



# HighPoint Operating Corporation

## Intermediate Post Job Report

---

Lion Creek 23-0362B

S:23 T:11N R:64W Weld CO

Quote #:

Execution #:

---



# HighPoint Operating Corporation

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

Highpoint Operation 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) 256-0306 | jason.creel@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>	8/12/2018	<b>Field Ticket#</b>	FT-09770-S2C1J60201-444201288
<b>End Date</b>	8/12/2018	<b>Well</b>	LION CREEK 23-0362B
<b>Client</b>	HighPoint Operating Corporation	<b>API#</b>	05-123-47399
<b>Service Sup.</b>	Zachary Hyde	<b>County</b>	WELD
<b>District</b>	Cheyenne, WY	<b>State/Province</b>	CO
<b>Type of Job</b>	Intermediate	<b>Rig</b>	Savanna 802
<b>Execution ID</b>	EXC-09770-S2C1J602	<b>Project ID</b>	PRJ1009623

## WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)	Grade
Previous Casing	8.92	9.63	36.00	1,538.00	1,538.00		
Open Hole	8.75	0.00	0.00	8,075.00	7,684.00	15.00	
Casing	6.37	7.00	23.00	8,063.00	7,684.00		J-55

Shoe Length (ft): 42.00

## HARDWARE

<b>Landing Collar Depth (ft)</b>	8,056	<b>Top Connection Thread</b>	LTC
<b>Pipe Movement</b>	None	<b>Top Connection Size</b>	7
<b>Job Pumped Through</b>	No Manifold	<b>Max Tubing Pressure - Rated (psi)</b>	

## CIRCULATION PRIOR TO JOB

<b>Well Circulated By</b>	Rig	<b>PV Mud In</b>	6
<b>Circulation Prior to Job</b>	Yes	<b>PV Mud Out</b>	6
<b>Circulation Time (min)</b>	30.00	<b>YP Mud In</b>	7
<b>Circulation Rate (bpm)</b>	8.00	<b>Solids Present at End of Circulation</b>	No
<b>Circulation Volume (bbls)</b>	240.00	<b>10 sec SGS</b>	3.00
<b>Lost Circulation Prior to Cement Job</b>	No	<b>10 min SGS</b>	3.00
<b>Mud Density In (ppg)</b>	9.70	<b>Flare Prior to/during the Cement Job</b>	No
<b>Mud Density Out (ppg)</b>	9.70	<b>Gas Present</b>	No

## TEMPERATURE

<b>Ambient Temperature (°F)</b>	90.00	<b>Slurry Cement Temperature (°F)</b>	80.00
<b>Mix Water Temperature (°F)</b>	70.00	<b>Flow Line Temperature (°F)</b>	120.00

# Cementing Treatment



## 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			527.00				20.0000
Lead Slurry	BJCem I100.3.01C	12.5000	2.0735	11.83	1,200.00	6398	535	1,105.0000	196.6000
Tail Slurry	BJCem I100.6.01C	15.8000	1.1550	4.98	7,598.00	500	80	96.0000	17.0000
Displacement Final	Water	8.3300			0.00			0.0000	317.2000

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	GELLANT WATER, GW-86	0.8000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SPACER SURFACTANT, SS-247	0.5000	GPB
Lead Slurry	BJCem I100.3.01C	BONDING AGENT, BA-60	0.3000	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	RETARDER, SR-20	0.4000	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	BONDING AGENT, BA-60	0.2000	BWOB
Tail Slurry	BJCem I100.6.01C	RETARDER, R-6	0.1000	BWOB
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

# Cementing Treatment



## TREATMENT SUMMARY

Fluid	Rate (bpm)	Fluid Vol. (bbls)
IntegraGuard EZ Spacer	5.00	20.00
BJCem I100.3.01C	7.00	196.60
BJCem I100.6.01C	5.50	17.00
Water	9.00	317.20

## DISPLACEMENT AND END OF JOB SUMMARY

<b>Displaced By</b>	BJ Services	<b>Amount of Cement Returned/Reversed</b>	15.00
<b>Calculated Displacement Volume (bbls)</b>	316.00	<b>Method Used to Verify Returns</b>	Visual
<b>Actual Displacement Volume (bbls)</b>	316.00	<b>Amount of Spacer to Surface</b>	15.00
<b>Did Float Hold?</b>	Yes	<b>Amount Bled Back After Job</b>	2.50
<b>Bump Plug</b>	Yes	<b>Total Volume Pumped (bbls)</b>	550.80
<b>Bump Plug Pressure (psi)</b>	1,800.00	<b>Top Out Cement Spotted</b>	No
<b>Were Returns Planned at Surface</b>	No	<b>Lost Circulation During Cement Job</b>	No
<b>Cement returns During Job</b>	None		

# EVENT LOG



**Customer Name:** HighPoint Operating Corporation

**Well Name:** LION CREEK 23-0362B

**Job Type:** Intermediate

**Quote ID:** QUO-16979-COL8N9

**Plan ID:** ORD-09770-S2C1J6

**District:** Cheyenne, WY

**Execution ID:** EXC-09770-S2C1J602

**BJ Supervisor:** Zachary Hyde

Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	08/12/2018 07:30	Callout					Crew gets called out requested time 13:30
2	08/12/2018 12:50	Arrive on Location					Crew arrives on location
3	08/12/2018 13:00	Spot Units					Spot units
4	08/12/2018 13:06	Rig Up					Rig up
5	08/12/2018 13:30	Other (See comment)					Wait for rig to finish running casing and to circulate the well
6	08/12/2018 15:31	Safety Meeting					Crew has a safety meeting with company man and rig crew
7	08/12/2018 15:59	Prime Up	8.3300	3.00	3.00	30.00	Filled lines 3 bbls
8	08/12/2018 16:01	Pressure Test					Pressure tested to 4000 psi
9	08/12/2018 16:03	Pump Spacer	8.3300	5.00	27.00	450.00	Pumped 27 bbls of fresh water at 5 bpm with 450 psi
10	08/12/2018 16:09	Pump Spacer	11.0000	5.00	20.00	630.00	Pumped 20 bbls of Spacer at 11 ppg at 5 bpm with 630 psi
11	08/12/2018 16:12	Pump Lead Cement	12.5000	7.00	197.00	1,000.00	Pumped 197 bbls of lead at 12.5 ppg(535sk,2.07yld,11.89gal/sk) at 7 bpm with 1000 psi
12	08/12/2018 16:43	Pump Tail Cement	15.8000	5.50	17.00	300.00	Pumped 17 bbls of Tail at 15.8 ppg (80sk, 1.15yld,4.98gal/sk) at 5.5 bpm with 300 psi
13	08/12/2018 16:51	End Pumping					Shutdown
14	08/12/2018 16:55	Drop Top Plug					Drop top plug
15	08/12/2018 16:56	Pump Displacement	8.3300	9.00	295.00	1,800.00	Pumped 295 bbls of displacement at 9 bpm with 1800 psi
16	08/12/2018 17:37	Other (See comment)	8.3300	3.00	20.00	1,800.00	Pumped the last 20 bbls at 3 bpm to land the plug
17	08/12/2018 17:42	Other (See comment)					300 bbls away got spacer to surface
18	08/12/2018 17:43	Land Plug					Landed plug FCP was 1800 psi took it 500 psi over which was 2300
19	08/12/2018 17:45	Check Floats					Checked floats got 2.5 bbls back

# EVENT LOG

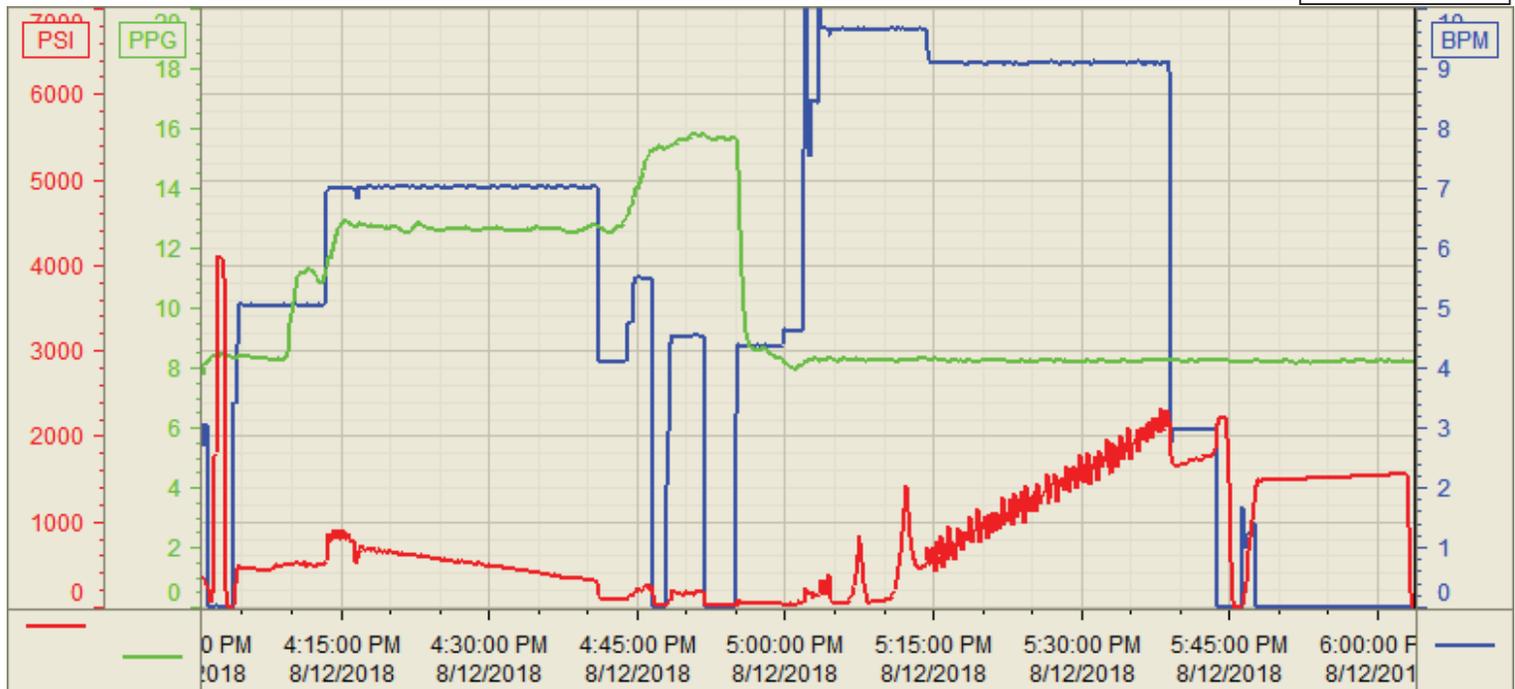


20	08/12/2018 17:46	Other (See comment)					Did a 15-minute casing test to 1500 psi
21	08/12/2018 18:02	Other (See comment)					Release pressure
22	08/12/2018 18:30	Rig Down					Crew rigs down
23	08/12/2018 19:00	Leave Location					Crew leaves location

Customer: High Point  
 Well Number: 23-0362B  
 Lease Info: Lion Creek



Print Date/Time  
 8/12/2018 6:11:50 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	6.4 i.	8/12/2018 6:03:43 PM i.	Cementer\DS_DISCHARGE_PRESS_DIAL
2	DH - Density (PPG)	8.20	8/12/2018 6:03:46 PM	Cementer\DENSITY2_ACTUAL_RATE
3	Combined Rate	0.00	8/12/2018 6:03:46 PM	Cementer\Flow_Combined
4				
5				

Source: Control1 6:11:45 PM