

September 15, 2020

8157-2800-32640-02

Mark Piercey, P.Geo, PMP Reservoir Operations Specialist, TRD and Caverns Tervita Corporation 1600, 140 – 10th Avenue SE Calgary, AB T2G 0R1

Dear Mr. Piercey:

RE: NON-HAZARDOUS WASTE AND PRODUCED WATER DISPOSAL

SPECIAL PROJECT; AMENDMENT #1

RESERVOIR PRESSURE TESTING EXEMPTION TERVITA TOWER 8-31-81-17 W6M; WA# 27395 TOWER LAKE FIELD – CADOMIN FORMATION

BC Oil and Gas Commission (Commission) staff have reviewed Tervita Corporation's (Tervita) request dated September 8, 2020, for exemption from the reservoir pressure testing requirement, Condition 2j, of Order 11-02-013 Amendment #1, for 2020. Tervita believes the well is in communication with Tervita Tower A8-31-81-17 (WA# 30428) and that the remaining capacity in the reservoir supports this request.

Approval for disposal of non-hazardous waste and produced water into the Cadomin formation in the subject well was granted February 6, 2011 as OGAA section 75 Order 11-02-013. As of July 31, 2020, the well has injected a cumulative volume of 998,494 m³ into the Cadomin formation. An August 2019 reservoir pressure measurement of 11,416 kPaa indicates reservoir pressure remains below the approved maximum formation pressure limit of 12,250 kPaa.

Pressure tests conducted prior to 2018 are not reflective of a stabilized reservoir pressure due to short shut-in time and/or interference from the disposal well A8-31-81-17. The 2018 and 2019 tests in both wells appear to be of good quality, representative of the reservoir pressure, and support Tervita's belief that the wells are in communication. Plotting the recent reservoir pressures against cumulative disposal volumes predicts a remaining storage capacity of approximately 810,000 m³. Tervita's request states that the annual disposal facility capacity is 200,000 m³. The total injection volume for the two wells was 216,314 m³ in 2018 and 174,374 m³ in 2019.

The Commission concurs that the risk of the subject well exceeding the maximum formation pressure prior to a 2021 reservoir pressure test is low. The annual reservoir pressure testing requirement of condition 2j) of Order 11-02-013 Amendment #1 is hereby waived for the 2020 calendar year. The next reservoir pressure test must be conducted prior to December 31, 2021.

The Commission notes that with only the 2018 and 2019 annual pressure surveys providing stabilized reservoir pressure measurements, additional representative reservoir pressure data will be required prior to the consideration of any future modification to pressure testing requirements.

Should you have any questions, please contact Kathryn Archibald at (250) 419-4406 or Ron Stefik at (250) 419-4430.

Sincerely.

Ron Stefik, EngL.

Supervisor, Reservoir Engineering

Oil and Gas Commission