



# HighPoint Operating Corporation

## Intermediate Post-Job Report

---

Critter Creek 15-6104BE (API 05-123-47302)

S:15 T:11N R:63W Weld, CO

Quote #:

I Execution #:

---



# HighPoint Operating Corporation

Attn: Mr. Matthew Schwartz | (303) 293-9100 | [mschwartz@hpres.com](mailto:mschwartz@hpres.com)

HighPoint Resources | 1099 18th ST, Suite 2300 | Denver, CO 80202

---

Dear Mr. 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,

Karl Griesser

Field Engineer I | (713) 829-7498 | [karl.griesser@bjservices.com](mailto:karl.griesser@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

---

# Cementing Treatment



<b>Start Date</b>	8/24/2018	<b>Project ID</b>	PRJ1009976
<b>End Date</b>	8/24/2018	<b>Field Ticket#</b>	FT-10162-D1X5P60202-68494
<b>Client</b>	HighPoint Operating Corporation	<b>Well</b>	CRITTER CREEK 15-6104BE
<b>Service Sup.</b>	Andrew Hyde	<b>API#</b>	05-123-47302
<b>District</b>	Cheyenne, WY	<b>County</b>	WELD
<b>Type of Job</b>	Intermediate	<b>State/Province</b>	CO
<b>Execution ID</b>	EXC-10162-D1X5P602	<b>Rig</b>	Cade 24

## WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)	Grade
Previous Casing	8.92	9.63	36.00	1,551.00	1,551.00		
Open Hole	8.75			7,960.00	7,329.00	18.00	
Casing	6.37	7.00	23.00	7,945.00	7,329.00		J-55

**Shoe Length (ft):** 41.00

## HARDWARE

<b>Bottom Plug Used?</b>	No	<b>Landing Collar Depth (ft)</b>	7,904
<b>Top Plug Used?</b>	Yes	<b>Tool Type</b>	Float Collar
<b>Top Plug Provided By</b>	Non BJ	<b>Tool Depth (ft)</b>	7,904.00
<b>Top Plug Size</b>	7.000	<b>Pipe Movement</b>	None
<b>Centralizers Used</b>	Yes	<b>Top Connection Thread</b>	LTC
<b>Centralizers Quantity</b>	12.00	<b>Top Connection Size</b>	7
<b>Centralizers Type</b>	Bow		

## CIRCULATION PRIOR TO JOB

<b>Well Circulated By</b>	Rig	<b>Solids Present at End of Circulation</b>	No
<b>Circulation Prior to Job</b>	Yes	<b>10 sec SGS</b>	4.00
<b>Lost Circulation Prior to Cement Job</b>	No	<b>10 min SGS</b>	6.00
<b>Mud Density In (ppg)</b>	9.90		
<b>Mud Density Out (ppg)</b>	9.90	<b>Flare Prior to/during the Cement Job</b>	No
<b>PV Mud In</b>	9	<b>Gas Present</b>	No
<b>PV Mud Out</b>	9		
<b>YP Mud In</b>	5		
<b>YP Mud Out</b>	5		

# Cementing Treatment



## TEMPERATURE

Ambient Temperature (°F)	86.00	Flow Line Temperature (°F)	113.00
Mix Water Temperature (°F)	65.00		

## BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Planned Top of Fluid (Ft)	Length (Ft)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	11.0000			627.00				20.0000
Lead Slurry	BJCem I100.3.01C	12.5000	2.0735	11.83	1,300.00	6160	505	1,091.0000	194.1000
Tail Slurry	BJCem I100.6.01C	15.8000	1.1550	4.98	7,460.00	500	87	98.0000	17.4000
Displacement Final	Water	8.3300			0.00			0.0000	311.7000

Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SAND, S-8, Silica Flour, 200 Mesh	179.6000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	RETARDER, SR-20	1.0200	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SPACER SURFACTANT, SS-247	0.5000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	GELLANT WATER, GW-86	0.8000	PPB
Lead Slurry	BJCem I100.3.01C	RETARDER, SR-20	0.4000	BWOB
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
Tail Slurry	BJCem I100.6.01C	BONDING AGENT, BA-60	0.2000	BWOB
Tail Slurry	BJCem I100.6.01C	CEMENT, CLASS G	100.0000	PCT
Tail Slurry	BJCem I100.6.01C	DISPERSANT, CD-31	0.2000	BWOB
Tail Slurry	BJCem I100.6.01C	FLUID LOSS, FL-24	0.2000	BWOB
Tail Slurry	BJCem I100.6.01C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem I100.6.01C	RETARDER, R-6	0.1000	BWOB

# Cementing Treatment



## TREATMENT SUMMARY

Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)
IntegraGuard EZ Spacer	4.00	20.00	230
BJCem I100.3.01C	6.00	194.10	300
BJCem I100.6.01C	4.00	17.40	178
Water	7.00	311.70	1800

## DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	0.00
Calculated Displacement Volume (bbls)	311.00	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	311.00	Amount of Spacer to Surface	20.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amount Bled Back After Job	2.50
Bump Plug Pressure (psi)	1,800.00	Total Volume Pumped (bbls)	562
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement returns During Job	Full	Lost Circulation During Cement Job	No

# EVENT LOG



**Customer Name:** HighPoint Operating Corporation

**Well Name:** CRITTER CREEK 15-6104BE

**Job Type:** Intermediate

**Quote ID:** QUO-17764-F8L7V3

**Plan ID:** ORD-10162-D1X5P6

**Execution ID:** EXC-10162-D1X5P602

**District:** Cheyenne, WY

**BJ Supervisor:** Andrew Hyde

Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol(bbls)	Pipe Pressure(psi)	Comments
1	08/24/2018 09:00	Callout					BJ crew gets called out and requested on location at 15:00
2	08/24/2018 10:30	Safety Meeting					BJ crew talks about the hazards of driving to location
3	08/24/2018 11:01	Other (See comment)					Depart yard
4	08/24/2018 12:30	Arrive on Location					Arrive on location
5	08/24/2018 12:40	Safety Meeting					BJ crew talks about the hazards of spotting in equipment and rigging up
6	08/24/2018 13:05	Rig Up					Rig up
7	08/24/2018 19:45	Safety Meeting					BJ and rig crew talk about the hazards of pumping the job
8	08/24/2018 20:21	Prime Up	8.3300	2.00	3.00	200.00	Pump 3 bbls of water ahead
9	08/24/2018 20:23	Pressure Test					Pressure test pumps and lines to 4000 psi
10	08/24/2018 20:26	Pump Spacer	8.3300	4.00	20.00	230.00	Pump 20 bbls of water spacer
11	08/24/2018 20:31	Pump Spacer	11.0000	4.00	20.00	230.00	Pump 20 bbls of spacer at 11 ppg, with 10 gals of SS-247
12	08/24/2018 20:36	Pump Lead Cement	12.5000	6.00	194.00	300.00	Mix up and pump 530 sks of BJCem I100.3.01C lead cement at 12.5 ppg, yield 2.07, 11.83 gal/sk, 194 bbls
13	08/24/2018 21:08	Pump Tail Cement	15.8000	4.00	17.40	178.00	Mix up and pump 90 sks of BJCem I100.6.01C tail cement at 15.8 ppg, yield 1.15, 4.98 gal/sk, 17.4 bbls
14	08/24/2018 21:13	Other (See comment)					Shutdown line out manifold to drop top plug
15	08/24/2018 21:15	Pump Displacement	8.3300	7.00	291.00	1,750.00	Pump 311 bbls of water displacement
16	08/24/2018 22:01	Pump Displacement	8.3300	3.00	20.00	1,800.00	Slow rate the last 20 bbls to 3 bpm

# EVENT LOG



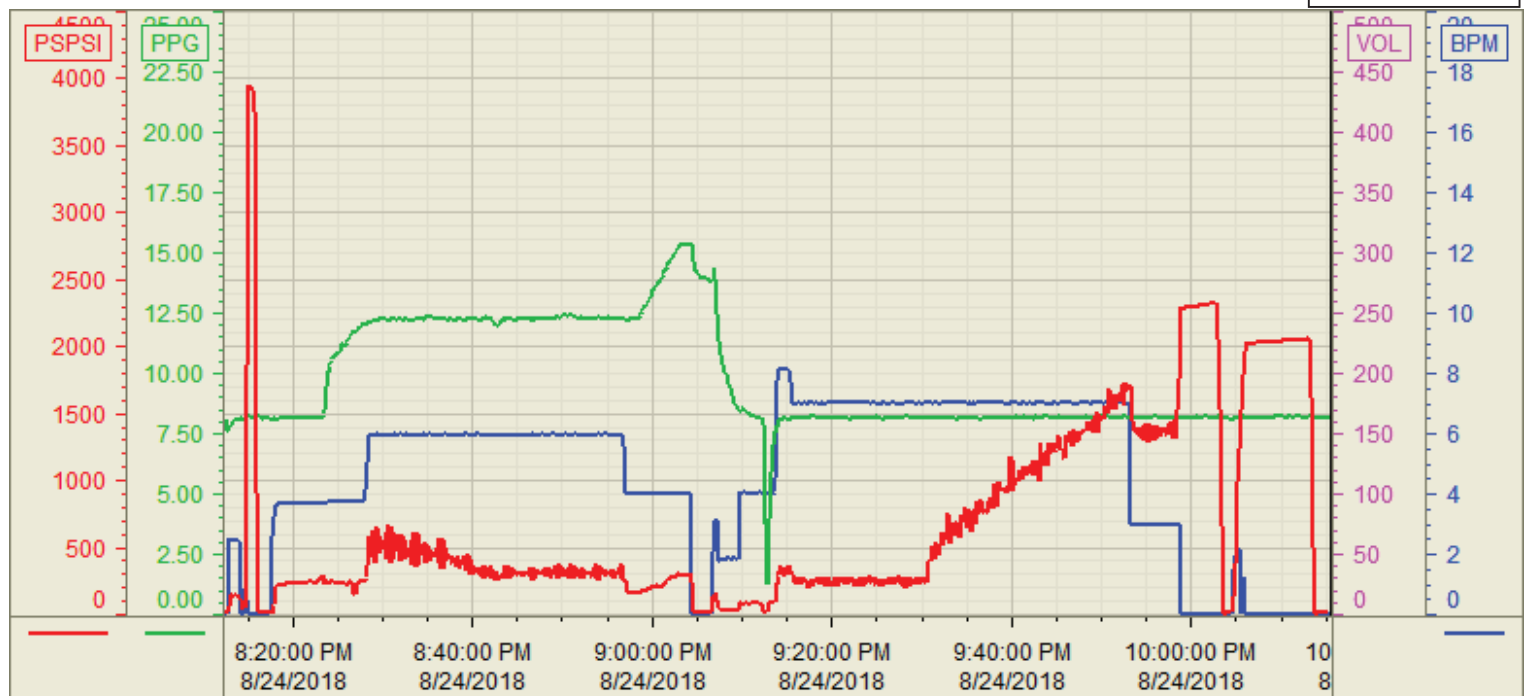
17	08/24/2018 22:07	Land Plug					Bump plug at 1800 psi, took it up to 2300 psi
18	08/24/2018 22:11	Check Floats					got bbls back to the truck
19	08/24/2018 22:15	Pressure Test					Pressure up to 2000 psi for 5 min casing test
20	08/24/2018 22:25	Safety Meeting					BJ crew talks about the hazards of rigging down
21	08/24/2018 22:40	Rig Down					Rig down
22	08/24/2018 23:30	Leave Location					Depart location
23	08/24/2018 23:32	Other (See comment)					Estimated top of tail at 7355 ft, lead at 237 ft, 20 bbls water spacer to surface

Customer: High Point  
Well Number: 15-6104BE  
Lease Info: Critter Creek



Print Date/Time

8/24/2018 10:28:44 PM



	Name	Y value	X value/time stamp	Tag name Y
1	PS - Press (PSI)		8/24/2018 10:15:30 PM i.	CementorPS_DISCHARGE_PRESS_DIAL
2	DH - Density (PPG)	8.17	8/24/2018 10:15:33 PM	CementorDENSITY2_ACTUAL_RATE
3	Combined rate (BPM)	0.00	8/24/2018 10:15:33 PM	CementorFlow_Combined
4				
5				

Source: Control1 10:28:31 PM