November 6, 2020

Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

RE: Roaring Fork 14-28 (API # 05-073-06774), Request to Flare Pursuant to Rule 912.b.

T16S, R54W, 6th PM
Section 28, SESW
Lincoln, Colorado

COGCC Engineering Staff,

KODA Exploration LLC (KODA) respectfully submits a request to flare pursuant to Rule 912.b for an initial period of 6 months, for KODA's Roaring Fork 14-28 Pad which is associated with the Form 2A Doc # 402149030.

COCGG Rule 912.a. provides that the unnecessary or excessive venting or flaring of natural gas produced from a well is prohibited. COGCC Rule 912.b. provides that except for gas flared or vented during an upset condition, well maintenance, well stimulation flowback, purging operations, or a productivity test, gas from a well shall be flared or vented only after notice has been given and approval obtained from the Director on a Sundry Notice, Form 4, stating the estimated volume and content of the gas. The notice shall indicate whether the gas contains more than one (1) ppm of hydrogen sulfide. If necessary, to protect the public health, safety or welfare, the Director may require the flaring of gas. COGCC Rule 912.d. provides that flared gas that is subject to Sundry Notice, Form 4, shall be directed to a controlled flare in accordance with Rule 903.b.(2) or other combustion device operated as efficiently as possible to provide maximum reduction of air contaminants where practicable and without endangering the safety of the well site personnel and the public.

Upstream Information and Midstream Infrastructure in KODA exploration area:

KODA leasehold (exploration area) is concentrated in an area located in Township 16S & 17S, Ranges 54W, Lincoln County, Colorado. To date, no commercial wells in the Morrow formation (or any other formations) have been drilled and completed in the area. The closest producing wells to KODA are Craig 4-4 (API 05-073-06319, Bolero Field, KTM Operating LLC) approximately 19 miles north-northwest and Kinzie ET Al #1-4 (API 05-073-06213, Double Eagle Field, Foundation Energy Mgt. LLC) approximately 18 miles northeast. Both are marginal oil producing wells and either flare and/or use associated produced gas on site – no gas sales.

KODA's exploration area lies approximately 20 miles to the SW of existing Kinder Morgan/ Colorado Interstate Gas (CIG) interstate gas transportation pipelines (2A and 2B) in Southern Lincoln County where their two 20" pipelines cross Hwy 94, near the intersection of Hwy's 40 and 94. Following existing county dirt roads, the distance is approximately 35 miles between KODA and CIG. The possibility, costs and requirements of obtaining an interconnection to the CIG gas pipeline(s) was discussed with Kinder Morgan, Colorado Springs office on September 28, 2020. Interconnects start at $1 million (for gas rates under 10 MMSCFD) and can cost approximately $1.5 million for gas rates around 50 MMSCFD. KODA would be required to obtain and purchase the land (approximately 0.5 acres based on Wiepking-Fullerton's CIG interconnect to the north) on which the interconnect facilities are constructed. Although KODA would reimburse Kinder Morgan for the actual facilities cost, Kinder Morgan would own and operate the facility after it is built and operational. Since gas being transported through CIG pipelines is for direct sales to customers (municipalities, power plants, companies, etc.) the gas must be pipeline quality (e.g., dry gas meeting their gas quality specifications). KODA would be required to build and operate a gas processing plant to remove water vapor, condensable hydrocarbons and other impurities. Additionally, since the CIG pipelines operate between 600 – 920 psig, KODA would be required to install and operate a compressor station designed to boost its gas from a typical separator production pressure of 25-50 psig to the CIG's 920 psig maximum allowable operating pressure (MAOP). An initial estimate for a 35-mile, 1000 psig MAOP gas pipeline is $5-8 million ($20-40 per foot - varies with pipeline diameter based on gas rates) for pipe and fittings, to obtain ROW, lay pipeline, bore waterways, purchase land for CIG's connection, in addition to a CIG connection fee estimated at $1 million. The estimated cost of a gas processing/compressor plant vary significantly based upon the gas production rate and gas quality, but it could easily cost an additional $0.5 million. A total cost of $6.5-$9.5 million to build the above facilities (plus costs to operate them) is not practical until commercial production and hydrocarbon reserves of sufficient quantity are established by KODA to justify such expenses.

There are no existing gas gathering systems nearby KODA's exploration area. The closet gas gathering system (Haswell-McClave gathering) to KODA is to the southeast, with the closet wells as potential tie-in points in that system being producing well Weinman 1-27 (API 05-061-06403, Haswell Field, Strachan Exploration Inc.) approximately 23 miles southeast of KODA and shut-in well Peck #1 (API 05-061-06599, Elephant Field, Mull Drilling Company Inc.) approximately 25 miles east-southeast of KODA. The distance from KODA to these points, following existing county dirt roads, are approximately 37-42 miles, respectively. Produced gas from this area, along with gas from McClave Field and other smaller fields in that area are gathered to the McClave Compressor Station/Gas Plant operated by Strachan Exploration Inc., located approximately 43 miles southeast of KODA in Kiowa County, Section 32, T20S, R48 W and transported for sale through the CIG 3A interstate gas transportation pipeline that runs between the Kit Carson and Campo, Colorado areas. Since this system interconnects into CIG's interstate transportation system, the same gas specification requirements as outlined above apply. The operating pressure of a KODA pipeline to the Haswell-McClave area could be lower due to connecting into an existing gas gathering system, but gas compression would likely still be required to get KODA's gas to that gathering system. If the Haswell-McClave gathering system is available, is in adequate mechanical condition (due to its age), and has available capacity, a larger diameter, lower pressure pipeline 37 miles in length could cost $4-6 million ($20 – 30 per foot) depending on the actual MAOP and gas rate. A $1 million interconnect into CIG and a gas processing plant might be avoided, assuming the McClave Gas Plant has sufficient available capacity, however gas dehydration at KODA's pipeline entrance may be necessary. Operating costs would include gas transportation, compression and processing fees imposed by owners of the gathering lines and gas compression/gas plant. A total cost estimate of $5 million capital cost to build the above facilities (plus costs to operate them and pay 3rd party fees) is also not practical until commercial production and hydrocarbon reserves of sufficient quantity are established by KODA to justify such expenses.

KODA is attempting to balance the need to drill wells to develop an understanding of the well performance from the Morrow Formation in this unproven area with the desire to minimize the amount of gas flared. The information that KODA has obtained from evaluating available data in COGIS and COENV from surrounding wells and fields, it is estimated that the initial gas production rate will be approximately 100 MCFD at a 0% decline for the first 12 months. Gas content is expected to be like that from War Eagle #16, 40 miles to the north, which was tested in the Morrow Zone formation that is also the target zone for Roaring Fork 14-28. The War Eagle #16 gas analysis (Doc # 402160761, July 18, 2019) is the most recent Morrow Zone analysis found in COGIS/COENV among wells in Lincoln County.

Due to the absence of immediately available gas gathering and sales lines at the Roaring Fork 14-28 Pad, KODA is seeking a 6-month request to flare for the Roaring Fork 14-28 well and subsequent production facility pursuant to COGCC Rule 912.b. The first two months of flaring will occur on the Roaring Fork 14-28 well pad using temporary equipment during a maximum 60-day well testing period. The additional 4 months of flaring will occur using permanent facilities installed on location. KODA is planning to commence drilling operations for the Roaring Fork 14-28 well on or around October 20, 2020, as such, KODA respectfully request expedited review of this request to flare.

The lack of gas gathering and process infrastructure in KODA's area is an issue that KODA is actively working to resolve. An approved request to flare for the Roaring Fork 14-28 well will allow KODA time to bridge its operations into an increasingly visible midstream solution or other acceptable options and obtain information that will ultimately result in less flaring and waste from the KODA exploration area, as additional commercial well results may promote an acceleration of gas gathering and processing or alternate solutions in this currently underserved region.

To reduce emissions, KODA plans to collect and flare all gas, rather than venting any of it in both temporary test facilities and permanent production facilities. Per Rule 805.b.(2) an emissions control device (ECD or enclosed combustor) will be permitted with CDPHE and installed at the site. The ECD will be capable of achieving 95% control efficiency of VOC. No venting of produced gas is planned at any time during normal operations. All site specific CDPHE permit requirements will be presented to and followed by KODA operating personnel.

In addition to possible long-term gas gathering, transportation and processing, KODA has and will continue exploring more immediate and more likely onsite or nearby process scenarios for the produced gas, including:

- KODA plans to use as much produced gas as possible to power all gas-fired production equipment such as the pumping unit engine (10-40 MSCFD) and the separator burner (5-15 MSCFD).
- KODA will investigate the use of produced gas to generate electric power, for onsite use and/or to sell to the local electrical co-op (Mountain View Electric Association - MVEA).
- KODA will determine if onsite natural gas liquids processing is an option to recover liquids for transportation and sale and to shrink the remaining volume of gas required to be flared on site.
- KODA will review and evaluate the use of gas in new/unconventional ways to beneficially use produced gas onsite, such as:
    - Purestream's produced water flash evaporation process to reduce offsite transportation or water for disposal, thereby reducing emissions due to fewer water trucks on the road. Initial discussions were held with Purestream on March 4, 2020 to determine if this is a potential option, and this process may be viable if water production and gas rates can be met.
    - Cruesoe Energy Systems' Digital Flare Mitigation service that burns gas to power a computer server (via satellite transmission) farm, etc.
- Although more likely to be a longer-term solution, KODA will consider the benefits of reinjecting gas into the Morrow formation for reservoir pressure maintenance once other KODA wells are drilled (as has been done in the Sorrento Field) and production rates and reserve estimates established.

The work that KODA has done to date to define and investigate gas sales and usage options meets the COGCC's basic intent of the protection of public health, safety, welfare and environment and minimize the waste of a resource.

As noted in the cultural distances portion of the Roaring Fork 14-28 Pad Form 2A, there are no building units within (1) mile of the location and therefore there are no directly affected parties from which to obtain a waiver.

KODA welcomes further discussion with you and the COGCC Staff on this request to flare, if necessary. As noted above, KODA is planning to commence drilling operations for the Roaring Fork 14-28 well on or around November 1, 2020, so an expedited review of this request for a six-month flaring allowance is respectfully requested. Please do not hesitate to contact Joe Rezendes (Engineering Consultant), at (303) 618-3057, should you have any questions or concerns. You may also contact myself, Anders Elgerd, at (303) 915-2555.

Sincerely,
KODA Exploration LLC
CEO
Anders Elgerd
(303) 915-2555