



Bonanza Creek Energy

Latham K31-1-12XRLNB

API # 05-123-50034

Production

September 27, 2019

Quote #: QUO-36482-T5D9F0

Execution #: EXC-21408-S1W5H602



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	Chad Johnson	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 (%)
Previous Casing	8.92	9.63	36.00	1,622.00	1,622.00	
Casing	4.78	5.50	20.00	17,541.00	6,270.00	
Open Hole	8.50	0.00	0.00	17,552.00	6,270.00	7.00

HARDWARE

Bottom Plug Used?	No	Centralizers Type	Rigid
Top Plug Used?	Yes	Landing Collar Depth (ft)	
Top Plug Provided By	Non BJ	Pipe Movement	None
Top Plug Size	5.500	Job Pumped Through	Manifold
Centralizers Used	Yes	Top Connection Thread	BTC
Centralizers Quantity	136.00	Top Connection Size	5.5

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud Out	10
Circulation Prior to Job	Yes	YP Mud In	6
Circulation Time (min)	180.00	YP Mud Out	6
Circulation Rate (bpm)	8.00	Solids Present at End of Circulation	No
Circulation Volume (bbls)	1440.00	10 sec SGS	3
Lost Circulation Prior to Cement Job	No	10 min SGS	4
Mud Density In (ppg)	9.70	30 min SGS	5
Mud Density Out (ppg)	9.70	Flare Prior to / during the Cement Job	No
PV Mud In	10	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	74.00	Mix Water Temperature (°F)	65.00
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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				26.0000
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	12.0000			0.00				28.0000
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	11.0000			0.00				26.0000
Lead Slurry	BJCem P100.3.01C	12.5000	2.1529	12.23	0.00	5,000.00	590	1271.0000	226.2000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4772	7.45	5,000.00	12,538.00	2085	3080.0000	548.5000
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	368.1000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
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	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	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	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	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	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	RETARDER, R-7C	2.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	WEIGHTING ADDITIVE, W-11	243.3100	PPB
Lead Slurry	BJCem P100.3.01C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem P100.3.01C	IntegraGuard GW-86	0.2000	BWOB
Lead Slurry	BJCem P100.3.01C	EXTENDER, BENTONITE	4.0000	BWOB
Lead Slurry	BJCem P100.3.01C	BONDING AGENT, BA-60	0.4000	BWOB
Lead Slurry	BJCem P100.3.01C	RETARDER, SR-20	0.3000	BWOB
Lead Slurry	BJCem P100.3.01C	FOAM PREVENTER, FP-25	0.3000	BWOB
Lead Slurry	BJCem P100.3.01C	FLUID LOSS, FL-24	0.3000	BWOB
Lead Slurry	BJCem P100.3.01C	IntegraSeal POLI	0.1300	LBS/SK
Tail Slurry	BJCem P50.6.02C	EXTENDER, BENTONITE	2.0000	BWOB
Tail Slurry	BJCem P50.6.02C	FLUID LOSS, FL-66	0.2000	BWOB
Tail Slurry	BJCem P50.6.02C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem P50.6.02C	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	CEMENT, CLASS G	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	IntegraGuard GW-86	0.1000	BWOB
Tail Slurry	BJCem P50.6.02C	RETARDER, SR-20	0.0700	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

Displaced By	BJ	Amt of Cement Returned / Reversed	100.00
Calculated Displacement Vol (bbls)	388.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	388.00	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	2.50
Bump Plug Pressure (psi)	2000.00	Total Volume Pumped (bbls)	1264.00
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 - Isaiah Spigner

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	09/26/2019 06:00	Callout					Crew called out, requested on location at 1400.
2	09/26/2019 13:00	Arrive on Location					Crew arrived on location.
3	09/26/2019 13:05	STEACS Briefing					Rig up safety meeting.
4	09/26/2019 13:20	Spot Units					Spotted all units.
5	09/26/2019 13:30	Rig Up					Rigged up all equipment.
6	09/26/2019 15:00	Client					Waited on rig to finish running casing and to circulate the well.
7	09/26/2019 22:30	STEACS Briefing					Safety meeting with rig and cement crews.
8	09/26/2019 22:40	Prime Up	8.3400	3.00	5.00	200.00	Primed up the truck and filled lines.
9	09/26/2019 22:45	Pressure Test					Tested lines to 6000 psi.
10	09/26/2019 22:47	Pump Spacer		6.00	80.00	200.00	Pumped 26 BBL Spacer @ #11, 28 BBL Spacer @ #12, 26 BBL Spacer @ #11.
11	09/26/2019 23:02	Pump Lead Cement	12.5000	8.00	226.00	450.00	Pumped Lead Cement (590 sacks, 2.15 yield, 12.23 g/s)
12	09/26/2019 23:39	Pump Tail Cement	13.5000	8.00	550.00	600.00	Pumped 550 BBL Tail Cement (2085 sacks, 2.15 yield, 7.45 g/s)
13	09/27/2019 00:54	Other (See comment)					Shut down.
14	09/27/2019 00:55	Wash Pumps and Lines					Washed pumps and lines to pit.
15	09/27/2019 01:03	Drop Top Plug					Drop top plug.
16	09/27/2019 01:04	Pump Displacement	8.3300	8.00	370.00		Pumped displacement.
17	09/27/2019 01:25	Spacer Back-to-Surface					80 BBL of spacer to surface.
18	09/27/2019 01:37	Cement Back-to-Surface					Cement to surface. 100 BBLS Back.
19	09/27/2019 01:48	Other (See comment)	8.3400	3.00	18.00		Slow rate to land plug
20	09/27/2019 01:52	Land Plug					Landed plug at 2000psi. Took to 2700 psi, pressured up to 5000 psi to rupture plug, and pumped 5 bbls.

Client: Bonanza Creek Energy

Well Name / API: LATHAM #K31-1-12XRLNB / 05-123-50034

Well MD: 17552



Quote #: QUO-36482-T5D9F0

Plan #: ORD-21408-S1W5H6

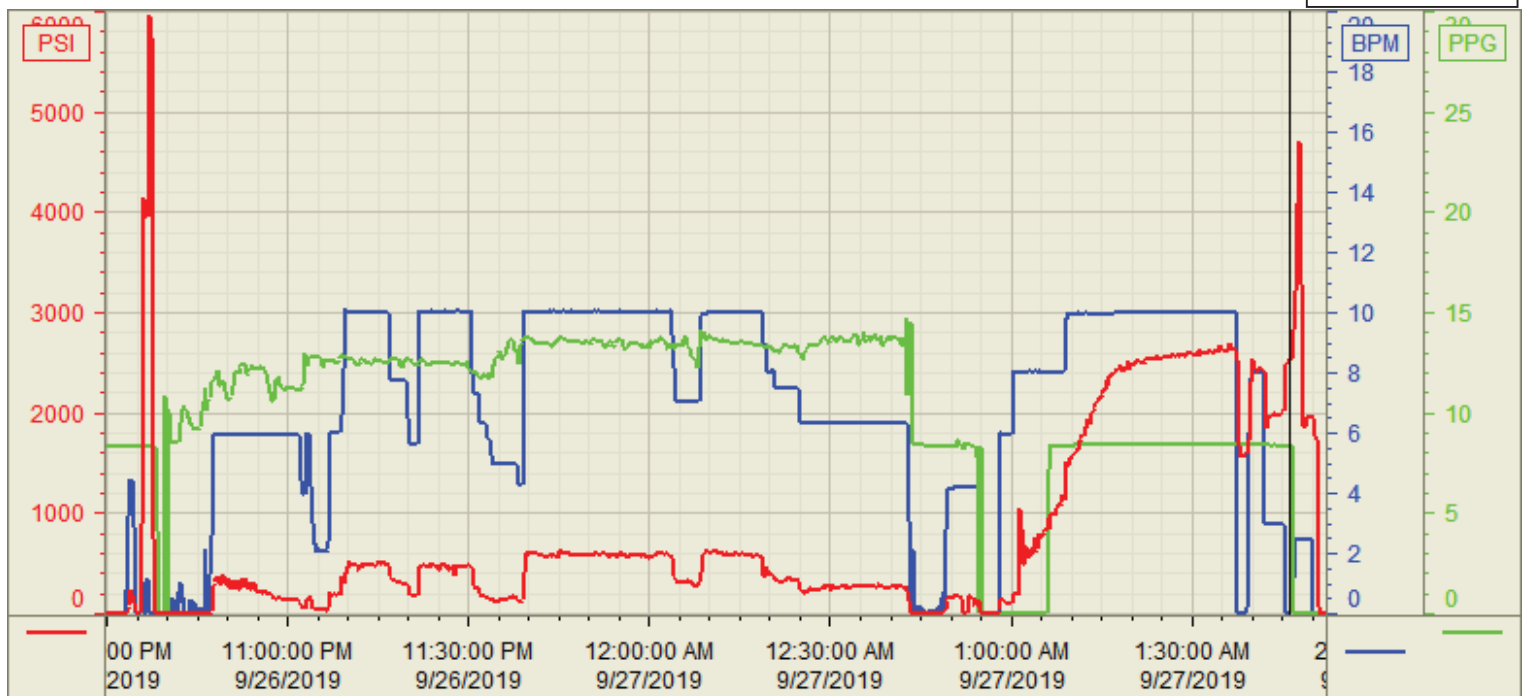
Execution #: EXC-21408-S1W5H602

21	09/27/2019 01:56	Check Floats					Checked floats, floats holding. 2.5 BBLS back.
22	09/27/2019 02:00	STEACS Briefing					Rig down safety meeting.
23	09/27/2019 02:15	Rig Down					Rigged down all units and equipment.
24	09/27/2019 04:00	Leave Location					Departed from location.

Customer: BONANZA CREEK
Well Number: K31-1-12XRLNB
Lease Info: LATHAM



Print Date/Time
9/27/2019 2:33:14 AM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	2527.3 i.	9/27/2019 1:46:06 AM i.	CementerDS_DISCHARGE_PRESS_DIAL
2	Recirc - Density (PPG)	8.36 i.	9/27/2019 1:46:06 AM i.	CementerDENSITY_ACTUAL_RATE
3	Combined Rate	0.00 i.	9/27/2019 1:46:06 AM i.	CementerFlow_Combined
4				
5				

Source: Control1 2:33:10 AM