

Bulletin 2019-07

March 15, 2019

Recommendations around Hydraulic Fracturing in the Red Deer Area

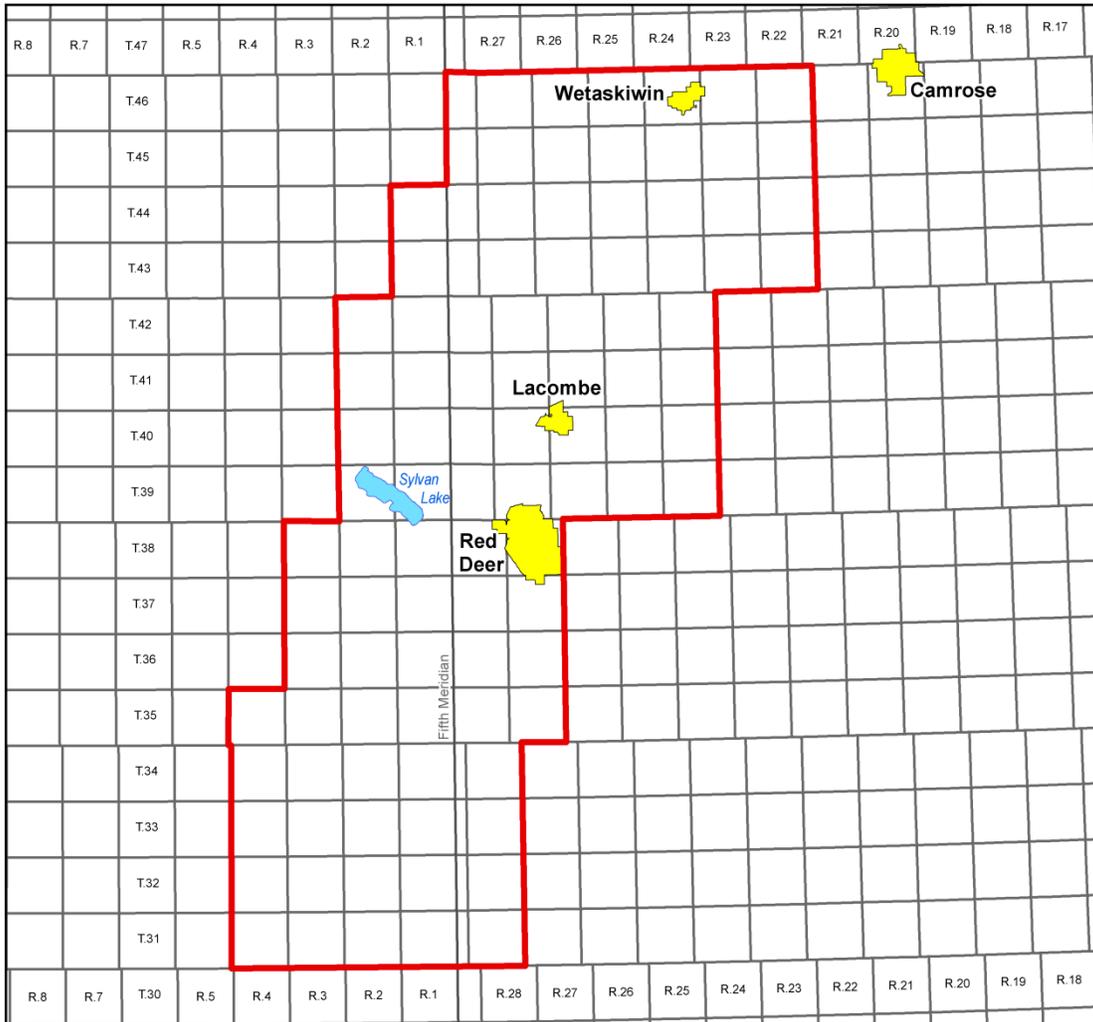
On March 4, 2019, at 5:55 a.m. MST, an earthquake measuring 4.1 local magnitude (M_L) was detected approximately 12 kilometres south of Sylvan Lake, Alberta. At this time, no injuries have been reported, nor has there been any reported impact to the environment or public health.

This event is a reminder of the need for oil and gas operators to manage sites in a way that prevents and minimizes induced seismicity. As a result, we recommend that oil and gas operators working within the Duvernay Formation in the Red Deer Region (see attached map) take the following steps to reduce the possibility of triggered seismicity associated with hydraulic fracturing:

- Before conducting hydraulic fracturing operations in this area, operators should assess the potential for induced seismicity, develop a seismic response plan to respond to any induced seismicity that may occur and monitor local seismic activity around their operations
- If a seismic event of 1.0 M_L or greater occurs within 5 kilometres of an active well, the licensee should implement its seismic response plan to eliminate or reduce the magnitude of subsequent seismic events. The licensee should immediately report the event to the AER's Energy/Environmental Emergency and Operational Complaint Line (1-800-222-6514).
- If the event is 3.0 M_L or greater, the licensee should immediately suspend hydraulic fracturing operations at the affected well, return it to a safe state and get in contact with the AER immediately.

These recommended measures are similar to the requirements set out in [Subsurface Order No. 2](#), which applies to operations near the town of Fox Creek, Alberta. Pending the results of our investigation into the recent seismic event, we may introduce new enforceable requirements for hydraulic fracturing operations in the Red Deer Region.

For more information on this bulletin, contact our Customer Contact Centre by phone at 403-297-8311 (1-855-297-8311 toll free) or by email at Inquiries@aer.ca.



 **Alberta Energy Regulator**

Area subject to recommendations in Bulletin 2019-07

 Red Deer Region - Duvernay

0 15 30 60 km
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Projection and Datum: 10TM AEP Forest, NAD83
 Data Date: March 14, 2019
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