

BEFORE THE OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF COLORADO

| IN THE MATTER OF THE PROMULGATION AND |) | CAUSE NO. 421 |
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| ESTABLISHMENT OF FIELD RULES TO GOVERN |) | |
| OPERATIONS FOR THE NIOBRARA, FORT HAYS, |) | DOCKET NO. 180700568 |
| CODELL, AND CARLILE FORMATIONS, |) | |
| HEREFORD FIELD, WELD COUNTY, COLORADO | j | TYPE: SPACING |
| • | j | |
| | j | ORDER NO. 421-127 |
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REPORT OF THE COMMISSION

The Commission heard this matter on September 17, 2018, at the Garfield County Sheriff's Annex – Rifle, 106 County Road 333-A, Rifle, Colorado, upon application for an order to amend Order No. 421-34 to include the Fort Hayes, Codell, and Carlile Formations in the approximate 1,280-acre drilling and spacing unit previously established by Order No. 421-34 for Sections 21 and 28, Township 10 North, Range 62 West, 6th P.M., for the production of oil, gas, and associated hydrocarbons from the Niobrara, Fort Hays, Codell, and Carlile Formations, and approve up to six new horizontal wells within the unit, for a total of 16 horizontal wells, for the production of oil, gas, and associated hydrocarbons from the Niobrara, Fort Hays, Codell, and Carlile Formations.

FINDINGS

The Commission finds as follows:

- 1. HighPoint Operating Corporation (Operator No. 10071) ("HighPoint" or "Applicant") is an interested party in the subject matter of the above-referenced hearing.
- 2. Due notice of the time, place and purpose of the hearing has been given in all respects as required by law.
- 3. The Commission has jurisdiction over the subject matter embraced in said Notice, and of the parties interested therein, and jurisdiction to promulgate the hereinafter prescribed order pursuant to the Oil and Gas Conservation Act.
- 4. Rule 318.a. of the Rules and Regulations of the Oil and Gas Conservation Commission requires that, on unspaced lands, wells drilled in excess of 2,500 feet in depth be located not less than 600 feet from any lease line, and located not less than 1,200 feet from any other producible or drilling oil or gas well when drilling to the same common source of supply. Sections 21 and 28, Township 10 North, Range 62 West, 6th P.M., are subject to this Rule for the Fort Hays, Codell, and Carlile Formations.
- 5. On June 27, 2011, the Commission entered Order No. 535-28 which, among other things, established 52 approximate 640-acre drilling and spacing units, and approved one horizontal well within each unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation. Sections 21 and 28, Township 10 North, Range 62 West, 6th P.M. are subject to this Order for the Niobrara Formation.

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- 6. On January 7, 2013, the Commission entered Order No. 421-34 which vacated two approximate 640-acre drilling and spacing units established by Order No. 535-28 for Sections 21 and 28, Township 10 North, Range 62 West, 6th P.M., and established an approximate 1,280-acre drilling and spacing unit for Sections 21 and 28, Township 10 North, Range 62 West, 6th P.M., and approved up to ten wells within the unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation, with the bottomhole locations not less than 600 feet from the boundary of the proposed drilling unit and not less than 460 feet from any other well or treated interval of a well producing from the Niobrara Formation, without exception being granted by the Director.
- 7. On May 31, 2018, HighPoint filed a verified application ("Application") pursuant to §34-60-116, C.R.S., for an order to amend Order No. 421-34 to include the Fort Hayes, Codell, and Carlile Formations in the approximate 1,280-acre drilling and spacing unit previously established for the below described lands ("Application Lands") and to approve up to six new horizontal wells within the unit, for a total of 16 horizontal wells, for the production of oil, gas and associated hydrocarbons from the Niobrara, Fort Hays, Codell, and Carlile Formations, with the productive interval of the wellbores in the Niobrara and Fort Hays Formations to be located no closer than 150 feet from unit boundaries, the productive interval of the wellbores in the Codell and Carlile Formations to be located no closer than 300 feet from the unit boundaries, and the productive interval of the wellbores in the Niobrara, Fort Hays, Codell, and Carlile Formations to be located no closer than 150 feet from the productive interval of any other wellbore located in the unit, unless the Director grants an exception:

Township 10 North, Range 62 West, 6th P.M.

Section 21: All Section 28: All

Applicant stated that any horizontal wells to be drilled under this Application will be drilled from no more than four multi-well pads on the surface of the drilling unit, or on adjacent lands with consent of the landowner, unless the Director grants an exception.

- 8. On July 3, 2018, supplemented on July 13, 2018, HighPoint, by its attorneys, filed with the Commission a written request to approve the Application based on the merits of the verified Application and the supporting exhibits. Sworn written testimony and exhibits were submitted in support of the Application.
- 9. Land testimony and exhibits submitted in support of the Application by Teale Stone, Landman for HighPoint, showed that both the mineral and surface interests in the Application Lands are owned in fee, and that HighPoint has a leasehold interest with the right to drill in the Application Lands.
- 10. Geologic testimony and exhibits submitted in support of the Application by Dan Moore, Senior Geologist for HighPoint, showed that the Niobrara Formation is present throughout the Application Lands, is approximately 325 to 360 feet thick, and consists of a sequence of chalks marls, and limestones. The geologic testimony also showed that the Fort Hays Formation is present throughout the Application Lands, ranges from approximately 20 to 24 feet thick, and consists of limestone. The geologic testimony also showed that the Codell Formation is present throughout the Application Lands, ranges from approximately 16 to 18 feet thick, and consists of a sequence of siltstones and sandstones. The geologic testimony also showed that the Carlile Formation is present throughout the Application Lands, ranges from approximately 30 to 32 feet thick, and is a shale.

- Stewart, Senior Reservoir Engineer at HighPoint, showed that HighPoint plans to drill four to six horizontal Codell-Formation wells and 10 to 12 horizontal Niobrara-Formation wells. In addition, the engineering testimony showed that the drainage area for analog horizontal Niobrara-Formation wells is estimated at 54 acres per well, and an approximate 1,280-acre drilling and spacing unit is therefore not less than the maximum area that can be efficiently, economically and effectively drained by 10 to 12 horizontal wells producing oil, gas and associated hydrocarbons from the Niobrara Formation. The engineering testimony also showed that the drainage area for analog horizontal Codell-Formation wells is estimated at 78 acres per well, and an approximate 1,280-acre drilling and spacing unit is therefore not less than the maximum area that can be efficiently, economically and effectively drained by four to six horizontal wells producing oil, gas and associated hydrocarbons from the Codell Formation. Engineering testimony also showed that the primary drilling targets are the Niobrara and Codell Formations, but that horizontal wells targeting the Codell Formation might deviate into the Fort Hays and Carlile Formations. However, this type of occurrence will not impact the drainage area calculations.
- 12. In addition, the engineering testimony showed that the average drainage distance from wellbores in the Niobrara and Fort Hays Formations is estimated to be 115 feet. The engineering testimony also showed that the average drainage distance from wellbores in the Codell and Carlile Formations is estimated to be 170 feet. Thus, the requested setbacks of 150 feet from the unit boundaries for wellbores in the Niobrara and Fort Hays Formations and 300 feet from the unit boundaries for wellbores in the Codell and Carlile formations are appropriate.
- 13. The above-referenced testimony and exhibits show that granting the Application will allow more efficient reservoir drainage, will prevent waste, will assure a greater ultimate recovery of hydrocarbons, and will not violate correlative rights.
 - 14. HighPoint agreed to be bound by oral order of the Commission.
- 15. Based on the facts stated in the verified Application, having received no protests, and based on the Hearing Officer review of the Application under Rule 511, the Commission should enter an order to amend Order No. 421-34 to include the Fort Hayes, Codell, and Carlile Formations in the approximate 1,280-acre drilling and spacing unit previously established by Order No. 421-34 for Sections 21 and 28, Township 10 North, Range 62 West, 6th P.M., for the production of oil, gas, and associated hydrocarbons from the Niobrara, Fort Hays, Codell, and Carlile Formations, and approve up to six new horizontal wells within the unit, for a total of 16 horizontal wells, for the production of oil, gas, and associated hydrocarbons from the Niobrara, Fort Hays, Codell, and Carlile Formations.

<u>ORDER</u>

IT IS HEREBY ORDERED:

1. Order No. 421-34 is hereby amended to include the Fort Hayes, Codell, and Carlile Formations, in addition to the Niobrara Formation, in an approximate 1,280-acre drilling and spacing unit established by Order No. 421-34 for the below described lands, and up to six new horizontal wells within the unit, for a total of up to 16 horizontal wells, are approved for the production of oil, gas and associated hydrocarbons from the Niobrara, Fort Hays, Codell, and Carlile Formations:

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Section 21: All Section 28: All

- 2. The productive interval of the wellbores in the Niobrara and Fort Hays Formations will be located no closer than 150 feet from unit boundaries, the productive interval of the wellbores in the Codell and Carlile Formations will be located no closer than 300 feet from the unit boundaries, and the productive interval of the wellbores in the Niobrara, Fort Hays, Codell, and Carlile Formations will be located no closer than 150 feet from the productive interval of any other wellbore located in the unit, unless the Director grants an exception.
- 3. All wells permitted under this Order will be drilled from no more than four multi-well pads within the Application Lands, or on adjacent lands with surface owner consent, unless the Director grants an exception.

IT IS FURTHER ORDERED:

- 1. The provisions contained in the above order shall become effective immediately.
- 2. The Commission expressly reserves its right, after notice and hearing, to alter, amend or repeal any and/or all of the above orders.
- 3. Under the State Administrative Procedure Act, the Commission considers this Order to be final agency action for purposes of judicial review within 35 days after the date this Order is mailed by the Commission.
- 4. An application for reconsideration by the Commission of this Order is not required prior to the filing for judicial review.

ENTERED this 2nd day of October, 2018, as of September 17, 2018.

OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF COLORADO

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