



HighPoint Operating Corporation

FOX CREEK 34-0164B

API # 05-123-49947

Production

December 02, 2019

Quote #: QUO-39135-L1C7Q9

Execution #: EXC-22590-S5V7L602



HighPoint Operating Corporation

Attention: Mr. Matthew Schwartz | (303) 312-8142 | mschwartz@hpres.com

HighPoint Operating Corporation | 1099 18th St. | Denver, CO. 80202

Dear Mr. Matthew Schwartz,

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) 365-9038 | jason.creel@bjservices.com

Field Office 1716 East Allison Rd., Cheyenne WY, 82007
Phone: (307) 459-6487

Sales Office 999 18th St. Suite 1200 Denver, CO 80202
Phone: (281) 408-2361

BJ Cementing Treatment Report

SERVICE SUPERVISOR	Chad Johnson	RIG	Workover
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
Open Hole	6.13	0.00	0.00	17,999.00		10.00	
Previous Casing	6.37	7.00	23.00	8,245.00			J-55
Casing	4.00	4.50	11.60	18,018.00			P-110

HARDWARE

Bottom Plug Used?	No	Centralizers Quantity	126.00
Top Plug Used?	Yes	Centralizers Type	Rigid
Top Plug Provided By	Non BJ	Landing Collar Depth (ft)	18,000
Top Plug Size	4.500	Pipe Movement	None
Centralizers Used	Yes	Job Pumped Through	Manifold

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Solids Present at End of Circulation	No
Circulation Prior to Job	No	Flare Prior to / during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	35.00	Mix Water Temperature (°F)	60.00
---------------------------------	-------	-----------------------------------	-------

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	Fresh Water	8.3300			2,485.00				20.0000
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	10.0000			7,185.00				20.0000
Spacer / Pre Flush / Flush	IntegraGuard Star Conc.	10.0000			1,978.00				30.0000
Tail Slurry	BJCem P50.6.01C	13.5000	1.5937	7.95	3,500.00	14,520.00	970	1546.0000	275.3000
Displacement 1	Retarded Water	8.3300			17,357.00			0.0000	10.0000
Displacement Final	Water + Chems	8.3300			0.00			0.0000	269.7000

Client: HighPoint Operating Corporation

Well: FOX CREEK #34-0164B

Well API: 05-123-49947

Start Date: 12/2/2019

End Date: 12/2/2019



FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Spacer / Pre Flush / Flush	Fresh Water	DYE,LIQUID,BLUE	0.1000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	RETARDER, SR-20	0.6000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	IntegraGuard GW-86	0.8000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SAND, S-8, Silica Flour, 200 Mesh	111.9500	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SPACER SURFACTANT, SS-247	0.5000	GPB
Spacer / Pre Flush / Flush	IntegraGuard Star Conc.	RETARDER, SR-20	0.6000	PPB
Spacer / Pre Flush / Flush	IntegraGuard Star Conc.	SAND, S-8, Silica Flour, 200 Mesh	106.7800	PPB
Spacer / Pre Flush / Flush	IntegraGuard Star Conc.	IntegraGuard STAR II concentrate	12.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard Star Conc.	SPACER SURFACTANT, SS-247	0.5000	GPB
Spacer / Pre Flush / Flush	IntegraGuard Star Conc.	DYE,LIQUID,BLUE	0.0333	GPB
Tail Slurry	BJCem P50.6.01C	EXTENDER, BENTONITE	4.0000	BWOB
Tail Slurry	BJCem P50.6.01C	CEMENT, CLASS G	50.0000	PCT
Tail Slurry	BJCem P50.6.01C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem P50.6.01C	BONDING AGENT, BA-90	3.0000	LBS/SK
Tail Slurry	BJCem P50.6.01C	IntegraGuard GW-86	0.1000	BWOB
Tail Slurry	BJCem P50.6.01C	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem P50.6.01C	IntegraCare EC-2	3.0000	BWOB
Tail Slurry	BJCem P50.6.01C	FLUID LOSS, FL-24	0.4000	BWOB
Tail Slurry	BJCem P50.6.01C	RETARDER, SR-20	0.3000	BWOB
Displacement Final	Water + Chems	CORROSION INHIBITORS, CI-27	0.2100	GPB
Displacement Final	Water + Chems	BIOCIDE, BIOC11139W	0.0210	GPB
Displacement Final	Water + Chems	OXYGEN SCAVENGER, OS-30	0.1680	GPB

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	0.00
Calculated Displacement Vol (bbls)	279.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	282.00	Amt of Spacer to Surface	0.00
Cement Returns During Job	None	Pressure Left on Casing (psi)	250.00
Bump Plug	No	Amt Bled Back After Job	0.00
Bump Plug Pressure (psi)	0.00	Total Volume Pumped (bbls)	682.00
Were Returned Planned at Surface	Yes	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	12/02/2019 09:00	Callout					Crew called out requested on location 1300
2	12/02/2019 12:45	Arrive on Location					Crew arrived on location
3	12/02/2019 12:46	STEACS Briefing					Safety meeting
4	12/02/2019 13:00	Spot Units					Spot units
5	12/02/2019 13:05	Rig Up					Rigged up all equipment
6	12/02/2019 14:30	Client					Waiting on client
7	12/02/2019 15:45	STEACS Briefing					Safety meeting
8	12/02/2019 16:07	Prime Up	8.3400	3.00	3.00	400.00	Fill lines
9	12/02/2019 16:09	Pressure Test					Pressure test lines to 6000 psi
10	12/02/2019 16:11	Pump Spacer	8.3400	4.00	20.00	350.00	Pump 20 bbls water spacer
11	12/02/2019 16:17	Pump Spacer	10.0000	4.00	20.00	350.00	Pump 20 bbls spacer
12	12/02/2019 16:21	Pump Spacer	10.0000	4.00	30.00	350.00	Pump 30 bbls spacer
13	12/02/2019 16:29	Pump Tail Cement	13.5000	6.00	275.00	300.00	Pump cement (970 sks, 1.59 Y, 7.95 gal/sk)
14	12/02/2019 17:18	Other (See comment)					Shutdown
15	12/02/2019 17:19	Wash Pumps and Lines					Wash pumps and lines
16	12/02/2019 17:32	Drop Top Plug					Drop top plug
17	12/02/2019 17:33	Pump Displacement	8.3400	4.00	150.00	900.00	Pump displacement
18	12/02/2019 18:08	Other (See comment)	8.3400	3.00	129.00	450.00	Slow rate
19	12/02/2019 19:28	Other (See comment)	8.3400			400.00	Plug at perms pump 3 bbls over and shutdown
20	12/02/2019 19:30	STEACS Briefing					Safety meeting
21	12/02/2019 19:45	Rig Down					Rigged down all equipment
22	12/02/2019 21:00	Leave Location					Crew departed location

Client: HighPoint Operating Corporation

Well Name / API: FOX CREEK #34-0164B / 05-123-49947

Well 17999
MD:



Quote #: QUO-39135-L1C7Q9

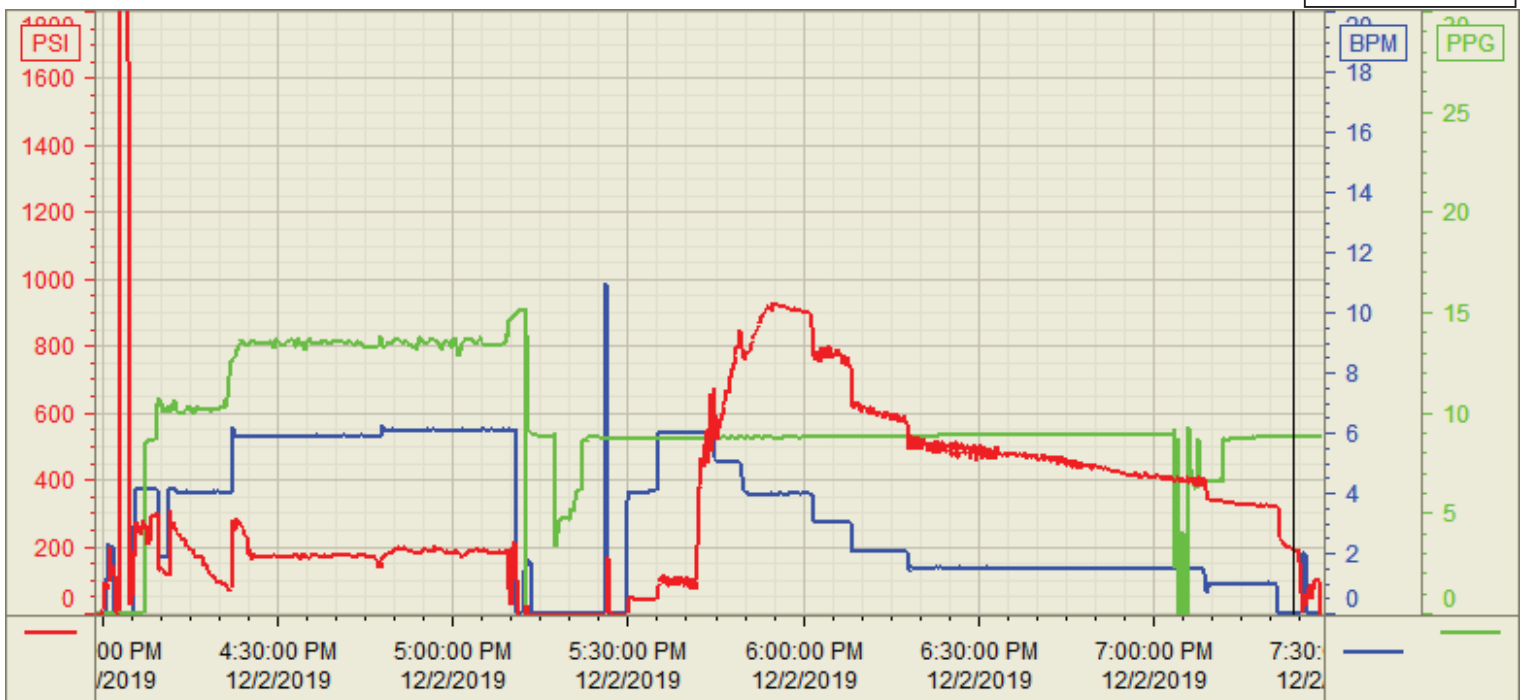
Plan #: ORD-22590-S5V7L6

Execution #: EXC-22590-S5V7L602

Customer: HighPoint
 Well Number: 34-0164B
 Lease Info: Fox Creek



Print Date/Time
 12/2/2019 7:28:56 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	193.5 i.	12/2/2019 7:23:59 PM i.	Cementer\DS_DISCHARGE_PRESS_DIAL
2	Recirc - Density (PPG)	8.77	12/2/2019 7:23:55 PM	Cementer\DENSITY_ACTUAL_RATE
3	Combined Rate	0.00 i.	12/2/2019 7:23:59 PM i.	Cementer\Flow_Combined
4				
5				

Source: Control1 7:28:51 PM