



# HighPoint Operating Corporation

Fox Creek 34-0164B

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API # 05-123-49947

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Intermediate

October 30, 2019

Quote #: QUO-38278-Q6R7H4

Execution #: EXC-22164-X6C0Q202



# HighPoint Operating Corporation

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

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

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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@bjsservices.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

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# BJ Cementing Treatment Report

SERVICE SUPERVISOR	Eric Dewit	RIG	Savanna 802
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 (%)
Open Hole	8.75	0.00	0.00	8,309.00		20.00
Previous Casing	8.92	9.63	36.00	1,546.00		
Casing	6.37	7.00	23.00	8,245.00		

## HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	8,200.00
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	4000.00
Top Plug Size	7.000	Max Casing Pressure - Operated (psi)	3000.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	12.00	Job Pumped Through	Manifold
Centralizers Type	Bow	Top Connection Thread	LTC
Landing Collar Depth (ft)	8,200	Top Connection Size	7

## CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Mud Density In (ppg)	9.70
Circulation Prior to Job	No	Mud Density Out (ppg)	9.70
Circulation Time (min)	1.00	Solids Present at End of Circulation	No
Circulation Rate (bpm)	5.00	Flare Prior to / during the Cement Job	No
Circulation Volume (bbls)	300.00	Gas Present	No
Lost Circulation Prior to Cement Job	No		

## TEMPERATURE

Ambient Temperature (°F)	8.00	Slurry Cement Temperature (°F)	46.00
Mix Water Temperature (°F)	45.00		

## FLUID DETAILS

FLUID TYPE	FLUID NAME	DENSITY (ppg)	YIELD (Cu Ft/sk)	H <sub>2</sub> 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			2,006.00				40.0000
Lead Slurry	BJCem I100.3.01C	12.5000	2.0726	11.83	3,500.00	4,221.00	370	767.0000	136.6000
Tail Slurry	BJCem I100.6.01C	15.8000	1.1570	4.99	7,721.00	500.00	90	105.0000	18.5000
Displacement Final	Water	8.3300			0.00			0.0000	321.9000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Lead Slurry	BJCem I100.3.01C	FLUID LOSS, FL-24	0.3000	BWOB
Lead Slurry	BJCem I100.3.01C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem I100.3.01C	FOAM PREVENTER, FP-25	0.3000	BWOB
Lead Slurry	BJCem I100.3.01C	BONDING AGENT, BA-60	0.3000	BWOB
Lead Slurry	BJCem I100.3.01C	RETARDER, SR-20	0.3000	BWOB
Tail Slurry	BJCem I100.6.01C	RETARDER, R-6	0.3000	BWOB
Tail Slurry	BJCem I100.6.01C	DISPERSANT, CD-31	0.2000	BWOB
Tail Slurry	BJCem I100.6.01C	CEMENT, CLASS G	100.0000	PCT
Tail Slurry	BJCem I100.6.01C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem I100.6.01C	FLUID LOSS, FL-24	0.2000	BWOB
Tail Slurry	BJCem I100.6.01C	BONDING AGENT, BA-60	0.2000	BWOB

## DISPLACEMENT AND END OF JOB SUMMARY

<b>Displaced By</b>	BJ	<b>Amt of Cement Returned / Reversed</b>	0.00
<b>Calculated Displacement Vol (bbls)</b>	322.00	<b>Method Used to Verify Returns</b>	Visual
<b>Actual Displacement Vol (bbls)</b>	322.00	<b>Amt of Spacer to Surface</b>	0.00
<b>Did Float Hold?</b>	Yes	<b>Pressure Left on Casing (psi)</b>	0.00
<b>Bump Plug</b>	Yes	<b>Amt Bled Back After Job</b>	2.50
<b>Bump Plug Pressure (psi)</b>	2004.00	<b>Total Volume Pumped (bbls)</b>	518.00
<b>Were Returns Planned at Surface</b>	No	<b>Top Out Cement Spotted</b>	No
<b>Cement Returns During Job</b>	None	<b>Lost Circulation During Cement Job</b>	No

# BJ Cementing Event Log

Intermediate - Cheyenne, WY - Eric Dewit

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	10/29/2019 09:00	Callout					Customer calls with an RTS of 15:00 on 10/29/19
2	10/29/2019 09:00	Other (See comment)					Crew get equipment and materials ready to travel to location
3	10/29/2019 13:30	Depart for Location					Crew leaves to travel to location
4	10/29/2019 14:30	Arrive on Location					Arrive on location rig is still running casing
5	10/29/2019 14:30	STEACS Briefing					Pre-rig up safety meeting
6	10/29/2019 14:40	Spot Units					Spot trucks
7	10/29/2019 14:50	Rig Up					Rig up
8	10/29/2019 15:50	Rig					Waiting on the rig to finish running casing, and circulate
9	10/29/2019 20:30	STEACS Briefing					Pre-job safety meeting with BJ crew, rig crew, and company man
10	10/29/2019 20:45	Rig Up					Rig up cement head on rig floor
11	10/29/2019 21:15	Other (See comment)	8.3400	2.80	2.00	0.00	Pump 2 bbls of fresh water ahead to load lines
12	10/29/2019 21:33	Pressure Test	8.3400	0.00	0.00	4300.00	
13	10/29/2019 21:40	Pump Spacer	8.3400	5.30	40.00	579.00	Pump 40 bbls of fresh water ahead
14	10/29/2019 21:52	Pump Lead Cement	12.5000	5.30	136.00	616.00	Pump 370 sks of lead cement @12.5 ppg (Yield: 2.07 mix water: 11.83)
15	10/29/2019 22:21	Pump Tail Cement	15.8000	4.00	18.50	172.00	Pump 90 sks of tail cement @15.8 ppg (Yield: 1.15 Mix water: 4.99)
16	10/29/2019 22:30	Drop Top Plug					Shut down drop top plug
17	10/29/2019 22:45	Pump Displacement	8.3400	7.40	0.00	314.00	Send plug. start fresh water displacement
18	10/29/2019 22:58	Pump Displacement	8.3400	7.40	100.00	657.00	Pump displacement
19	10/29/2019 23:08	Equipment Issue			174.00	0.00	Had to shut down due to one of the valves on the 2nd water tank was broke, had to run a line from a different valve on the tank
20	10/29/2019 23:37	Pump Displacement	8.3400	7.40		1947.00	Start pumping again
21	10/29/2019 23:57	Pump Displacement	8.3400	2.80	300.00	1247.00	Drop rate to land the plug
22	10/30/2019 00:03	Land Plug	8.3400	2.80	322.80	2004.00	Land plug, with 1480 psi, Bump up to 2004
23	10/30/2019 00:08	Check Floats	8.3400	0.00	0.00	0.00	Check floats, floats held (2.5 bbls back)
24	10/30/2019 00:11	STEACS Briefing					Pre-rig down safety meeting
25	10/30/2019 00:20	Rig Down					Rig everything down
26	10/30/2019 01:10	Leave Location					

Client: HighPoint Operating Corporation

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

Well 8221  
MD:



Quote #: QUO-38278-Q6R7H4

Plan #: ORD-22164-X6C0Q2

Execution #: EXC-22164-X6C0Q202



JobMaster Program Version 4.02C1  
Job Number: 19113  
Customer: HighPoint  
Well Name: Fox Creek 34-0164B

### Intermediate (CPF-074)

