

February 19, 2020

9000-7450-32640-02

Lyle Veillet
Operations Superintendent
Shanghai Energy Corporation
PO Box 1830, Station M
Calgary, Alberta T1P 2L8

Dear Mr. Veillet:

**RE: PRODUCED WATER DISPOSAL SPECIAL PROJECT APPROVAL, AMENDMENT #1
RESERVOIR PRESSURE TESTING DEFERRAL
SEC ET AL TATTOO c-C68-B/94-O-15; WA# 25340
ELKTON FORMATION**

Approval Order 09-02-007, Amendment #1, condition 2h) requires that an annual reservoir pressure test be conducted in the well SEC et al Tattoo c-C68-B/94-O-15 (WA# 25340), Elkton formation. The most recent reservoir pressure test conducted in the subject well is dated September 29, 2018. Shanghai Energy Corporation is requesting deferral of the required reservoir pressure testing until summer 2020. The shut-in time required to obtain a stabilized pressure is an economic hardship during the winter months when commodity prices are higher. Conducting the test in the summer provides opportunity for a longer shut-in duration which provides better quality test data.

SEC et al Tattoo c-C68-B/94-O-15 (WA# 25340) began disposal operations in July 2009 and the cumulative disposal volume as of December 31, 2019 is 669,438 m³. Six reservoir pressure tests have been conducted since 2009. The September 2018 test indicates the Elkton formation was at 108% of initial reservoir pressure following 615,118 m³ of water injection. Since the test, an additional 54,320 m³ water has been disposed. A comparison of reservoir pressures to cumulative disposal volumes indicates significant disposal capacity remains available. The recently conducted hydraulic isolation temperature and casing inspection logs confirm the well integrity is suitable for continued disposal operations.

Condition 2h), the requirement to conduct an annual reservoir pressure test, is hereby deferred until August 31, 2020. The results of the reservoir pressure test must be submitted to the Commission within 60 days of the end of the test.

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

Sincerely,



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