No
Lost Circulation Prior to Cement Job	No	10 sec SGS	1
Mud Density In (ppg)	9.30	10 min SGS	2
Mud Density Out (ppg)	9.30	30 min SGS	3
PV Mud In	9	Flare Prior to / during the Cement Job	No
PV Mud Out	9	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	32.00
Mix Water Temperature (°F)	60.00

Slurry Cement Temperature (°F)	61.00
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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	11,280.00	1970	2812.0000	500.8000
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	229.3000

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	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
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	RETARDER, R-31	0.5000	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	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-31	0.5000	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
Tail Slurry	IntegraCem LITE B03-CY02X	IntegraGuard GW-86	0.1500	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X	RETARDER, R-6	0.6000	BWOB
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
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	RETARDER, SR-20	0.7000	BWOB
Tail Slurry	IntegraCem LITE B03-CY02X	FOAM PREVENTER, FP-25	0.3000	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	51.00
Calculated Displacement Vol (bbls)	251.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	251.00	Amt of Spacer to Surface	60.00
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)	4871.00	Total Volume Pumped (bbls)	811.00
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement Returns During Job	Full	Lost Circulation During Cement Job	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	01/27/2020 17:30	Callout					Customer calls with an O/L time of 1:00 on 7/28/20
2	01/27/2020 22:30	Depart for Location					Leave to travel to location
3	01/28/2020 00:30	Arrive on Location					Arrive on location, rig is still running casing
4	01/28/2020 00:30	Rig					Waiting on rig to finish running casing
5	01/28/2020 04:00	STEACS Briefing					Pre-rig up safety meeting
6	01/28/2020 04:10	Spot Units					
7	01/28/2020 04:15	Rig Up					Rig up everything except stand pipe, and treating line on the floor
8	01/28/2020 05:10	Rig					Waiting on rig to finish circulating
9	01/28/2020 06:00	STEACS Briefing					Pre-job safety meeting with BJ crew, Rig crew, Company man
10	01/28/2020 06:15	Rig					Waiting on water to truck to deliver more water for the job
11	01/28/2020 07:42	Other (See comment)	8.3400	2.80	2.00	79.00	Load lines with 2 bbls of fresh water
12	01/28/2020 07:44	Pressure Test	8.3400	0.00	0.00	5500.00	
13	01/28/2020 08:00	Pump Spacer	11.0000	4.10	20.00	204.00	Pump spacer @11 ppg
14	01/28/2020 08:04	Pump Spacer	12.0000	4.10	20.00	151.00	Pump spacer @12 ppg
15	01/28/2020 08:10	Pump Spacer	11.0000	5.70	20.00	165.00	Pump spacer @11 ppg
16	01/28/2020 08:15	Pumping Cement	13.5000	6.40	500.00	431.00	Pump 1,970 sks of cement @13.5 ppg
17	01/28/2020 09:45	Wash Pumps and Lines					Wash pumps and lines
18	01/28/2020 09:54	Other (See comment)	8.3400	4.50	2.00	78.00	Pump 2 bbls of retarded water ahead of the 1st plug
19	01/28/2020 09:56	Drop Bottom Plug	8.3400	0.00	0.00	0.00	Drop 1st plug
20	01/28/2020 09:57	Other (See comment)	8.3400	3.70	3.00	63.00	Send 1st plug, pump 3 bbls of retarded water ahead of the 2nd plug
21	01/28/2020 09:58	Drop Top Plug	8.3400	0.00	0.00	0.00	Drop 2nd plug
22	01/28/2020 09:59	Pump Displacement	8.3400	9.60	0.00	1306.00	Send 2nd plug start fresh water + Biocide displacement
23	01/28/2020 10:11	Pump Displacement	8.3400	9.60	100.00	2416.00	
24	01/28/2020 10:17	Spacer Back-to-Surface	8.3400	9.60	140.00	2950.00	60 bbls of spacer back to surface

Client: Bonanza Creek Energy

Well Name / API: STATE ANTELOPE V-B-13HNB / 05-123-50288

Well 11280
MD:



Quote #: QUO-41511-X1N4Q5

Plan #: ORD-24147-T8F6T0

Execution #: EXC-24147-T8F6T002

25	01/28/2020 10:23	Cement Back-to-Surface	8.3400	9.60	200.00	2930.00	51 bbls of cement to surface
26	01/28/2020 10:27	Pump Displacement	8.3400	2.80	240.00	2109.00	Drop rate to land the plug
27	01/28/2020 10:31	Other (See comment)	8.3400	2.80	248.00	3304.00	Burst 1st plug
28	01/28/2020 10:33	Land Plug	8.3400	2.80	251.00	4871.00	Land, and burst 2nd plug
29	01/28/2020 10:35	End Pumping	8.3400	0.00	0.00	2100.00	Shut down as soon as we burst the plug
30	01/28/2020 10:36	Check Floats	8.3400	0.00	0.00	0.00	Floats held (1.5 bbls back)
31	01/28/2020 10:38	STEACS Briefing					Pre-rig down safety meeting
32	01/28/2020 10:45	Rig Down					Rig everything down



JobMaster Program Version 5.00C1

Job Number:

Customer: Bonanza Creek

Well Name: State Antelope V-B-13HNB

Production

