

STATE OF ALASKA
ALASKA OIL AND GAS CONSERVATION COMMISSION
333 West 7th Avenue
Anchorage, Alaska 99501

Re: THE APPLICATION OF Great Bear) Docket Number: OTH-22-028
Pantheon LLC authorizing the flaring of gas in)
association with a long-term, up to nine) Other Order 194
months, production test of the Alkaid #2 well)
(PTD 222-077), pursuant to 20 AAC) Alkaid #2 Exploration Well
25.235(d)(6).) Alkaid Unit
) North Slope Borough, Alaska
)
) November 23, 2022

IT APPEARING THAT:

1. By letter dated August 29, 2022, Great Bear Pantheon LLC (Great Bear) submitted an application seeking authorization from the Alaska Oil and Gas Conservation Commission (AOGCC) to flare gas during a long-term, up to nine months, production test of the Alkaid #2 well in accordance with 20 AAC 25.235(d)(6).
2. Pursuant to 20 AAC 25.540, the AOGCC scheduled a public hearing for October 27, 2022. On September 14, 2022, the AOGCC published notice of the opportunity for that hearing on the State of Alaska's Online Public Notice website and on the AOGCC's website, electronically transmitted the notice to all persons on the AOGCC's email distribution list and mailed printed copies of the notice to all persons on the AOGCC's mailing distribution list. On September 15, 2022, the AOGCC published the notice in the Anchorage Daily News.
3. Written comments on Great Bear's application were received from Trustees for Alaska and Bret Chambers.
4. The hearing was held as scheduled on October 27, 2022. Testimony was received from the applicant, Great Bear, and Bret Chambers.

PURPOSE AND NEED FOR THIS ORDER:

20 AAC 25.235(d)(6) provides "upon application, the commission will, in its discretion, authorize the flaring or venting of gas for purposes of testing a well before regular production." "Regular Production" is defined under AS 31.05.170(14) as "continuing production of oil or gas from a well into production facilities and transportation to market, but does not include short term testing, evaluation, or experimental pilot production activities that have been approved by permit or order of the commission." Typically, such tests are of relatively short duration, a matter of a few weeks or less, and handled via sundry permit approval or letter, but what Great Bear has proposed is a long-term, up to nine months, test and the AOGCC has determined that because of the long-term nature of the request that a hearing and order are warranted.

FINDINGS:

1. Great Bear drilled the Alkaid #2 well from a gravel pad off the Dalton Highway approximately 20 miles south of the Prudhoe Bay Field in July and August 2022.

2. The Alkaid #2 well encountered what Great Bear is referring to as the Alkaid Production Zone, which it characterizes as a tight sand.
3. The well was completed horizontally with a multi-stage hydraulically fractured completion, which is similar to the completions used in tight sand reservoirs in areas such as the Permian, Anadarko, and Williston basins in the lower 48.
4. Long-term production tests provide more accurate results, especially in poorer quality reservoir rocks, than short-term tests when evaluating the feasibility of a project. Short-term tests may not be able to differentiate between an economically viable development and an uneconomic one.
5. The Alkaid Unit is not associated with any existing field on the North Slope and therefore does not have access to permanent production facilities in order to conduct a long-term test or a full field development.
6. Great Bear has acquired temporary production facilities to process production from the field and it will transport produced oil to an existing field in order to sell it and it will dispose of any produced water. Some gas will be used as fuel gas onsite and for gas-lift (there's also the possibility of compressing some gas for transport offsite to market) but there will likely be excess gas produced during the production test that can not be beneficially used, sold, or reinjected since there's no available injection well onsite.
7. Great Bear estimates the well could produce between 150 and 500 thousand standard cubic feet per day (MSCFPD).
8. Great Bear estimates that fuel consumption and gas-lift will require up to 150 MSCFPD and that any gas above this amount would have to be flared.
9. Great Bear believes that a nine month production test should be long enough for them to be able to determine if it has an economically viable project. It is possible a decision could be reached before this period of time.

CONCLUSIONS:

1. A long-term production test is necessary to determine if Great Bear has made an economic discovery and to be able to design production facilities for a full field development if it is determined that it has a viable project.
2. Utilizing the produced gas for fuel and gas-lift, and possibly sales as compressed gas, will reduce the amount of gas that could be flared during the production test.
3. Regular updates on the project are necessary in order to allow the AOGCC to provide proper oversight and ensure flaring is kept to a minimum.

NOW THEREFORE IT IS ORDERED:

The AOGCC authorizes Great Bear to flare gas in association with a long-term production test of the Alkaid #2 well in accordance with the following conditions:

1. This authorization expires three full months after production begins (i.e. if production begins in mid-December 2022 this authorization will expire on March 31, 2023). The AOGCC may, at its discretion, extend this authorization in three month increments, not to exceed nine months total, based on its analysis of the quarterly reports required in Condition 3 below.
2. Great Bear shall submit a Facility Report of Produced Gas Disposition (Form 10-422) each month during the production test. The volume of lift-gas shall be reported on this form in the "Remarks:" section. Since this is an exploratory well this information will be held

- confidential, pursuant to AS 31.05.035(c), until such time as the well's confidentiality period expires.
3. On a quarterly basis Great Bear shall meet with the AOGCC to discuss the status of the project. Topics to discuss at these meetings include, but are not limited to, the following:
 - a. General status of the project,
 - b. Steps, if any, taken or under consideration to reduce the amount of gas flared, and
 - c. Progress towards reaching a conclusion on the viability of the project.
 4. Great Bear must notify the AOGCC no later than the close of the following business day if anything happens (i.e. the electrical generation turbine breaks) to cause a significant increase in the amount of gas being flared.

DONE at Anchorage, Alaska and dated November 23, 2022.

Jessie L.
Chmielowski
Jessie L. Chmielowski
Commissioner

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Jessie L. Chmielowski
Date: 2022.11.23
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Gregory Wilson
Gregory C. Wilson
Commissioner

Digitally signed by Gregory
Wilson
Date: 2022.11.23 12:05:58
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RECONSIDERATION AND APPEAL NOTICE

As provided in AS 31.05.080(a), within **20** days after written notice of the entry of this order or decision, or such further time as the AOGCC grants for good cause shown, a person affected by it may file with the AOGCC an application for reconsideration of the matter determined by it. If the notice was mailed, then the period of time shall be **23** days. An application for reconsideration must set out the respect in which the order or decision is believed to be erroneous.

The AOGCC shall grant or refuse the application for reconsideration in whole or in part within 10 days after it is filed. Failure to act on it within 10 days is a denial of reconsideration. If the AOGCC denies reconsideration, upon denial, this order or decision and the denial of reconsideration are **FINAL** and may be appealed to superior court. The appeal **MUST** be filed within **33** days after the date on which the AOGCC mails, **OR 30** days if the AOGCC otherwise distributes, the order or decision denying reconsideration, **UNLESS** the denial is by inaction, in which case the appeal **MUST** be filed within **40** days after the date on which the application for reconsideration was filed.

If the AOGCC grants an application for reconsideration, this order or decision does not become final. Rather, the order or decision on reconsideration will be the **FINAL** order or decision of the AOGCC, and it may be appealed to superior court. That appeal **MUST** be filed within **33** days after the date on which the AOGCC mails, **OR 30** days if the AOGCC otherwise distributes, the order or decision on reconsideration.

In computing a period of time above, the date of the event or default after which the designated period begins to run is not included in the period; the last day of the period is included, unless it falls on a weekend or state holiday, in which event the period runs until 5:00 p.m. on the next day that does not fall on a weekend or state holiday.