

May 2012

What Does the ERCB's Decision in *Kallisto*¹ Mean for Hydraulic Fracturing?

William M. Laurin and JoAnn P. Jamieson

In a recent contest before the Alberta Energy Resources Conservation Board between the operator of a natural gas storage reservoir and a producer seeking to drill and frack a Basal Quartz vertical oil well in the vicinity of the storage reservoir, the ERCB granted the producer its well licence, subject to conditions. While not specifically addressing any of the potential issues relating to hydraulic fracturing in tight oil reservoirs, there are interesting and useful inferences that can be drawn from the ERCB's approach to an adjoining mineral owner's objection to a fracking operation.

The *Kallisto* Decision

The issues considered by the ERCB were the risk of communication between the proposed well and the existing Elkton storage reservoir, the rights of the parties and the public interest and the mitigation of risks.

The ERCB panel acknowledged that Kallisto Energy Corp. ("Kallisto") had the right to apply for and drill the 11-26 well to evaluate the mineral lease it obtained from freehold owners. Similarly, the panel acknowledged CrossAlta Gas Storage & Services Ltd. et al.'s ("CrossAlta") right to store royalty-paid gas in and withdraw it from the Elkton storage reservoir in accordance with its approval. The panel further noted CrossAlta's responsibility to assess and understand the full extent of the storage unit reservoir (i.e. justify the boundary).

The ERCB examined extensive geological evidence from both parties. Given the physical separation and the geology of the area, the ERCB found that the likelihood of communication between the proposed vertical well and the storage reservoir was low and therefore, the risk to the storage reservoir was not of sufficient magnitude to warrant denying the well licence. Instead, the panel decided to condition the well licence to further assess and reduce the risk during completion of the well.

After drilling its well, Kallisto is required to submit stabilized initial pressure data to confirm that the Basal Quartz zone is not within the pressure regime of the gas storage reservoir. If the well indicates existing communication with the Elkton storage reservoir, the ERCB will order that the well be shut-in without any fracture stimulation in the offending zone. In the event that the well demonstrates a virgin reservoir pressure, the ERCB will limit the size of a fracture stimulation in the well to 40 tonnes or less.

In essence, the ERCB would not enforce CrossAlta's requested regulatory "halo" around the storage reservoir by granting what amounts to the equivalent of "injunctive relief" to CrossAlta. Rather, the ERCB instead took a "wait and see" approach by attaching the conditions to the well licence.



William M. Laurin

403.218.7534

wilaurin@lawsonlundell.com



JoAnn P. Jamieson

403.218.7514

jjamieson@lawsonlundell.com

¹<http://www.ercb.ca/docs/documents/decisions/2012/2012-ABERCB-005.pdf>

Threshold for Adjacent Mineral Owners to Object

A frack of the size proposed by Kallisto was not considered by the ERCB to pose a risk significant enough to induce communication over the distance that a fracture would have to propagate from the vertical well to the storage reservoir. In this regard, the panel found it reasonable to limit the size of Kallisto's fracture stimulation of the well to 40 tonnes or less, recognizing that it was unlikely for such a frack to extend more than 200 metres from the well.

The ERCB's view of the 200 metre frack stimulated rock volume is of interest in the context of the *Oil & Gas Conservation Regulations*. The *Regulations* ascribe a quarter section drilling spacing unit for an oil well, and further provide that the target area must be the central area within the drilling spacing unit having sides of "100 metres from the sides of the drilling spacing unit" and parallel to them. It may follow that the ERCB has given its approval, as a reasonable exercise of Kallisto's right to work, to fracks extending through the regulatory setback distance and beyond the drilling spacing unit boundary.

In the end, CrossAlta, as a mineral owner potentially adversely affected by Kallisto's fracking activities, must wait to see whether its subsurface interests are negatively impacted because they were unable to demonstrate to the ERCB's satisfaction that more than a low "likelihood of communication" existed. Perhaps too much can be read into the choice of language employed by the ERCB, but it may follow that an objecting adjoining mineral owner, in order to enjoin or modify a neighboring fracking operation, would be required to demonstrate at least a reasonable likelihood (i.e. 20% - 40%) that the neighboring operation would negatively impact to its equitable interests. From our understanding of the imprecision and uncertainty inherent in predicting rock volumes stimulated by fracking operations using microseismic techniques or otherwise, this burden may be insurmountable for an adjoining mineral owner.

Regulatory Approval no Defense in Tort

Finally, an adjoining mineral landowner, both in the scenario of a tight oil reservoir or CrossAlta with its storage reservoir, will always have its civil remedies available to address negligence, nuisance, trespass or conversion as a result of fracking operations. Regulatory approval, in this or any other circumstance, is not a defense in tort to damages suffered by an adjoining mineral owner – all the *Kallisto* decision does is suggest that a significant burden has been placed on the party seeking damages to prove that those damages have in fact been suffered as a result of the activity, rather than, in the case of CrossAlta, seeking to prevent the activity from occurring in the first place.

For more information please contact [William M. Laurin](#) at 403.218.7534 or [JoAnn P. Jamieson](#) at 403.218.7514.

Lawson Lundell LLP is a British Columbia Limited Liability Partnership. The information contained in this update is for general information purposes only. If you require legal advice or further information, please contact one of the lawyers listed above.



Vancouver

Suite 1600, Cathedral Place
925 West Georgia Street
Vancouver, British Columbia
Canada V6C 3L2
(T) 604.685.3456
(F) 604.669.1620



Calgary

Suite 3700, 205-5th Avenue S.W.
Bow Valley Square 2
Calgary, Alberta
Canada T2P 2V7
(T) 403.269.6900
(F) 403.269.9494



Yellowknife

P.O. Box 818
Suite 200, 4915 – 48 Street
Yellowknife, Northwest Territories
Canada X1A 2N6
(T) 867.669.5500 Toll Free: 888.465.7608
(F) 867.920.2206

