



HighPoint Operating Corporation

GRINDE 01-64-05-3225C

API # 05-123-49716

Intermediate

December 30, 2019

Quote #:

Execution #:



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	Nicholas Iverson	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
Previous Casing	8.92	9.63	36.00	1,535.00	1,538.00		
Casing	6.37	7.00	23.00	7,458.00	7,055.00		J-55
Open Hole	8.75	0.00	0.00	7,486.00	7,055.00	20.00	

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	7,409.00
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	3797.00
Top Plug Size	7.000	Max Casing Pressure - Operated (psi)	3500.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	14.00	Job Pumped Through	Manifold
Centralizers Type	Bow	Top Connection Thread	Itc
Landing Collar Depth (ft)	7,414	Top Connection Size	7

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Mud Density In (ppg)	9.80
Circulation Prior to Job	Yes	Mud Density Out (ppg)	9.80
Circulation Time (min)	100.00	Solids Present at End of Circulation	No
Circulation Rate (bpm)	8.00	Flare Prior to / during the Cement Job	No
Circulation Volume (bbls)	300.00	Gas Present	No
Lost Circulation Prior to Cement Job	No		

TEMPERATURE

Ambient Temperature (°F)	15.00	Slurry Cement Temperature (°F)	70.00
Mix Water Temperature (°F)	70.00	Flow Line Temperature (°F)	70.00

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	3,460.00	305	633.0000	112.6000
Tail Slurry	BJCem I100.6.01C	15.8000	1.1570	4.99	6,960.00	500.00	90	105.0000	18.5000
Displacement Final	Water	8.3300			0.00			0.0000	291.9000

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	FLUID LOSS, FL-24	0.3000	BWOB
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	RETARDER, SR-20	0.3000	BWOB
Tail Slurry	BJCem I100.6.01C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem I100.6.01C	RETARDER, R-6	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
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

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	0.00
Calculated Displacement Vol (bbls)	291.20	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	291.20	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	1.50
Bump Plug Pressure (psi)	1300.00	Total Volume Pumped (bbls)	505.30
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 - Nicholas Iverson

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	12/30/2019 18:30	Callout					Crew called out at 1830 on 12/30/19 on location at 0000 on 12/31/19
2	12/30/2019 18:35	STEACS Briefing					Steacs briefing
3	12/30/2019 20:19	Depart for Location					Depart for location
4	12/30/2019 20:20	Arrive on Location					Arrive on location
5	12/31/2019 00:00	STEACS Briefing					Steacs briefing
6	12/31/2019 00:30	Rig Up					Rig up equipment
7	12/31/2019 00:35	Rig					Waiting on rig to finish running casing
8	12/31/2019 03:00	Equipment Issue					While prime the pump up for the job the we blew a hydraulic line on the pump shut down was able to get a line that worked from the rig. Then once we started prime up again, we could not get the computer to read rate so customer wanted to wait for new pump before starting. We went down at 03:00 and started pumping water ahead at 06:39
9	12/31/2019 06:30	STEACS Briefing					Steacs briefing with rig crew to go over the job.
10	12/31/2019 06:35	Prime Up	8.3300	3.00	3.00	300.00	File lines to pressure test
11	12/31/2019 06:42	Pressure Test	8.3300			5000.00	Pressure test iron with h2O
12	12/31/2019 06:44	Pump Spacer	8.3300	6.00	40.00	400.00	Pump h2O spacer
13	12/31/2019 06:55	Pump Lead Cement	12.5000	7.00	112.60	600.00	Pump lead cement at 12.5 ppg 305 sks, 2.0726 ft/sk, 11.83 gal/sks top of lead at 2634
14	12/31/2019 07:15	Pump Tail Cement	15.8000	5.00	18.50	500.00	Pump tail cement at 15.8ppg 90sks, 1.157 ft/sk, 4.99 gal/sks top of tail at 6838
15	12/31/2019 07:24	Drop Top Plug					Drop top plug
16	12/31/2019 07:26	Pump Displacement	8.3300	8.00	40.00	400.00	Pump displacement
17	12/31/2019 07:30	Pump Displacement	8.3300	8.00	150.00	900.00	Pump displacement
18	12/31/2019 07:50	Pump Displacement	8.3300	3.00	271.20	1300.00	Slow rate for last 20 bbls to land plug
19	12/31/2019 08:08	Land Plug			291.00	1800.00	Land plug fcp was 1300 psi 15 minute casing test

Client: HighPoint Operating Corporation

Well Name / API: GRINDE #01-64-05-3225C / 05-123-49716

Well MD: 7486



Quote #: QUO-40603-B2K2P9

Plan #: ORD-23544-T9T8Y3

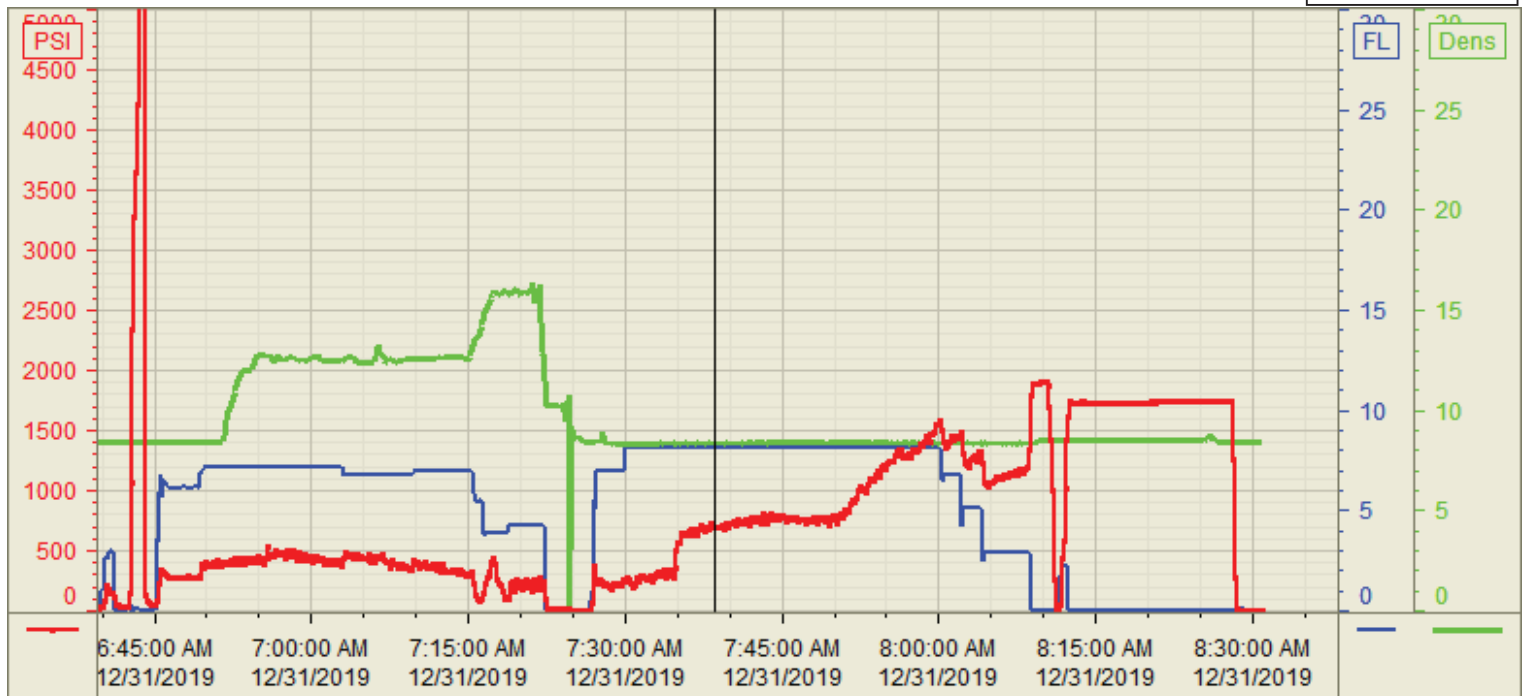
Execution #: EXC-23544-T9T8Y302

20	12/31/2019 08:27	Check Floats			1.50		Check floats back to pump truck floats held got 3 bbls back
21	12/31/2019 08:30	STEACS Briefing					Steacs briefing
22	12/31/2019 08:35	Rig Down					Rig down equipment
23	12/31/2019 08:50	STEACS Briefing					Steacs briefing
24	12/31/2019 08:55	Leave Location					Job completed crew leave location

Customer: HighPoint Operating
Well Number: 01-64-05-3225C
Lease Info: GRINDE



Print Date/Time
12/31/2019 8:31:00 AM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	696.9 i.	12/31/2019 7:38:51 AM i.	CementerDS_DISCHARGE_PRESS_DIAL
2	Den - Density (PPG)	8.37	12/31/2019 7:38:52 AM	CementerDENSITY_ACTUAL_RATE
3	Pump Rate	8.15	12/31/2019 7:38:52 AM	CementerFlow_Combined
4				
5				
				Source: Control1 8:31:01 AM