



January 25, 2010

9000-7400-32640-02

Cheryl Crumblin, RPF, A.Ag.
Environmental Manager
Geoterra I.R.S. Ltd.
Box 3852
Fort Nelson, BC V0C 1R0

Dear Ms. Crumblin:

**RE: SALT WATER DISPOSAL APPROVAL
ALCAN HZ EVIE b-62-C/094-J-15 (WA# 17986); DEBOLT FORMATION**

Commission staff have reviewed the information submitted in support of the application, dated November 24, 2009, on behalf of Alcan Fluid Disposal Ltd., requesting permission to dispose of produced water and completion/workover fluids resulting from fracture treatments in the Horn River Basin, into the Debolt formation of the subject well.

A limited injectivity test was conducted on November 5, 2009. An extended injectivity test was approved December 21, 2009, however has not occurred to-date. A fluid sample from the Debolt was obtained on January 20, 2010.

This well is considered a suitable candidate for produced water disposal. Attached is Approval 10-02-003 for the application, granted under Part 8, Division 3, section 94 of the *Drilling and Production Regulation*. The form Notice of Commencement or Suspension of Operations (BC-11) must be submitted upon commencing injection operations.

Please note that condition #3 of the attached approval states that "the disposal/injection pressure at the sandface must not exceed the formation fracture pressure". It is noted that the November 5 injection surface pressure varied from 10 – 14 Mpa. The Commission encourages Alcan to implement an appropriate safety factor when making a determination as to the maximum wellhead injection pressure which can be sustained without exceeding the formation fracture pressure.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard Slocomb'.

Richard Slocomb, P.Eng.
Supervisor, Reservoir Engineering
Resource Conservation

Attachment

APPROVAL 10-02-003

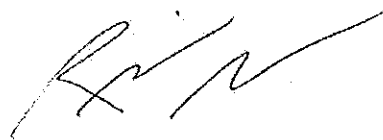
THE PROVINCE OF BRITISH COLUMBIA
PETROLEUM AND NATURAL GAS ACT
DRILLING AND PRODUCTION REGULATION
OIL AND GAS COMMISSION

IN THE MATTER of a scheme of Alcan Fluid Disposal Ltd. (Alcan) for Salt Water and Recovered Fluids Disposal in the Other Areas – Debolt formation in the well ALCAN HZ EVIE b-62-C/094-J-15; WA# 17986.

NOW, THEREFORE, pursuant to Part 8, Division 3, Section 94 of the *Drilling and Production Regulation*, the scheme is hereby approved, as such scheme is described in

an application from Alcan to the Commission dated November 24, 2009 and related submissions.

1. The disposal interval must be in the Debolt formation.
2. A record of volume of salt water and recovered fluid disposed of through this well must be included on a Monthly Injection/Disposal Statement, in the prescribed form (BC-S18), which must be submitted to the Oil and Gas Commission not later than the 25th day of the month following the reported month.
3. The disposal/injection pressure at the sandface must not exceed the formation fracture pressure.
4. The Commission must be notified in writing of the date of commencement of disposal.
5. This approval may be modified or rescinded if deemed appropriate through a change in circumstances.



Richard Slocomb
Supervisor, Reservoir Engineering
Resource Conservation
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 25th day of January 2010.