

March 24, 2009

8135-4100-32640-02

Marcel Reyes  
Reservoir Engineer  
Murphy Oil Company Ltd.  
P.O. Box 2721, Station M  
Calgary, AB T2P 3Y3

Dear Mr. Reyes:

**RE: SALT WATER DISPOSAL APPROVAL  
MURPHY HZ SWAN c-39-A/93-P-09 (WA# 24405); BALDONNEL FORMATION**

Commission staff have reviewed the information submitted March 12, 2009, in support of your application dated January 8, 2009, requesting permission to dispose of produced water into the Baldonnel formation of the subject well.

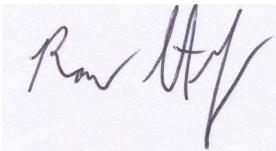
A water injectivity test was approved February 3, 2009. The required production test found the zone to be water bearing with no commercial hydrocarbon potential. A successful step-rate injection test and reservoir pressure test were performed.

We concur that the subject well appears to be a good candidate for salt water disposal in the Baldonnel formation. Notice of your application was posted on the OGC website with no objections received.

Attached is Approval 09-02-003 for the application, granted under Part 8, Division 3, Section 94 of the *Drilling and Production Regulation*.

Should you have any questions, please contact Ron Stefik at (250) 952-0310.

Sincerely,



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

**APPROVAL 09-02-003**

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

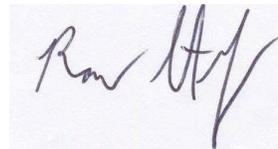
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IN THE MATTER of a scheme of Murphy Oil Company Ltd. (Murphy) for Salt Water Disposal in the Swan Lake field Baldonnel formation in the well Murphy HZ Swan c-39-A/93-P-09 (WA# 24405).

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 Murphy to the Commission dated January 8 and March 12, 2009 and related submissions.*

1. The disposal interval must be in the Baldonnel formation.
2. A record of volume of salt water 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.



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

DATED AT the City of Victoria, in the Province of British Columbia, this 24<sup>th</sup> day of March 2009.