



November 1, 2018

4900-7400-32640-02

Amanda Klein
Environment and Regulatory Advisor
Processing Recovery and Disposal Division
Secure Energy Services Inc.
3600, 205 – 5th Avenue S.W.
Calgary AB T2P 2V7

Dear Ms. Klein:

**RE: REQUEST FOR MODIFIED RESERVOIR PRESSURE TEST REQUIREMENT
PRODUCED WATER AND NON-HAZARDOUS WASTE DISPOSAL WELL
SECURE INGA c-88-J/94-A-12; WA# 29846
INGA FIELD – DEBOLT FORMATION**

Oil and Gas Commission staff have reviewed Secure Energy Services Inc.'s request, dated October 24, 2018, to amend condition 2h), annual reservoir pressure testing requirement, of Order 14-02-014.

Well c-88-J/094-A-12 was spudded in March 2014 and drilled vertically to a depth of 2034 mKB where production casing was set. Drilling continued vertically through the Debolt formation to a depth of 2101 mKB, creating a 67 m open-hole Debolt injection zone. Disposal operations commenced in April 2015 and as of September 2018 a cumulative volume of 301,767 m³ has been disposed. The reservoir pressure measured in August 2018 was 19,253 kPaa at MPP.

The Commission has reviewed the reservoir pressure and disposal data reported for the subject well; as well as Debolt disposal wells operating in the surrounding area. The well Tervita E Blueberry d-A96-K/94-A-12 (WA 27939), located approximately 5 km away from the subject well, would appear to be in reservoir communication based on pressure and performance. As a number of seismic events have been recorded near 96-K/94-A-12 in the past year, and these recent seismic events may be due to disposal activities into the connected Debolt formation, it is prudent to continue annual reservoir pressure monitoring at the subject well.

Disposal of fluid into a formation increases pore pressure and affects stresses in the formation. Seismic events can occur as a result of disposal operations if fault orientation and rock stresses are favorable for movement. Annual reservoir pressure testing provides valuable information on the viability of the reservoir for disposal and the porosity and permeability.

The potential communication between the two disposal wells and recent seismic events do not support amendment of Order 14-02-014 condition 2 h), annual reservoir pressure testing, for the subject well at this time. The Commission may consider a subsequent request for pressure testing amendment should additional data demonstrate there is no communication between the two wells.

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

Sincerely,

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

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