



HighPoint Operating Corporation

GRINDE 01-64-05-4841B

API # 05-123-49721

Intermediate

November 21, 2019

Quote #: QUO-39216-M8S8G4

Execution #: EXC-22667-Y5J1T202



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	Eric Dewit	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	8.75	0.00	0.00	7,417.00	7,082.00	20.00	
Casing	6.37	7.00	23.00	7,397.00	7,082.00		J-55
Previous Casing	8.92	9.63	36.00	1,261.00	1,261.00		

HARDWARE

Bottom Plug Used?	No	Tool Depth (ft)	7,351.00
Top Plug Used?	Yes	Max Casing Pressure - Rated (psi)	5072.00
Top Plug Provided By	Non BJ	Max Casing Pressure - Operated (psi)	3500.00
Top Plug Size	7.000	Pipe Movement	None
Centralizers Used	No	Job Pumped Through	No Manifold
Centralizers Type	Bow	Top Connection Thread	LTC
Landing Collar Depth (ft)	7,351	Top Connection Size	7
Tool Type	Float Collar		

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	YP Mud In	6
Circulation Prior to Job	Yes	YP Mud Out	6
Lost Circulation Prior to Cement Job	No	Solids Present at End of Circulation	No
Mud Density In (ppg)	9.90	10 sec SGS	1
Mud Density Out (ppg)	9.90	10 min SGS	3
PV Mud In	3	Flare Prior to / during the Cement Job	No
PV Mud Out	3	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	29.00	Slurry Cement Temperature (°F)	56.00
Mix Water Temperature (°F)	55.00		

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	3,377.00	295	612.0000	108.9000
Tail Slurry	BJCem I100.6.01C	15.8000	1.1570	4.99	6,877.00	500.00	90	105.0000	18.5000
Displacement Final	Water	8.3300			0.00			0.0000	288.6000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Lead Slurry	BJCem I100.3.01C	BONDING AGENT, BA-60	0.3000	BWOB
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	FLUID LOSS, FL-24	0.3000	BWOB
Lead Slurry	BJCem I100.3.01C	CEMENT, ASTM TYPE III	100.0000	PCT
Tail Slurry	BJCem I100.6.01C	CEMENT, CLASS G	100.0000	PCT
Tail Slurry	BJCem I100.6.01C	BONDING AGENT, BA-60	0.2000	BWOB
Tail Slurry	BJCem I100.6.01C	RETARDER, R-6	0.3000	BWOB
Tail Slurry	BJCem I100.6.01C	FOAM PREVENTER, FP-25	0.3000	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

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	0.00
Calculated Displacement Vol (bbls)	289.40	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	281.00	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	2.50
Bump Plug Pressure (psi)	2111.00	Total Volume Pumped (bbls)	452.00
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 - Eric Dewit

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	11/20/2019 14:00	Callout					Customer calls with an RTS of 20:00 on 11/20/19, Crew gets everything ready to travel to location
2	11/20/2019 17:30	Depart for Location					Crew leaves yard to travel to location
3	11/20/2019 20:00	Arrive on Location					Crew arrives on location (rig still running casing)
4	11/20/2019 20:00	STEACS Briefing					Pre-rig up safety meeting
5	11/20/2019 20:10	Spot Units					Spot trucks
6	11/20/2019 20:20	Rig Up					Rig up everything except stand pipe, and rig floor
7	11/20/2019 21:00	Rig					Waiting on rig to finish running casing
8	11/20/2019 22:30	Rig Up					Finish rigging everything up
9	11/20/2019 22:55	STEACS Briefing					Pre-job safety meeting with BJ crew, rig crew, and company man
10	11/20/2019 23:14	Other (See comment)	8.3400	3.00	2.00	50.00	Load lines with 2 bbls of fresh water
11	11/20/2019 23:16	Pressure Test	8.3400	0.00	0.00	4653.00	Test pumps and lines
12	11/20/2019 23:22	Pump Spacer	8.3400	7.70	40.00	1108.00	Pump 40 bbls of fresh water ahead
13	11/20/2019 23:27	Pump Lead Cement	12.5000	7.00	108.00	1018.00	Pump 295 sks of lead cement @12.5 ppg (Yield: 2.07 Mix Water: 11.83)
14	11/20/2019 23:50	Pump Tail Cement	15.8000	5.00	18.00	483.00	Pump 90 sks of tail cement @15.8 ppg (Yield: 1.15 Mix Water: 4.99)
15	11/20/2019 23:56	Drop Top Plug					Shut down, drop plug
16	11/21/2019 00:02	Pump Displacement	8.3400	7.80	0.00	326.00	Send plug start fresh water displacement
17	11/21/2019 00:16	Pump Displacement	8.3400	7.80	100.00	994.00	
18	11/21/2019 00:29	Pump Displacement	8.3400	7.80	200.00	1256.00	
19	11/21/2019 00:38	Pump Displacement	8.3400	2.80	270.00	1197.00	Drop rate to land the plug
20	11/21/2019 00:43	Land Plug	8.3400	2.80	281.00	2111.00	Land the plug (landed the plug 8 bbls early)
21	11/21/2019 00:53	Check Floats	8.3400	0.00	0.00	0.00	Check floats (floats held) 2.5 bbls back
22	11/21/2019 00:56	STEACS Briefing					Pre-rig down safety meeting
23	11/21/2019 01:06	Rig Down					Rig everything down
24	11/21/2019 02:00	Leave Location					Crew leaves location

Client: HighPoint Operating Corporation

Well Name / API: GRINDE #01-64-05-4841B / 05-123-49721

Well 7377
MD:



Quote #: QUO-39216-M8S8G4

Plan #: ORD-22667-Y5J1T2

Execution #: EXC-22667-Y5J1T202



JobMaster Program Version 4.02C1
Job Number: 19579
Customer: HighPoint
Well Name: Grinde 01-64-05-4841B

