



HighPoint Operating Corporation

GRINDE 01-64-05-4841C

API # 05-123-49718

Intermediate

November 14, 2019

Quote #: QUO-38957-M6K9Y3

Execution #: EXC-22540-Y9G3D602



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	William Silvester	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	7,556.00	6,562.00	20.00	
Previous Casing	8.92	9.63	36.00	1,252.00	1,252.00		
Casing	6.37	7.00	23.00	7,529.00	6,562.00		J-55

HARDWARE

Bottom Plug Used?	No	Landing Collar Depth (ft)	7,481
Top Plug Used?	Yes	Tool Type	Float Collar
Top Plug Provided By	Non BJ	Tool Depth (ft)	7,481.42
Top Plug Size	7.000	Pipe Movement	None
Centralizers Used	Yes	Job Pumped Through	Manifold
Centralizers Quantity	12.00	Top Connection Thread	8 rd
Centralizers Type	Rigid	Top Connection Size	7

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud In	6
Circulation Prior to Job	Yes	PV Mud Out	6
Circulation Time (min)	120.00	YP Mud In	2
Circulation Rate (bpm)	8.00	YP Mud Out	2
Circulation Volume (bbls)	499.80	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)	10.00	Gas Present	No
Mud Density Out (ppg)	10.20		

TEMPERATURE

Ambient Temperature (°F)	33.00	Slurry Cement Temperature (°F)	71.00
Mix Water Temperature (°F)	65.00	Flow Line Temperature (°F)	135.00

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			1,243.16				40.0000
Lead Slurry	BJCem I100.3.01C	12.5000	2.0726	11.83	2,733.61	3,480.00	305	633.0000	112.6000
Tail Slurry	BJCem I100.6.01C	15.8000	1.1570	4.99	6,929.13	500.00	90	105.0000	18.6000
Displacement Final	Water	8.3300			0.00			0.0000	292.7000

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

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Method Used to Verify Returns	Visual
Calculated Displacement Vol (bbls)	294.80	Amt of Spacer to Surface	0.00
Actual Displacement Vol (bbls)	294.80	Pressure Left on Casing (psi)	0.00
Did Float Hold?	Yes	Amt Bled Back After Job	2.00
Bump Plug	No	Total Volume Pumped (bbls)	465.30
Were Returned Planned at Surface	No	Top Out Cement Spotted	No
		Lost Circulation During Cement Job	No

BJ Cementing Event Log

Intermediate - Cheyenne, WY - William Silvester

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	11/14/2019 00:00	Callout					Call out
2	11/14/2019 00:30	STEACS Briefing					Pre convoy meeting Load up Pre trip Equip Etc
3	11/14/2019 01:00	Depart for Location					Travel To location
4	11/14/2019 02:30	Arrive on Location					Arrive on Location
5	11/14/2019 04:35	STEACS Briefing					Pre rig up meeting
6	11/14/2019 07:07	Rig Up					Rig up
7	11/14/2019 08:30	STEACS Briefing					Pre job meeting
8	11/14/2019 08:35	Prime Up					Fill pump & lines
9	11/14/2019 08:39	Pressure Test					Pressure test pump & lines
10	11/14/2019 08:46	Pump Spacer	8.3300	4.00	40.00	300.00	Pump water spacer
11	11/14/2019 08:57	Pump Lead Cement	12.5000	5.50	112.00	450.00	Lead = 305 sks 2.07 ft3/sk 11.8 gps=112 bbls @ 12.5 ppg Wet & Dry Samples Taken
12	11/14/2019 09:15	Pump Tail Cement	15.8000	5.00	18.60	300.00	Tail = 90 sks 1.16 ft3/sk 4.99 gps = 18.6 bbls @ 15.8 ppg Wet & Dry Samples Taken
13	11/14/2019 09:20	Drop Top Plug					Drop top plug
14	11/14/2019 09:27	Pump Displacement	8.3300	8.00	100.00	1400.00	Pump displacement good returns
15	11/14/2019 09:44	Pump Displacement	8.3300	8.00	200.00	1400.00	Pump displacement good returns
16	11/14/2019 09:56	Pump Displacement	8.3300	4.00	280.00	1300.00	Pump displacement good returns
17	11/14/2019 10:06	Land Plug	8.3300	4.00	294.80	1300.00	Land Plug from 1300 to 1800 psi Wait 3 mins Bled Back 2.5 bbls back Float Held
18	11/14/2019 10:12	Other (See comment)	8.3300	4.00	294.80	2000.00	Casing Test 2000 psi for 15 mins
19	11/14/2019 10:27	STEACS Briefing					Pre rig down meeting
20	11/14/2019 10:30	Rig Down					Rig down
21	11/14/2019 11:30	STEACS Briefing					Pre convoy meeting
22	11/14/2019 11:35	Leave Location					Leave location headed back to Cheyenne

Client: HighPoint Operating Corporation

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

Well 7556
MD:



Quote #: QUO-38957-M6K9Y3

Plan #: ORD-22540-Y9G3D6

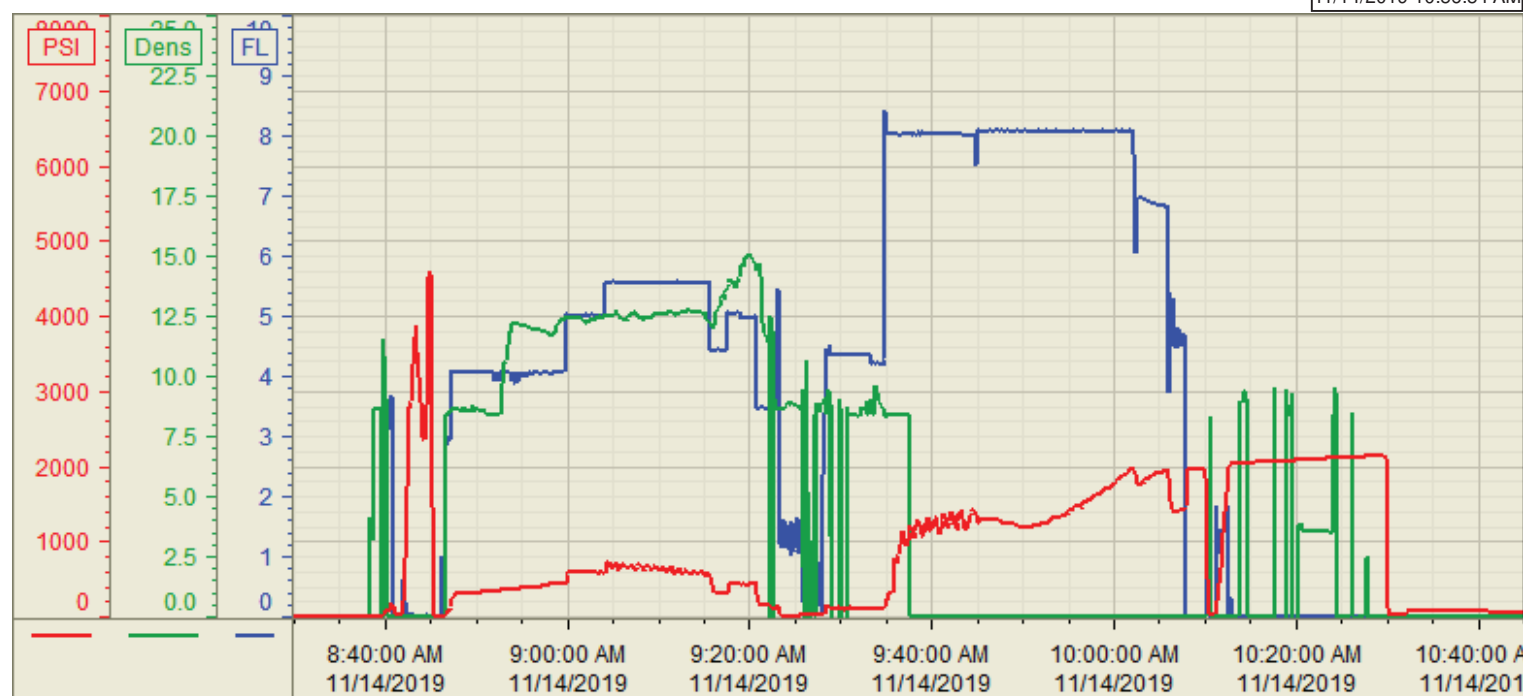
Execution #: EXC-22540-Y9G3D602

Customer: HighPoint Operating
Well Number: 01-64-05-4841C
Lease Info: Grinde



Print Date/Time

11/14/2019 10:56:54 AM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	60.8	11/14/2019 10:45:00 AM	CementerDS_DISCHARGE_PRESS_DIAL
2	Recirc - Density (PPG)		11/14/2019 10:45:00 AM i.	CementerDENSITY_ACTUAL_RATE
3	Combined pump rate		11/14/2019 10:45:00 AM i.	CementerFlow_Combined
4				
5				

Source: Control1 10:56:54 AM