



July 2, 2013

0320-7400-32640-02

Alexander Cote, P.Eng.
Talisman Energy Inc.
Suite 3400, 888 3rd Street SW
Calgary, AB T2P 5C5

Dear Mr. Cote:

**RE: SALT WATER DISPOSAL SPECIAL PROJECT
TALISMAN ALTAIRES B-H094-I/94-B-01; WA# 26800
ALTAIRES FIELD - DEBOLT POOL**

Oil and Gas Commission (Commission) staff have reviewed your application, dated May 10, 2013, requesting permission to dispose of produced water into the Debolt formation of the subject well.

Approval to dispose of produced water may be approved for depleted hydrocarbon reservoirs or saline water bearing zones - each having demonstrated the ability to contain a fluid. The subject well is less than ideal for disposal for the following reasons:

- 1) Negligible matrix porosity and permeability and lack of evidence of open fracture network indicate minimal storage capacity.
- 2) Containment of injected fluid within formation cannot be demonstrated.
- 3) The Debolt formation at this location at initial conditions is above normal pressure depth gradient (over pressured);
 - a. This severely limits additional storage capacity, controlled by a maximum final average reservoir pressure value.
 - b. Potential faults in vicinity may be near critical stress limits. Injection of water has potential to induce seismicity.

Because of the risks associated with disposal into an unknown and untraceable network, the application for disposal into this well is denied.

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

Sincerely,

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

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