



HighPoint Operating Corporation

GRINDE 01-64-05-1724B

API # 05-123-49717

Intermediate

January 07, 2020

Quote #: QUO-40843-V0X3P7

Execution #: EXC-23690-Y3J1B402



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	Hector Montoya	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			20.00	
Casing	6.37	7.00	23.00	7,446.00			J-55
Previous Casing	8.92	9.63	36.00	1,539.00			

HARDWARE

Bottom Plug Used?	No	Landing Collar Depth (ft)	7,446
Top Plug Used?	Yes	Max Casing Pressure - Rated (psi)	4360.00
Top Plug Provided By	Non BJ	Max Casing Pressure - Operated (psi)	3488.00
Top Plug Size	7.000	Job Pumped Through	Manifold
Centralizers Used	Yes	Top Connection Thread	LTC
Centralizers Quantity	14.00	Top Connection Size	7
Centralizers Type	Rigid		

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud Out	1
Circulation Prior to Job	Yes	YP Mud In	3
Circulation Time (min)	60.00	YP Mud Out	3
Circulation Rate (bpm)	8.00	Solids Present at End of Circulation	No
Circulation Volume (bbls)	420.00	10 sec SGS	1
Lost Circulation Prior to Cement Job	No	10 min SGS	2
Mud Density In (ppg)	10.00	30 min SGS	3
Mud Density Out (ppg)	10.00	Flare Prior to / during the Cement Job	No
PV Mud In	1	Gas Present	No

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Well: GRINDE #01-64-05-1724B

Well API: 05-123-49717

Start Date: 1/6/2020

End Date: 1/7/2020



TEMPERATURE

Ambient Temperature (°F)	35.00	Slurry Cement Temperature (°F)	70.00
Mix Water Temperature (°F)	65.00	Flow Line Temperature (°F)	98.00

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	3,369.00	295	612.0000	108.9000
Tail Slurry	BJCem I100.6.01C	15.8000	1.1570	4.99	6,869.00	500.00	90	105.0000	18.5000
Displacement Final	Water	8.3300			0.00			0.0000	291.0000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
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
Lead Slurry	BJCem I100.3.01C	RETARDER, SR-20	0.3000	BWOB
Lead Slurry	BJCem I100.3.01C	BONDING AGENT, BA-60	0.3000	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	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	FLUID LOSS, FL-24	0.2000	BWOB
Tail Slurry	BJCem I100.6.01C	RETARDER, R-6	0.3000	BWOB

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	0.00
Calculated Displacement Vol (bbls)	291.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	291.00	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)	2150.00	Total Volume Pumped (bbls)	458.00
Were Returns Planned at Surface	No	Top Out Cement Spotted	No
Cement Returns During Job	None	Lost Circulation During Cement Job	No

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Start Date: 1/6/2020

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BJ Cementing Event Log

Intermediate - Cheyenne, WY - Hector Montoya

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	01/06/2020 22:00	Callout					BJ Crew gets called out
2	01/06/2020 23:00	Other (See comment)					Load Up for job
3	01/07/2020 00:00	Arrive on Location					Crew arrives safely to location
4	01/07/2020 02:30	Rig Up					Rig Up
5	01/07/2020 04:00	Other (See comment)					Wait on Casing to be ran
6	01/07/2020 05:00	STEACS Briefing					BJ Crew and Rig Crew discuss hazards of pumping the job
7	01/07/2020 05:30	Prime Up					Fill lines
8	01/07/2020 05:32	Pressure Test					Pressure test to 4500psi
9	01/07/2020 05:41	Pump Spacer	8.3300	4.00	40.00	600.00	40bbl Fresh water spacer
10	01/07/2020 05:51	Pump Lead Cement	12.5000	5.00	108.00	800.00	Lead- 108bbl at 12.5ppg, 290sks BJ Cem l100.3.01C, y-2.07, gps-11.83, mix water- 83bbl
11	01/07/2020 06:06	Pump Tail Cement	15.8000	3.50	18.50	600.00	Tail- 18.5bbl at 15.8ppg, 90sks BJ Cem l100.6.01C, y-1.15, gps-4.99, mix water-10bbl. Estimated Height of cement at 690ft, Estimated Top of Cement at 6763ft
12	01/07/2020 06:14	Drop Top Plug					Customer witnesses Top Plug leave
13	01/07/2020 06:20	Pump Displacement	8.3300	8.00	271.00	2100.00	Total displacement 291bbl Fresh Water
14	01/07/2020 07:02	Pump Displacement	8.3300	4.00	20.00	2150.00	Slow rate last 20bbl to 4bpm
15	01/07/2020 07:04	Land Plug					Land Plug. Final Circulating pressure was 1780psi took to 2150psi
16	01/07/2020 07:05	Check Floats					Floats hold. 2.5bbl back to the truck
17	01/07/2020 07:20	Rig Down					Rig Down
18	01/07/2020 08:30	Leave Location					Depart location

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Well Name GRINDE 01-64-05-1724B
API: 05-123-49717

Well 7369
MD:



Quote #: QUO-40843-V0X3P7

Plan #: ORD-23690-Y3J1B4

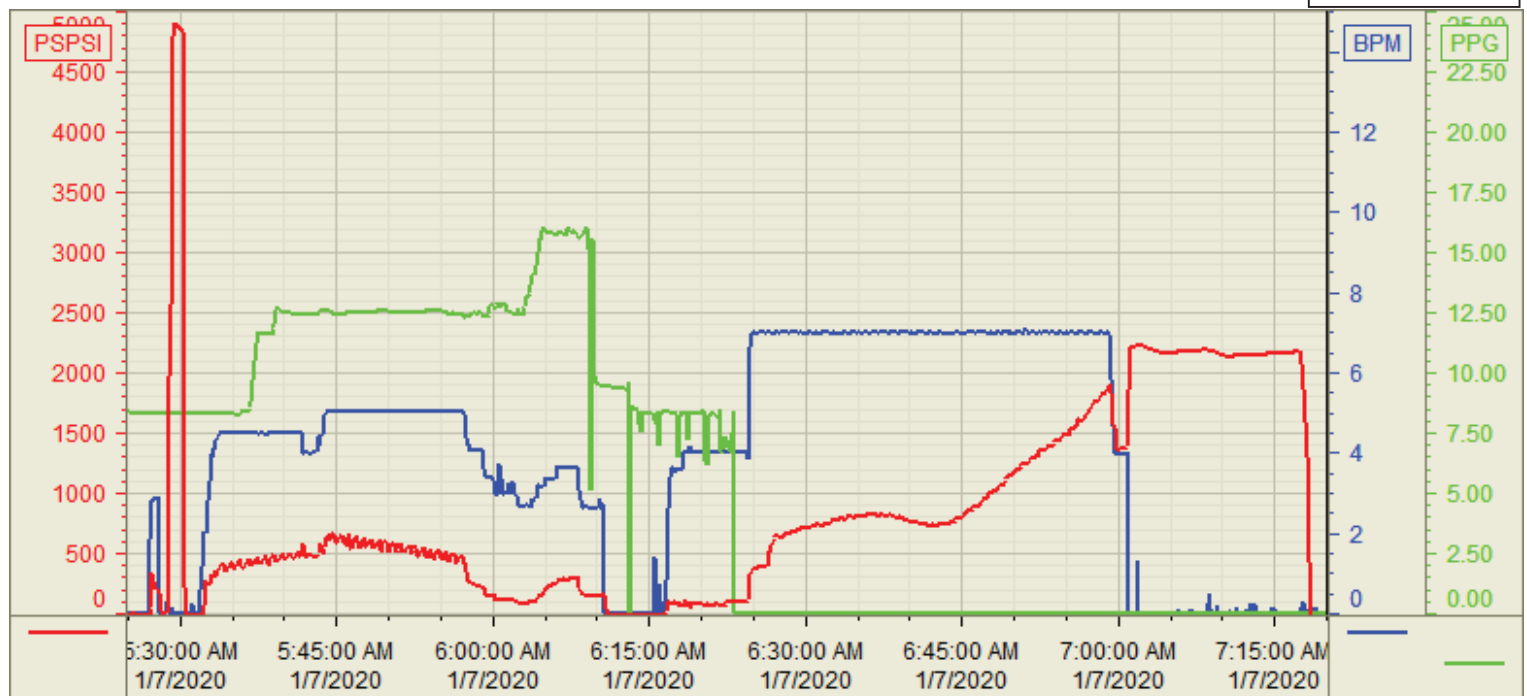
Execution #: EXC-23690-Y3J1B402

Customer: HIGH POINT
Well Number: 01-64-05-1724B
Lease Info: GRINDE



Print Date/Time

1/7/2020 7:37:22 AM



	Name	Y value	X value/time stamp	Tag name Y
1	PS - Press (PSI)	-30.6	1/7/2020 7:19:59 AM	Cement\PS_DISCHARGE_PRESS_DIAL
2	Recirc - Density (PPG)	0.01 i.	1/7/2020 7:20:00 AM i.	Cement\DENSITY_ACTUAL_RATE
3	Combined rate (BPM)	0.00 i.	1/7/2020 7:20:00 AM i.	Cement\Flow_Combined
4				
5				

Source: Control1 7:37:17 AM