



HighPoint Operating Corporation

GRINDE 01-64-05-4956C

API # 05-123-50641

Intermediate

December 18, 2019

Quote #: QUO-40239-S1M2R0

Execution #: EXC-23249-Q6L0B102



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	Aldo Espinoza Galindo	RIG	Cade 23
CLIENT FIELD REPRESENTATIVE	CHRIS MOORE	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	6.37	7.00	23.00	7,407.00	7,041.00		J-55
Open Hole	8.75	0.00	0.00	7,407.00	7,041.00	20.00	
Previous Casing	8.92	9.63	36.00	1,245.00	1,245.00		

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	7,359.00
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	4360.00
Top Plug Size	7.000	Max Casing Pressure - Operated (psi)	2000.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	12.00	Job Pumped Through	No Manifold
Centralizers Type	Bow	Top Connection Thread	LTC
Landing Collar Depth (ft)	7,359	Top Connection Size	7

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Mud Density In (ppg)	10.00
Circulation Prior to Job	Yes	PV Mud In	5
Circulation Time (min)	15.00	YP Mud In	7
Circulation Rate (bpm)	6.00	Solids Present at End of Circulation	No
Circulation Volume (bbls)	90.00	Flare Prior to / during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	25.00	Slurry Cement Temperature (°F)	60.00
Mix Water Temperature (°F)	60.00	Flow Line 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			2,006.00				40.0000
Lead Slurry	BJCem I100.3.01C	12.5000	2.0726	11.83	3,500.00	3,387.00	295	612.0000	108.8000
Tail Slurry	BJCem I100.6.01C	15.8000	1.1570	4.99	6,887.00	500.00	90	105.0000	18.5000
Displacement Final	Water	8.3300			0.00			0.0000	289.0000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Lead Slurry	BJCem I100.3.01C	CEMENT, ASTM TYPE III	100.0000	PCT
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
Lead Slurry	BJCem I100.3.01C	FLUID LOSS, FL-24	0.3000	BWOB
Lead Slurry	BJCem I100.3.01C	RETARDER, SR-20	0.3000	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	BONDING AGENT, BA-60	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
Tail Slurry	BJCem I100.6.01C	DISPERSANT, CD-31	0.2000	BWOB

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	0.00
Calculated Displacement Vol (bbls)	289.90	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	289.00	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)	2000.00	Total Volume Pumped (bbls)	457.20
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 - Aldo Espinoza Galindo

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	12/18/2019 07:30	Callout					Called out
2	12/18/2019 11:00	Arrive on Location					On location
3	12/18/2019 14:00	Rig Up					Rig equipment up
4	12/18/2019 15:00	Rig					Rig working on pipe
5	12/18/2019 17:00	Other (See comment)					Safety meeting
6	12/18/2019 17:12	Pressure Test	8.3400	0.20	0.20	4300.00	Pressure test lines to 4300 psi
7	12/18/2019 17:16	Pump Spacer	8.3400	3.00	40.00	480.00	Pump 40 bbl of water spacer ahead of cement
8	12/18/2019 17:26	Pump Lead Cement	12.5000	5.60	108.80	590.00	Pump 108.8 bbl / 295 sk of lead cement @ 12.5 # / yield 2.07 / water 11.83
9	12/18/2019 17:49	Pump Tail Cement	15.8000	3.00	18.50	80.00	Pump 18.5 bbl / 90 sk of tail cement @ 15.8 # / yield 1.15 / water 4.99
10	12/18/2019 18:02	Drop Top Plug					Drop plug
11	12/18/2019 18:05	Pump Displacement	8.3400	5.00	10.00	80.00	Start pumping displacement washing on top of plug
12	12/18/2019 18:16	Pump Displacement	8.3400	6.00	40.00	375.00	50 bbl on to displacement
13	12/18/2019 18:26	Pump Displacement	8.3400	6.00	50.00	450.00	100 bbl on to displacement
14	12/18/2019 18:36	Pump Displacement	8.3400	6.00	50.00	440.00	150 bbl on to displacement
15	12/18/2019 18:44	Pump Displacement	8.3400	6.00	50.00	890.00	200 bbl on to displacement
16	12/18/2019 18:49	Pump Displacement	8.3400	6.00	50.00	1280.00	250 bbl on to displacement
17	12/18/2019 19:07	Land Plug	8.3400	4.00	39.00	1300.00	Reduce rate 20 bbl before bumping, landed plug at 289 bbl gone to 2000 psi
18	12/18/2019 19:10	Check Floats				2000.00	Check floats 2.5 bbl back
19	12/18/2019 19:15	Pressure Test				2000.00	Pressure test casing 2000 psi for 15 minutes
20	12/18/2019 19:30	Other (See comment)					Release pressure
21	12/18/2019 19:32	Rig Down					Rig equipment down, thanks

Client: HighPoint Operating Corporation

Well Name / API: GRINDE #01-64-05-4956C
/ 05-123-50641

Well 7407
MD:



Quote #: QUO-40239-S1M2R0

Plan #: ORD-23249-Q6L0B1

Execution #: EXC-23249-Q6L0B102



JobMaster Program Version 4.02C1

Job Number:

Customer: HighPoint Operating

Well Name: GRINDE #01-64-05-4956C

