



HighPoint Operating Corporation

GRINDE 01-64-05-4841C

API # 05-123-49718

Production

November 18, 2019

Quote #: QUO-39132-G4X8D6

Execution #: EXC-22637-F2V7H502



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	Gregory Black	RIG	Cade 23
CLIENT FIELD REPRESENTATIVE	Matt Schwartz	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
Casing	4.00	4.50	11.60	17,229.00	7,084.00		P-110
Previous Casing	6.37	7.00	23.00	7,529.00	7,040.00		J-55
Open Hole	6.13	0.00	0.00	17,234.00	7,084.00	10.00	

HARDWARE

Bottom Plug Used?	No	Landing Collar Depth (ft)	17,215
Top Plug Used?	Yes	Tool Type	Float Collar
Top Plug Provided By	Non BJ	Tool Depth (ft)	17,215.00
Top Plug Size	4.500	Pipe Movement	None
Centralizers Used	Yes	Job Pumped Through	No Manifold
Centralizers Quantity	120.00	Top Connection Thread	LTC
Centralizers Type	Bow	Top Connection Size	4.5

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud In	13
Circulation Prior to Job	Yes	PV Mud Out	13
Circulation Time (min)	1.00	YP Mud In	3
Circulation Rate (bpm)	6.50	YP Mud Out	3
Circulation Volume (bbls)	390.00	Solids Present at End of Circulation	No
Lost Circulation Prior to Cement Job	No	Flare Prior to / during the Cement Job	No
Mud Density In (ppg)	8.90	Gas Present	No
Mud Density Out (ppg)	8.90		

TEMPERATURE

Ambient Temperature (°F)	67.00	Slurry Cement Temperature (°F)	60.00
Mix Water Temperature (°F)	65.00		

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			1,470.00				40.0000
Tail Slurry	BJCem P50.6.01C	13.5000	1.5930	7.95	3,500.00	13,721.00	911	1450.0000	258.2000
Displacement 1	Retarded Water	8.3300			15,929.00			0.0000	20.0000
Displacement Final	Water + Chems	8.3300			0.00			0.0000	247.5000

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	IntegraCare EC-2	3.0000	BWOB
Tail Slurry	BJCem P50.6.01C	IntegraGuard GW-86	0.1000	BWOB
Tail Slurry	BJCem P50.6.01C	CEMENT, CLASS G	50.0000	PCT
Tail Slurry	BJCem P50.6.01C	EXTENDER, BENTONITE	4.0000	BWOB
Tail Slurry	BJCem P50.6.01C	RETARDER, SR-20	0.2000	BWOB
Tail Slurry	BJCem P50.6.01C	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem P50.6.01C	BONDING AGENT, BA-90	3.0000	LBS/SK
Tail Slurry	BJCem P50.6.01C	FLUID LOSS, FL-24	0.4000	BWOB
Displacement Final	Water + Chems	BIOCIDE, BIOC11139W	0.0210	GPB
Displacement Final	Water + Chems	CORROSION INHIBITORS, CI-27	0.2100	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	1.00
Bump Plug Pressure (psi)	2008.00	Total Volume Pumped (bbls)	565.00
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 - Gregory Black

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	11/18/2019 08:00	Callout					Crew called out with an RTS of 14:00.
2	11/18/2019 13:00	Arrive on Location					Crew arrived on location.
3	11/18/2019 13:00	STEACS Briefing					Crew had a pre rig up/ spotting procedure meeting.
4	11/18/2019 13:05	Rig Up					Crew rigged up.
5	11/18/2019 13:45	Rig					Waited for rig to finish running casing and circulating.
6	11/18/2019 16:50	STEACS Briefing					Crew had a safety meeting with tool hand, rig crew and company man.
7	11/18/2019 17:07	Prime Up	8.3400				Crew primed treating iron for pressure test.
8	11/18/2019 17:09	Pressure Test					Crew preforms pressure test.
9	11/18/2019 17:11	Pump Spacer	8.3400	6.50	40.00	410.00	Crew pumps a water spacer
10	11/18/2019 17:18	Pump Tail Cement	13.5000	6.50	20.00	1200.00	Crew pumps 911 SKS; Yield:1.59; GPS: 7.95.
11	11/18/2019 17:22	Pump Tail Cement	13.5000	6.50	238.00	950.00	Crew pumps 911 SKS; Yield:1.59 GPS:7.95.
12	11/18/2019 18:08	Drop Top Plug					Dropped top plug and pumper washes up pump to cement tank.
13	11/18/2019 18:17	Pump Displacement	8.3400	7.80	20.00	200.00	Crew displaces with retarded water.
14	11/18/2019 18:21	Pump Displacement	8.3400	6.00	227.00	1300.00	Crew displaces with water, biocide, OS-30, CI 27.
15	11/18/2019 18:59	Pump Displacement	8.3400	2.00	20.00	1400.00	Crew displaces with water, biocide, OS-30, CI27, and slows rate to land the plug.
16	11/18/2019 19:05	Land Plug					Plug landed total displacement of 267 bbls. final circulation psi 1400, took to 2008 psi.
17	11/18/2019 19:06	Other (See comment)					Pressured up to 3600 to sheer and then pumped 1.5 bbl wet shoe.
18	11/18/2019 19:11	Check Floats					Floats held 1 bbl back.
19	11/18/2019 19:13	STEACS Briefing					Rig down safety meeting with crew.
20	11/18/2019 19:20	Rig Down					Crew rigs down everything.
21	11/18/2019 19:45	STEACS Briefing					Return journey management meeting.
22	11/18/2019 19:50	Leave Location					Crew leaves location.

Client: HighPoint Operating Corporation

Well Name / API: GRINDE
#01-64-05-4841C / 05-123-49718

Well 17234
MD:



Quote #: QUO-39132-G4X8D6

Plan #: ORD-22637-F2V7H5

Execution #: EXC-22637-F2V7H502



JobMaster Program Version 4.02C1

Job Number:

Customer: HighPoint

Well Name: GRINDE 01-64-05-4841C

