

June 12, 2020

8157-2800-59240-09

Trevor Befus
Manager, Environment & Regulatory/Land
Catapult Water Midstream
Suite 1620, 700 – 9th Ave SW
Calgary, AB T2P 3V4

Dear Trevor Befus:

**RE: PRODUCED WATER DISPOSAL SPECIAL PROJECT APPROVAL
HYDRAULIC FRACTURE STIMULATION
CATAPULT TOWER 9-28-81-17; WA# 20897
TOWER LAKE FIELD – CADOMIN FORMATION**

Approval for disposal of produced water, Order 18-02-008 as a Special Project under section 75 of the Oil and Gas Activities Act (OGAA), was issued for the subject well, Cadomin formation, on November 1, 2018.

An application was received via email, dated June 9th, 2020, to fracture stimulate the well to remove obstructions and increase injectivity. A prior Commission approval, dated November 29, 2019, for conducting a fracture stimulation was not acted on.

Condition 2j) of Order 18-02-008 Amendment #1 states:

- j) Not conduct a hydraulic fracture stimulation on any formation in the subject well without prior Commission approval.

Simulation results of the hydraulic fracture program indicate that resulting fractures should not extend into any porous zones, except the Cadomin.

The Commission hereby approves a total of 80T sand, pumped in 2 equal stages, with bio balls being launched in between, approximately as per the program submitted as an attachment to the email dated June 9th, 2020 from Catapult Environmental Inc. This approval is conditional upon the requirement that a hydraulic isolation temperature log be conducted following fracture stimulation and prior to the resumption of disposal operation. A limited volume may be injected as required to provide diagnostic results for the temperature log. Log results and interpretation must be submitted to the Commission once available.

Note that an outcome of loss of formation isolation can result in cancellation of the disposal approval, under OGAA section 75(2)(b)(iv), and where a risk to the environment, safety or resource recovery may result, the Commission may issue an order necessitating remedial actions, which can include formation fluid flowback to reduce pressure.

Should you have any questions, please contact Michelle Gaucher at (250) 419-4482 or the undersigned at (250) 419-4430.

Sincerely,



Ron Stefik, EngL
Supervisor, Reservoir Engineering
Oil and Gas Commission