



HighPoint Operating Corporation

GRINDE 01-64-05-6457CB

API # 05-123-49720

Production

December 07, 2019

Quote #: QUO-39560-P8Z2R4

Execution #: EXC-22972-G9L4F602



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
CLIENT FIELD REPRESENTATIVE	Matt	COUNTY	WELD
DISTRICT	Cheyenne, WY	STATE / PROVINCE	CO
SERVICE	Cementing		

WELL GEOMETRY

TYPE	ID (in)	OD (in)	WEIGHT (lb/ft)	MD (ft)	TVD (ft)	EXCESS (%)	GRADE
Previous Casing	6.37	7.00	23.00	7,693.00	7,007.00		J-55
Open Hole	6.13	0.00	0.00	17,390.00	7,007.00	10.00	
Casing	4.00	4.50	11.60	17,386.56	7,007.00		P-110

HARDWARE

Bottom Plug Used?	No	Centralizers Type	Rigid
Top Plug Used?	Yes	Landing Collar Depth (ft)	17,373
Top Plug Provided By	Non BJ	Pipe Movement	None
Top Plug Size	4.500	Job Pumped Through	No Manifold
Centralizers Used	Yes	Top Connection Thread	LTC
Centralizers Quantity	122.00	Top Connection Size	4.5

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud Out	7
Circulation Prior to Job	Yes	YP Mud In	9
Circulation Time (min)	120.00	YP Mud Out	9
Circulation Rate (bpm)	7.00	Solids Present at End of Circulation	No
Circulation Volume (bbls)	840.00	10 sec SGS	6
Lost Circulation Prior to Cement Job	No	10 min SGS	7
Mud Density In (ppg)	9.10	Flare Prior to / during the Cement Job	No
Mud Density Out (ppg)	9.10	Gas Present	No
PV Mud In	7		

TEMPERATURE

Ambient Temperature (°F)	30.00	Slurry Cement Temperature (°F)	70.00
Mix Water Temperature (°F)	709.00	Flow Line Temperature (°F)	120.00

Client: HighPoint Operating Corporation

Well: GRINDE #01-64-05-6457CB

Well API: 05-123-49720

Start Date: 12/7/2019

End Date: 12/7/2019



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	IntegraGuard EZ Spacer	11.0000			5,735.00				20.0000
Tail Slurry	BJCem P50.6.01C	13.5000	1.5937	7.95	6,750.00	10,624.00	700	1116.0000	198.7000
Displacement 1	Retarded Water	8.3300			16,702.00			0.0000	10.0000
Displacement 1	Water + Chems	8.3300			9,491.00			0.0000	145.0000
Displacement 2	Retarded Water	8.3300				0.00	0	0.0000	20.0000
Displacement Final	Fresh Water	8.3300			0.00			0.0000	249.0000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SPACER SURFACTANT, SS-247	0.5000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	RETARDER, SR-20	0.6000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SAND, S-8, Silica Flour, 200 Mesh	179.8000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	IntegraGuard GW-86	0.8000	PPB
Tail Slurry	BJCem P50.6.01C	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem P50.6.01C	IntegraCare EC-2	3.0000	BWOB
Tail Slurry	BJCem P50.6.01C	FLUID LOSS, FL-24	0.4000	BWOB
Tail Slurry	BJCem P50.6.01C	BONDING AGENT, BA-90	3.0000	LBS/SK
Tail Slurry	BJCem P50.6.01C	EXTENDER, BENTONITE	4.0000	BWOB
Tail Slurry	BJCem P50.6.01C	RETARDER, SR-20	0.3000	BWOB
Tail Slurry	BJCem P50.6.01C	IntegraGuard GW-86	0.1000	BWOB
Tail Slurry	BJCem P50.6.01C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem P50.6.01C	CEMENT, CLASS G	50.0000	PCT
Displacement 2	Retarded Water	RETARDER, SR-61L	0.1000	GPB

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	0.00
Calculated Displacement Vol (bbls)	269.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	271.00	Amt of Spacer to Surface	0.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	No	Amt Bled Back After Job	1.00
Were Returns Planned at Surface	No	Total Volume Pumped (bbls)	487.00
Cement Returns During Job	None	Top Out Cement Spotted	No
		Lost Circulation During Cement Job	No

BJ Cementing Event Log

Long String - Cheyenne, WY

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	12/06/2019 16:05	Callout					Crew gets called out. Requested time 2100
2	12/06/2019 18:30	STEACS Briefing					Steacs briefing
3	12/06/2019 18:35	Depart for Location					Crew leaves yard to head for location
4	12/06/2019 21:00	Arrive on Location					Crew arrived on location
5	12/06/2019 21:00	STEACS Briefing					Steacs briefing
6	12/06/2019 21:10	Rig Up					Rig up equipment
7	12/06/2019 22:00	Rig					Waiting on rig to finish running casing
8	12/07/2019 03:30	STEACS Briefing					Safety meeting with rig crew
9	12/07/2019 03:52	Prime Up	8.3300	3.00	3.00	200.00	Fill lines 3bbls
10	12/07/2019 03:55	Pressure Test					Pressure tested to 5500 psi
11	12/07/2019 04:03	Pump Spacer	11.0000	6.00	20.00	1400.00	Pumped 20bbls of Spacer at 11ppg with surfactant
12	12/07/2019 04:08	Pump Lead Cement	13.5000	7.00	198.00	1400.00	Pumped 198bbls of Primary cement at 13.5ppg(700sk,1.59yld,7.45gal/sk)
13	12/07/2019 04:40	End Pumping					Shutdown
14	12/07/2019 04:40	Wash Pumps and Lines					Wash pump and lines
15	12/07/2019 04:50	Drop Top Plug					Dropped top plug
16	12/07/2019 04:50	Pump Displacement	8.3300	7.00	20.00	100.00	Pumped the first 20bbls of Displacement with retarder
17	12/07/2019 04:52	Pump Displacement	8.3300	7.00	229.00	3100.00	Pumped 229bbls of displacement at 7bpm. Once we were getting ready to slow rate, we had a pressure increase to 3200psi
18	12/07/2019 05:30	Pump Displacement	8.3300	3.00	20.00	2000.00	Slowed rate last 20 bbls to 3bpm. Didn't land on calculated displacement so we pumped 2bbls then shutdown
19	12/07/2019 05:47	Land Plug					Didn't land plug. Was supposed to burst wet shoe sub and pump 1.5bbls. Wet shoe sub burst pressure was 3500psi
20	12/07/2019 05:50	Check Floats					Checked floats got 1bbl back
21	12/07/2019 05:50	Rig Down					Crew rigs down iron and hoses

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Well Name / API: GRINDE #01-64-05-6457CB / 05-123-49720

Well 17374
MD:



Quote #: QUO-39560-P8Z2R4

Plan #: ORD-22972-G9L4F6

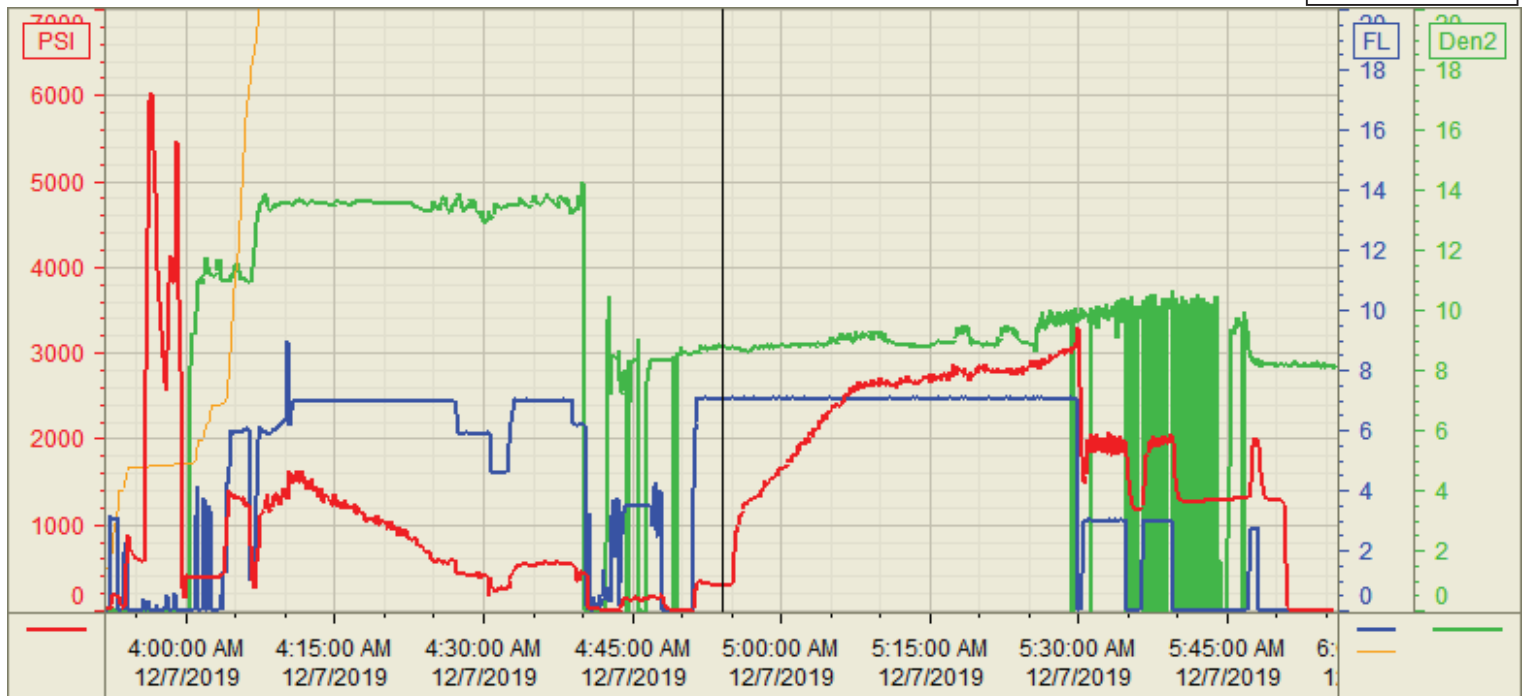
Execution #: EXC-22972-G9L4F602

Customer: HighPoint
Well Number: 01-64-05-6457CB
Lease Info: GRINDE



Print Date/Time

12/7/2019 6:14:02 AM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	298.7	12/7/2019 4:54:00 AM	CementorDS_DISCHARGE_PRESS_DIAL
2	Combined pump rate	7.07	12/7/2019 4:54:00 AM	CementorFlow_Combined
3	DS - Flow Total (BBLs)	179.30	12/7/2019 4:54:00 AM	CementorDS_FLOW_TOTAL
4	PS - Flow Total (BBLs)	99.54	12/7/2019 4:54:00 AM	CementorPS_FLOW_TOTAL
5	re circdensity	8.76	12/7/2019 4:54:00 AM	CementorDENSITY_ACTUAL_RATE

Source: Control1 6:14:02 AM