

January 23, 2014

5600-4800-32640-02

Tannis Gibson,
VP Geology and Geophysics
Saguaro Resources Ltd.
3000, 500 - 4th Ave S.W.
Calgary, Alberta T2P 2V6

Dear Ms. Gibson:

**RE: PROPOSED DISPOSAL WELL
SWORDCORP ET AL LAPRISE a-063-A/094-G-08; WA #14391
LAPRISE CREEK – HALFWAY FORMATION**

Commission staff have reviewed your request dated December 27, 2013, seeking comment on a proposed disposal well in a depleted Halfway pool in the Laprise Creek area.

Approval to dispose of produced water from Montney hydraulic fracturing operations may be granted for depleted hydrocarbon reservoirs. Depleted or partially depleted gas reservoirs, such as the Halfway, are favorable disposal candidates over saline aquifers given there is already considerable knowledge on the size and extent of the reservoir and demonstrated ability to contain fluid. Water injection may also result in favorable pressure support to enhance remaining hydrocarbon recovery, as may be the case with this pool. An application for disposal would have to address remaining Halfway C reserves recovery including any potential for further recovery or evidence that further recovery is not feasible.

We concur that the Halfway formation at the proposed location, well Swordcorp et al Laprise a-063-A/094-G-08 (WA #14391), may be prospective for deep disposal, within the partially depleted Laprise Creek – Halfway C gas pool. Disposal approval as an OGAA Section 75 Special Project may be granted once the well is tested to ensure suitability of disposal operation. A key value will be the reservoir pressure encountered, to confirm the current local reservoir conditions and determine future storage capacity. Ensure the reservoir pressure is obtained before injectivity testing or hydraulic fracturing is conducted. Post-stimulation pressure testing often results in non-stabilized reservoir pressure values. Other key information will be a recent cement bond log and a casing integrity test to ensure containment above and below the injection perfs and injectivity testing to prove the ability to accept fluid.

A disposal well permit holder is required have registered ownership, or consent from the owner, of subsurface tenure of the disposal formation. In the Dominion Land Survey this is an area of ¼ Section, in the National Topographic System of survey this area is one unit of land. Notification of disposal application will be posted on the Commission's website for 21 days to allow objections from offset title holders. Consent from offsetting tenure holders, particularly those with interests in nearby producing Halfway C gas pool, is highly recommended.

Should you have any questions, please contact the Ron Stefik at (250) 419-4430 or Michelle Gaucher at (250) 580-5968.

Sincerely,



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