



# HighPoint Operating Corporation

Grinde 01-64-05-3340B

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API # 05-123-49719

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## Production

November 12, 2019

Quote #: QUO-38846-S6J5N8

Execution #: EXC-22472-S2L1N702



# 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	Chad Johnson	RIG	Cade 23
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	17,219.00	6,988.00	10.00	
Previous Casing	6.37	7.00	23.00	7,530.00	6,988.00		J-55
Casing	4.00	4.50	11.60	17,215.00	6,988.00		P-110

## HARDWARE

Bottom Plug Used?	No	Centralizers Type	Rigid
Top Plug Used?	Yes	Landing Collar Depth (ft)	17,201
Top Plug Provided By	Non BJ	Pipe Movement	None
Top Plug Size	4.500	Job Pumped Through	Manifold
Centralizers Used	Yes	Top Connection Thread	LTC
Centralizers Quantity	120.00	Top Connection Size	4.5

## CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Mud Density In (ppg)	8.90
Circulation Prior to Job	Yes	Mud Density Out (ppg)	8.90
Circulation Time (min)	60.00	Solids Present at End of Circulation	No
Circulation Rate (bpm)	8.00	Flare Prior to / during the Cement Job	No
Circulation Volume (bbls)	480.00	Gas Present	No
Lost Circulation Prior to Cement Job	No		

## TEMPERATURE

Ambient Temperature (°F)	15.00	Mix Water Temperature (°F)	70.00
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## 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			2,470.00				40.0000
Tail Slurry	BJCem P50.6.01C	13.5000	1.5930	7.95	4,500.00	12,689.00	840	1339.0000	238.3000
Displacement 1	Retarded Water	8.3300			15,897.00			0.0000	20.0000
Displacement Final	Water + Chems	8.3300			0.00			0.0000	247.0000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Tail Slurry	BJCem P50.6.01C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem P50.6.01C	RETARDER, SR-20	0.2000	BWOB
Tail Slurry	BJCem P50.6.01C	IntegraGuard GW-86	0.1000	BWOB
Tail Slurry	BJCem P50.6.01C	EXTENDER, BENTONITE	4.0000	BWOB
Tail Slurry	BJCem P50.6.01C	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem P50.6.01C	CEMENT, CLASS G	50.0000	PCT
Tail Slurry	BJCem P50.6.01C	FLUID LOSS, FL-24	0.4000	BWOB
Tail Slurry	BJCem P50.6.01C	IntegraCare EC-2	3.0000	BWOB
Tail Slurry	BJCem P50.6.01C	BONDING AGENT, BA-90	3.0000	LBS/SK
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)	267.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	267.00	Amt of Spacer to Surface	0.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amt Bled Back After Job	0.50
Bump Plug Pressure (psi)	800.00	Total Volume Pumped (bbls)	551.00
Were Returns Planned at Surface	No	Top Out Cement Spotted	No
Cement Returns During Job	None	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	11/11/2019 20:00	Callout					Crew called out requested on location at 0130
2	11/12/2019 02:02	Arrive on Location					Crew arrived on location
3	11/12/2019 02:03	STEACS Briefing					Safety meeting
4	11/12/2019 02:11	Spot Units					Spotted all units
5	11/12/2019 02:15	Rig Up					Rigged up all equipment
6	11/12/2019 03:00	STEACS Briefing					Safety meeting
7	11/12/2019 03:30	Prime Up	8.3400	3.00	5.00	400.00	Fill lines
8	11/12/2019 03:32	Pressure Test					Pressure test lines to 5000 psi
9	11/12/2019 03:38	Pump Spacer	8.3400	5.00	40.00	800.00	Pump water spacer
10	11/12/2019 03:50	Pump Tail Cement	13.5000	6.00	238.00	800.00	Pump cement (840 sks, 1.59 Y, 7.95 gal/sk)
11	11/12/2019 04:31	Other (See comment)					Shutdown
12	11/12/2019 04:33	Wash Pumps and Lines					Wash pumps and lines to pit
13	11/12/2019 04:46	Drop Top Plug					Drop top plug
14	11/12/2019 04:47	Pump Displacement	8.3400	8.00	250.00	2500.00	Pump displacement
15	11/12/2019 05:25	Other (See comment)	8.3400	2.00	17.00	800.00	Slow pump rate
16	11/12/2019 05:32	Land Plug			1.00	2900.00	Land plug at 800 psi took to 1800 psi, shutdown, pressured up to 2900 psi to rupture wet shoe, pump 1 bbl
17	11/12/2019 05:38	Check Floats					Check floats, floats holding, 0.5 bbls back
18	11/12/2019 05:40	STEACS Briefing					Safety meeting
19	11/12/2019 06:00	Rig Down					Rigged down all equipment
20	11/12/2019 08:00	Leave Location					Crew departed location

Client: HighPoint Operating Corporation

Well Name / API: GRINDE #01-64-05-3340B / 05-123-49719

Well MD: 17219



Quote #: QUO-38846-S6J5N8

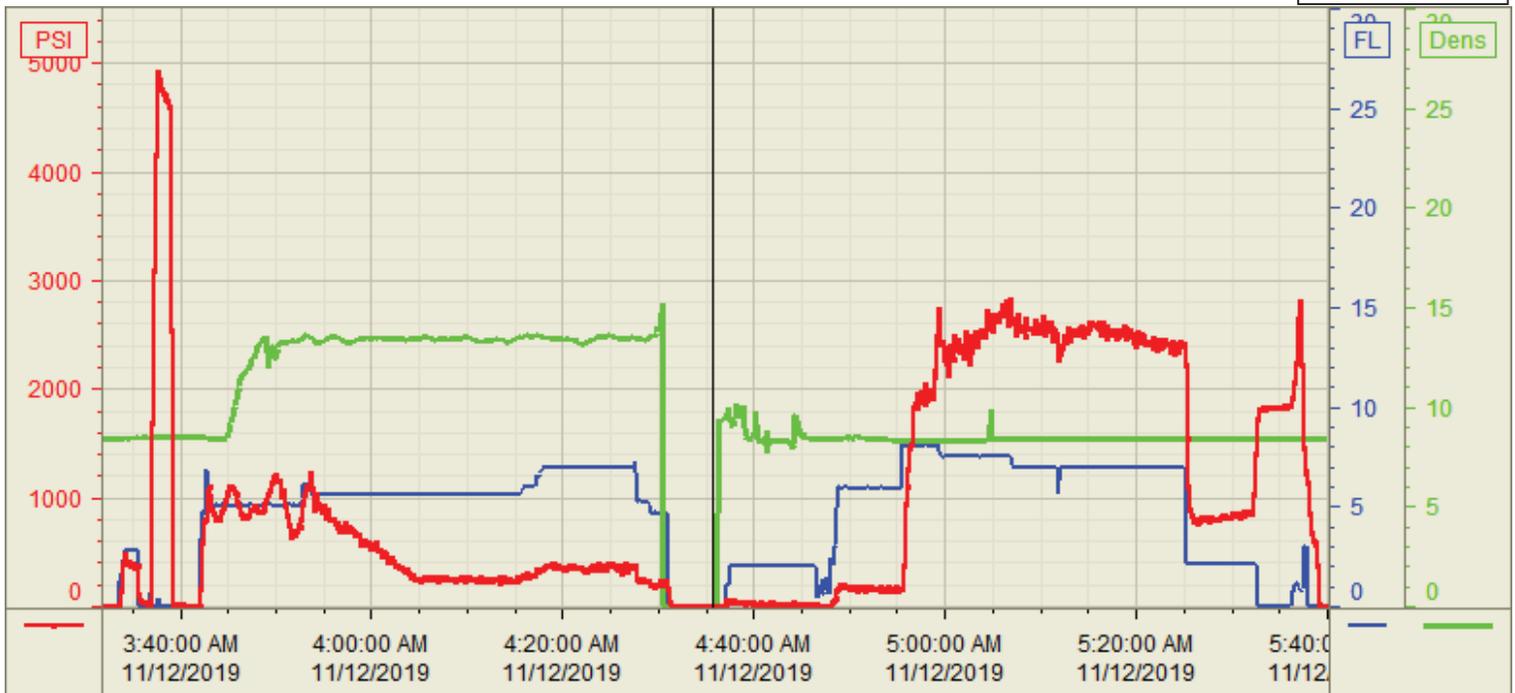
Plan #: ORD-22472-S2L1N7

Execution #: EXC-22472-S2L1N702

Customer: HighPoint Operating  
 Well Number: 01-64-05-3340B  
 Lease Info: Grinde



Print Date/Time  
 11/12/2019 5:48:30 AM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	4.3 i.	11/12/2019 4:36:00 AM i.	Cementer\DS_DISCHARGE_PRESS_DIAL
2	Den - Density (PPG)	0.00 i.	11/12/2019 4:36:00 AM i.	Cementer\DENSITY_ACTUAL_RATE
3	Pump Rate	0.00 i.	11/12/2019 4:36:00 AM i.	Cementer\Flow_Combined
4				
5				

Source: Control1 5:48:29 AM