

May 20, 2020

8157-4100-32640-02

Jason Bridges, P. Eng.
Senior Production Engineer
Ovintiv Canada ULC
500 Centre Street SE, PO Box 2850
Calgary, Alberta T2P 2S5

Dear Mr. Bridges,

**RE: EXTENDED INJECTIVITY TEST
OVV HZ TOWER A3-31-80-17; WA# 33143
TOWER LAKE FIELD – BALDONNEL FORMATION**

Commission staff have reviewed the application from Ovintiv Canada ULC (Ovintiv) dated May 11th, 2020, requesting an extended injectivity test of 3,000 m³ into the Baldonnel formation of the subject well.

The subject horizontal well was drilled in September of 2017 for the purpose of gas production from the Montney formation. Hydraulic fracturing operations resulted in a sand bridge plug in the horizontal portion of the well. Production results to date do not economically support the work required to clean out and return this well to gas production. Ovintiv intends to abandon the Montney formation and complete the Baldonnel formation for disposal. An extended injectivity test is requested in order to assess the disposal capability of the well.

Attached please find **Order 20-02-004**, designating an area in the Tower Lake field, Baldonnel formation, as a Special Project under section 75 of the Oil and Gas Activities Act, for the temporary operation and use of a storage reservoir for the injection of produced water. This authorization does not warrant that a future disposal approval will be issued. Any future disposal approval will be subject to results of testing and logging as well as a hydrogeology review. Ovintiv may exceed the MWHIP for the purpose of a step rate test, however injection pressure must remain below the MWHIP for the extended injection period following the step rate test.

Additional general information regarding disposal wells is available on the Commission's website at <http://www.bcogc.ca/industry-zone/documentation/Subsurface-Disposal>.

Should you have any questions, please contact Logan Gray at (250) 419-4465 or the undersigned at (250) 419-4430.

Sincerely,



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

Attachment



IN THE MATTER of the application from Ovintiv Canada ULC. to the Oil and Gas Commission (Commission) dated May 11th, 2020 for an extended injectivity test:

ORDER 20-02-004

1 Under Section 75(1)(d) of the *Oil and Gas Activities Act*, the Commission designates the temporary operation and use of a storage reservoir for the injection of fresh water or produced water, including flowback from fracturing operations, in the Tower Lake field – Baldonnel formation as a special project in the following area:

DLS Twp 80 Rge 17 W6M Section 31 – LSDs 3 - 6

2 Under section 75(2) of the *Oil and Gas Activities Act*, the special project designation in this Order is subject to the following conditions. The Permit Holder shall:

- a) Inject water into the well OVV HZ Tower A3-31-80-17; WA# 33143 Baldonnel formation from 1,539.0 – 1,591.0 mKB MD.
- b) Not exceed an injection pressure, measured at the wellhead on the subject well, of 7,375 kPag or the pressure required to fracture the formation, whichever is lesser.
- c) If the fluid injected is not fresh water, inject only through tubing with a packer set as near as is practical above the injection interval.
- d) The total volume of injected water must not exceed 3,000 m³.

A handwritten signature in blue ink, appearing to read 'R Stefik'.

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

DATED AT the City of Victoria, in the Province of British Columbia, this 20th day of May, 2020.