



Bonanza Creek Energy

Latham P-1-12XRLNC

API # 05-123-50036

Production

October 1, 2019

Quote #: QUO-37118-Q5K0R5

Execution #: EXC-21518-H8D5J602



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	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 (%)
Casing	4.78	5.50	20.00	17,241.00	6,350.00	
Open Hole	8.50	0.00	0.00	17,251.00	6,350.00	7.00
Previous Casing	8.92	9.63	36.00	1,627.00	1,627.00	

HARDWARE

Bottom Plug Used?	No	Landing Collar Depth (ft)	
Top Plug Used?	Yes	Pipe Movement	None
Top Plug Provided By	Non BJ	Job Pumped Through	Manifold
Top Plug Size	5.500	Top Connection Thread	LTC
Centralizers Used	Yes	Top Connection Size	5.5
Centralizers Quantity	153.00		

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud Out	7
Circulation Prior to Job	Yes	YP Mud In	5
Circulation Time (min)	180.00	YP Mud Out	5
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)	9.60	30 min SGS	5
Mud Density Out (ppg)	9.60	Flare Prior to / during the Cement Job	No
PV Mud In	7	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	55.00	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				33.0000
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	12.0000			0.00				34.0000
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	11.0000			0.00				33.0000
Lead Slurry	BJCem P100.3.01C	12.5000	2.1382	11.36	0.00	5,000.00	594	1271.0000	226.2000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4772	7.45	5,000.00	12,256.00	2040	3014.0000	536.7000
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	361.8000

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	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
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	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	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	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
Lead Slurry	BJCem P100.3.01C	RETARDER, SR-20	0.3000	BWOB
Lead Slurry	BJCem P100.3.01C	FLUID LOSS, FL-24	0.5000	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	XCem-12	6.0000	BWOB
Lead Slurry	BJCem P100.3.01C	EXTENDER, BENTONITE	4.0000	BWOB
Lead Slurry	BJCem P100.3.01C	IntegraSeal POLI	0.1300	LBS/SK
Lead Slurry	BJCem P100.3.01C	IntegraGuard GW-86	0.2000	BWOB
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	RETARDER, SR-20	0.0700	BWOB
Tail Slurry	BJCem P50.6.02C	CEMENT, CLASS G	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	FLUID LOSS, FL-66	0.2000	BWOB
Tail Slurry	BJCem P50.6.02C	IntegraGuard GW-86	0.1000	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	100.00
Calculated Displacement Vol (bbls)	382.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	387.00	Amt of Spacer to Surface	100.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	No	Amt Bled Back After Job	2.50
Were Returns Planned at Surface	Yes	Total Volume Pumped (bbls)	1256.00
Cement Returns During Job	Full	Top Out Cement Spotted	No
		Lost Circulation During Cement Job	No

BJ Cementing Event Log

Long String - Cheyenne, WY - Chad Johnson

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	09/30/2019 17:00	Callout					Crew called out requested on location for 0100
2	09/30/2019 23:59	Arrive on Location					Crew arrived on location
3	10/01/2019 00:10	STEACS Briefing					Safety meeting
4	10/01/2019 00:25	Spot Units					Spotted all units
5	10/01/2019 00:40	Rig Up					Rigged up all equipment
6	10/01/2019 02:00	Client					Waiting on rig to circulate the well
7	10/01/2019 03:45	STEACS Briefing					Safety meeting
8	10/01/2019 04:13	Prime Up	8.3400	3.00	5.00	100.00	Fill lines
9	10/01/2019 04:15	Pressure Test					Pressure test lines to 6000 psi
10	10/01/2019 04:22	Pump Spacer		6.00	100.00	150.00	Pump 33 bbls spacer @ 11 ppg, 34 bbls @ 12 ppg, 33 bbls @ 11 ppg
11	10/01/2019 04:39	Pump Lead Cement	12.5000	8.00	226.00	350.00	Pump lead cement (594 sks, 2.14 Y, 11.36 gal/sk)
12	10/01/2019 05:11	Pump Tail Cement	13.5000	8.00	538.00	350.00	Pump tail cement (2040 sks, 1.48 Y, 7.45 gal/sk)
13	10/01/2019 06:23	Other (See comment)					Shutdown
14	10/01/2019 06:25	Wash Pumps and Lines					Wash pumps and lines to pit
15	10/01/2019 06:32	Drop Top Plug					Drop top plug
16	10/01/2019 06:33	Pump Displacement	8.3400	8.00	370.00	2500.00	Pump displacement
17	10/01/2019 06:53	Spacer Back-to-Surface					Spacer back to surface, 100 bbls spacer to surface
18	10/01/2019 07:04	Cement Back-to-Surface					Cement back to surface, bbls cement to surface
19	10/01/2019 07:13	Other (See comment)	8.3400	3.00	17.00	2200.00	Slow rate
20	10/01/2019 07:27	Other (See comment)					Plug did not land, pumped 5 bbls over calculated displacement as per customer request
21	10/01/2019 07:30	Check Floats					Check floats, floats holding, 2.5 bbls back
22	10/01/2019 07:40	STEACS Briefing					Safety meeting
23	10/01/2019 08:00	Rig Down					Rigged down all equipment
24	10/01/2019 10:00	Leave Location					Crew departed location

Client: Bonanza Creek Energy

Well Name / API: LATHAM #P-1-12XRLNC / 05-123-50036

Well MD: 17251



Quote #: QUO-37118-Q5K0R5

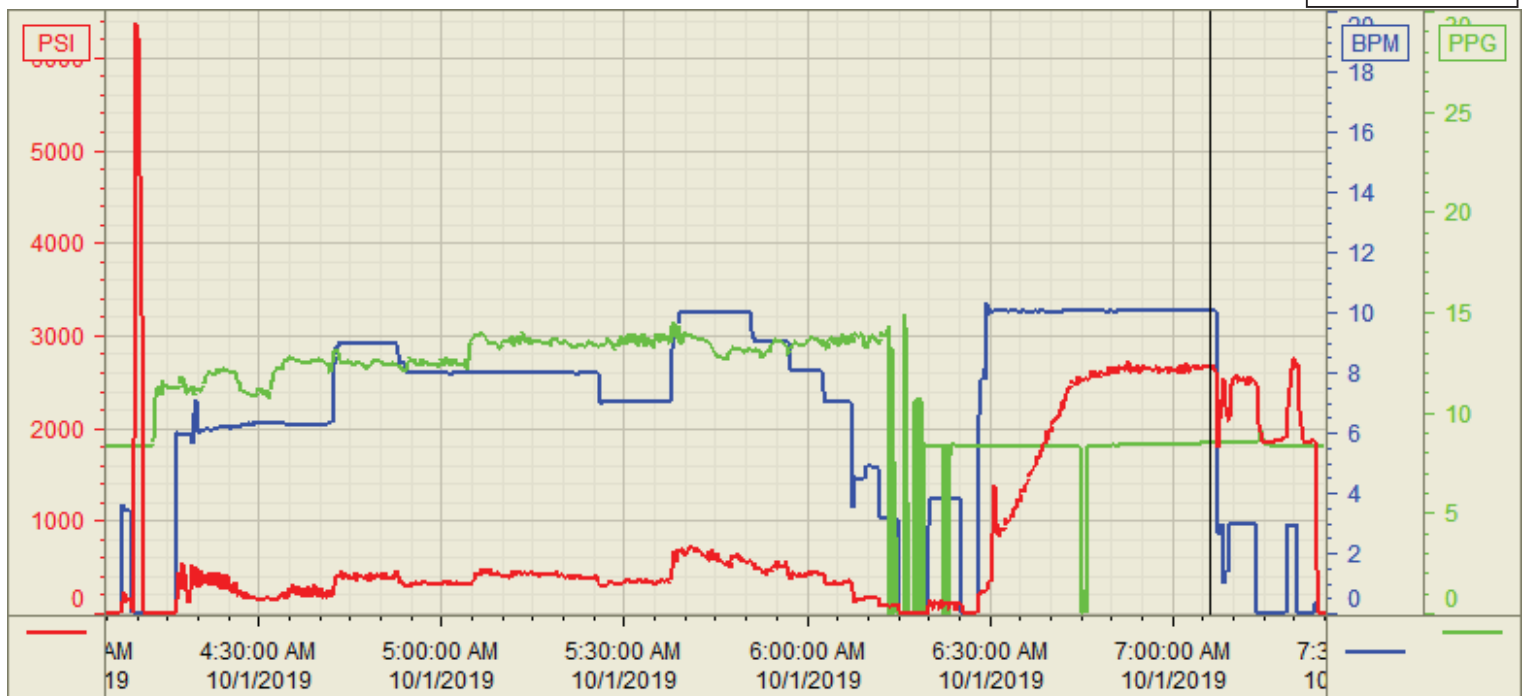
Plan #: ORD-21518-H8D5J6

Execution #: EXC-21518-H8D5J602

Customer: Bonanza Creek
Well Number: P-1-12XRLNC
Lease Info: Latham



Print Date/Time
10/1/2019 7:29:42 AM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	2676.0	10/1/2019 7:06:15 AM	CementerDS_DISCHARGE_PRESS_DIAL
2	Recirc - Density (PPG)	8.48	10/1/2019 7:06:11 AM	CementerDENSITY_ACTUAL_RATE
3	Combined Rate	10.06	10/1/2019 7:06:13 AM	CementerFlow_Combined
4				
5				

Source: Control1 7:29:36 AM