

BY EMAIL ONLY

August 16, 2019

Barbara Wingate
Canadian Natural Resources Limited

ADVANTAGE OIL AND GAS LTD. (ADVANTAGE)

APPLICATION NO. 1921259

STATEMENT OF CONCERN NO. 31529

Dear Barbara Wingate:

You are receiving this letter because you filed a statement of concern about Application No. 1921529. The Alberta Energy Regulator (AER) has reviewed your statement of concern, along with the company's application, and all applicable requirements and other submissions or information about the application. The AER has decided that a hearing is not required to consider the concerns outlined in your statement of concern.

In our review of your concerns, we considered the following:

- Regarding your concerns about confining strata, AER conducted a review of the Upper Belloy interval, and concluded that the strata was approximately 4.5 metres thick based on a porosity cut-off of 4%, which is less than 9 metres based on 9% porosity cut-off as suggested by Advantage. However, AER believes that the 4.5 metres is a sufficient seal for the proposed disposal water scheme.
- Regarding your concerns about natural faults and fractures, Advantage has committed to not conduct fracture stimulation in the 00/03-36-072-08W6/0 well. By committing to not fracture stimulate the 00/03-36-072-08W6/0 well, the risk associated with connecting to the potential natural faults and fractures in the area around the wellbore is reduced.
- Regarding your concerns about pressure, Advantage has committed to conduct an initial reservoir pressure test in the Belloy zone. The pressure in the Belloy zone must be measured by conducting a stabilized shut-in bottomhole pressure test in

accordance with *Directive 040: Pressure and Deliverability Testing Oil and Gas Wells* on the 00/03-36-072-08W6/0 well. The test must occur prior to disposal commencing and every four (4) years thereafter. The results of the tests must be submitted to the AER. The initial pressure must also be received and accepted by the AER through the Directive065.Submissions@aer.ca inbox.

Based on the above, the AER has concluded that it is not necessary to hold a hearing before making a decision on the application. The AER has issued the applied-for approval and this is your notice of that decision. A copy of the approval is attached.

All AER- regulated parties must comply not only with the conditions of their authorizations, but with all of the AER's regulatory requirements. To ensure industry compliance the AER has developed its *Integrated Compliance Assurance Framework*, which embodies the three main components of all effective compliance assurance programs, those being education, prevention, and enforcement. You can find out more about how the AER verifies industry compliance and responds to noncompliance here: <https://aer.ca/regulating-development/compliance/compliance-assurance-program>.

You may file a regulatory appeal on the AER's decision to issue the approval if you meet the criteria within section 36 of the *Responsible Energy Development Act*. Filing instructions and forms are on our website under Regulatory Appeal Process.

If you have any questions, contact Yvonne Chow at Yvonne.Chow@aer.ca

Sincerely,

<Original signed by>

Rob Cruickshank
Director, Business Process

Enclosure (1): **Approval**

cc: Tallis Dent, Advantage Oil and Gas Limited
Nathan Twarzynski, Advantage Oil and Gas Limited
AER SOC Assessor
AER Grande Prairie Field Centre