

January 22, 2016

3600-2800-32640-02

Nicholas Haddow
Regulatory Specialist
Aqua Terra Water Management Inc.
#108, 32 Burnt Lake Crescent
Red Deer, AB T4S 0K6

Dear Mr. Haddow,

**RE: EXTENDED INJECTIVITY TEST
AQTWM FT ST JOHN 11-12-084-19 W6M; WA# 3010
FORT ST JOHN FIELD – CADOMIN FORMATION**

Commission staff have reviewed the application made by CG Engineering Ltd. on behalf of Aqua Terra Water Management Inc, dated January 18, 2016, requesting an extended injectivity test of 500m³ into the Cadomin formation of the subject well.

The Commission received an application January 18, 2016 for produced water and non-hazardous waste disposal into the Cadomin formation of the subject well, and is in the process of review. The proposed injectivity test will obtain additional information regarding the suitability of the zone for disposal.

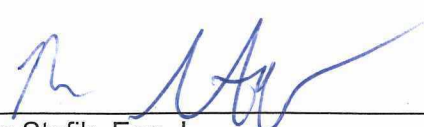
Attached please find **Order 16-02-002**, designating an area in the Fort St John field, Cadomin formation pool as a Special Project under section 75 of the Oil and Gas Activities Act, for the temporary operation and use of a storage reservoir for the injection of produced water. This authorization does not warrant that a future disposal approval will be issued.

This Order includes a maximum wellhead injection pressure of **9,480 kPag**, based on the step-rate test performed on the well. The total volume for the injection test is limited to 500 m³ of produced water.

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 Michelle Harding at (250) 419-4493 or Ron Stefik at (250) 419-4430.

Sincerely,



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

Attachments

Cc: Shawn Cody, CG Engineering Ltd.

IN THE MATTER of a letter from CG Engineering Ltd. on behalf of Aqua Terra Water Management Inc (Aqua Terra), to the Oil and Gas Commission (Commission) dated January 18th, 2016 for an extended injectivity test:

ORDER 16-02-002

- 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 produced water in the Fort St John field – Cadomin formation as a special project in the following area:

DLS Twp 84 Rge 19 W6M Section 12 – Lsds 11, 12, 13 and 14

- 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 produced water into the well AQTWM Ft St John 11-12-84-19; WA# 3010 Cadomin formation, 1030.5 – 1067 mKB MD.
 - b) Not exceed an injection pressure, measured at the wellhead on the subject well, of 9,480 kPag or the pressure required to fracture the formation, whichever is lesser.
 - c) Inject only through tubing with a packer set as near as is practical above the injection interval.
 - d) The total volume of injected produced water must not exceed 500 m³.
 - e) Continually measure and record the wellhead casing and tubing pressures electronically.



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

DATED AT the City of Victoria, in the Province of British Columbia, this 22nd day of January, 2016.