



July 24, 2018

8157-2800-32640-02

Trevor Befus
Environment and Regulatory Planner
Catapult Environmental Inc.
Suite 1620, 700 – 9th Ave S.W.
Calgary, AB T2P 3V4

Dear Mr. Befus,

**RE: EXTENDED INJECTIVITY TEST REQUEST DENIAL
CATAPULT TOWER 13-26-81-17; WA# 20155
TOWER LAKE FIELD – CADOMIN AND NIKANASSIN FORMATIONS**

Commission staff have reviewed the application from Catapult Environmental Inc., dated July 10th, 2018, requesting an extended injectivity test of an additional 2,000 m³ into the Cadomin and Nikanassin formations of the subject well. An extended injectivity test approval for 3,000 m³ into the Cadomin and Nikanassin formations was previously granted on April 26th, 2018, under Order 18-02-006.

Catapult has noted that during the hydraulic fracture operation conducted on the Cadomin and Nikanassin formations on April 27, 2018, an issue with the fracture chemical interaction resulted in fracture gel being pushed into the fractures, causing a decrease in injectivity. A total of 2,200 m³ has been injected under Order 18-02-006 so far, and by the end of this test the well's rates and pressures were beginning to stabilize. There has been ongoing discussion between Catapult and the Commission regarding the maximum wellhead injection pressure that is appropriate for the subject well, based on results of the DFIT test performed on April 26th.

At this time, the Commission will not be granting Catapult's request for an additional 2,000 m³ to be added to the pre-existing 3,000 m³ injectivity test volume granted under Order 18-02-006 for the Cadomin and Nikanassin formations. The reasons provided for the test do not suit the intention of an extended injectivity test, which is to establish the water injectivity potential of a zone. Although the well is not fully cleaned out after the fracture chemical issue, the 3,000 m³ injectivity test has determined a relatively stable water injection rate within the approved wellhead pressure of 15,460 kPag. The approved MWHIP was based on an average of area wells at the time, however the preliminary data provided from the DFIT analysis indicates that this MWHIP may not be appropriate for the subject well. Therefore, the Commission will evaluate the complete application, once received, prior to assigning conditions for further disposal operation.

Should you have any questions, please contact Michelle Harding at (250) 419-4493 or Ron Stefik at (250) 419-4430.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ron Stefik', written over a horizontal line.

Ron Stefik, Eng. L.
Supervisor, Reservoir Engineering
Oil and Gas Commission