



HighPoint Operating Corporation

GRINDE 01-64-05-1724C

API # 05-123-49714

Intermediate

January 14, 2020

Quote #: QUO-41285-V7P0Q9

Execution #: EXC-23877-Y8N0T702



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	Zachary Hyde	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
Casing	6.37	7.00	23.00	7,481.00	7,108.00		J-55
Previous Casing	8.92	9.63	36.00	1,543.00	1,543.00		
Open Hole	8.75	0.00	0.00	7,528.00	7,108.00	20.00	

HARDWARE

Bottom Plug Used?	No	Landing Collar Depth (ft)	7,433
Top Plug Used?	Yes	Pipe Movement	None
Top Plug Provided By	Non BJ	Job Pumped Through	No Manifold
Top Plug Size	7.000	Top Connection Thread	LTC
Centralizers Used	Yes	Top Connection Size	7
Centralizers Type	Rigid		

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud Out	7
Circulation Prior to Job	Yes	YP Mud In	9
Circulation Time (min)	30.00	YP Mud Out	9
Circulation Rate (bpm)	9.00	Solids Present at End of Circulation	No
Circulation Volume (bbls)	270.00	10 sec SGS	8
Lost Circulation Prior to Cement Job	No	10 min SGS	10
Mud Density In (ppg)	10.30	Flare Prior to / during the Cement Job	No
Mud Density Out (ppg)	10.30	Gas Present	No
PV Mud In	7		

TEMPERATURE

Ambient Temperature (°F)	40.00	Slurry Cement Temperature (°F)	70.00
Mix Water Temperature (°F)	70.00	Flow Line Temperature (°F)	90.00

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			2,006.00				40.0000
Lead Slurry	BJCem I100.3.01C	12.5000	2.0726	11.83	3,500.00	3,482.00	305	633.0000	112.6000
Tail Slurry	BJCem I100.6.01C	15.8000	1.1570	4.99	6,982.00	500.00	90	105.0000	18.5000
Displacement Final	Water	8.3300			0.00			0.0000	292.8000

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	RETARDER, SR-20	0.3000	BWOB
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	DISPERSANT, CD-31	0.2000	BWOB
Tail Slurry	BJCem I100.6.01C	RETARDER, R-6	0.3000	BWOB
Tail Slurry	BJCem I100.6.01C	FLUID LOSS, FL-24	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

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	0.00
Calculated Displacement Vol (bbls)	292.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	282.00	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	3.00
Bump Plug Pressure (psi)	1300.00	Total Volume Pumped (bbls)	462.00
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

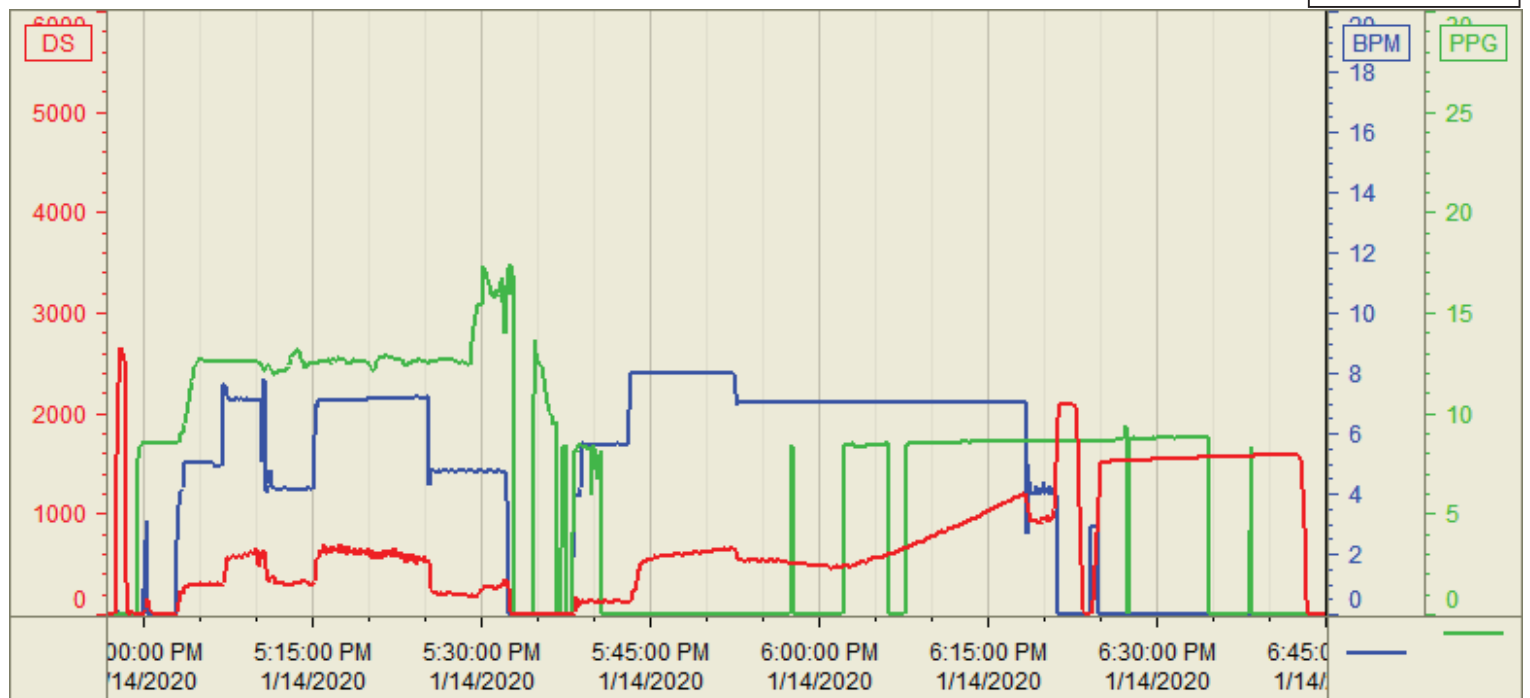
Intermediate - Cheyenne, WY

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	01/14/2020 10:00	Callout					Crew gets called out. Requested time 1600
2	01/14/2020 10:00	Depart for Location					Crew leaves for location
3	01/14/2020 15:00	Arrive on Location					Crew arrives on location
4	01/14/2020 15:00	Rig Up					Crew rigs up iron and hoses needed for job
5	01/14/2020 16:30	STEACS Briefing					Crew has a briefing with company man and rig crew discussing the job
6	01/14/2020 16:49	Prime Up	8.3300	3.00	3.00	100.00	Filled lines 3 bbls
7	01/14/2020 16:55	Pressure Test					Pressure tested to 3500psi
8	01/14/2020 16:57	Pump Spacer	8.3300	3.00	37.00	600.00	Pumped 40 bbls of water spacer
9	01/14/2020 17:07	Pump Lead Cement	12.5000	7.00	112.00	600.00	Pumped 112 bbls of Lead at 12.5ppg(305sks,2.07yld,11.83gal/sk)
10	01/14/2020 17:25	Pump Tail Cement	15.8000	4.00	18.50	500.00	Pumped 18.5bbls of Tail at 15.8ppg(90sks,1.15yld,4.99gal/sk)
11	01/14/2020 17:30	End Pumping					Shutdown
12	01/14/2020 17:30	Drop Top Plug					Dropped top plug
13	01/14/2020 17:35	Pump Displacement	8.3300	5.00	20.00	400.00	Washed up on top of the plug the first 20bbls of displacement
14	01/14/2020 17:41	Pump Displacement	8.3300	8.00	252.00	1700.00	Pumped 252 bbls of displacement at
15	01/14/2020 18:15	Pump Displacement	8.3300	3.00	20.00	1500.00	Slowed rate last 20 bbls to 3 bpm
16	01/14/2020 18:19	Land Plug					Landed plug went 1000psi over FCP was 1500psi brought it up to 2500psi
17	01/14/2020 18:21	Check Floats					Checked floats got
18	01/14/2020 18:23	Other (See comment)					Did a 15-minute casing test to 1700 psi. Top of Tail with excess 6857 Top of lead with Excess 2656. Without excess top of tail 6981 and lead 3500
19	01/14/2020 18:40	Rig Down					Crew rigs down iron and hose s

Customer: HighPoint Operating
Well Number: 01-64-05-1724C
Lease Info: GRINDE



Print Date/Time
1/14/2020 7:11:38 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	-3 i.	1/14/2020 6:44:57 PM i.	CementerDS_DISCHARGE_PRESS_DIAL
2	Density (PPG)	0.01	1/14/2020 6:44:59 PM	CementerDENSITY_ACTUAL_RATE
3	Combined Rate (BPM)	0.00	1/14/2020 6:44:59 PM	CementerFlow_Combined
4				
5				

Source: Control1 7:11:33 PM