



January 25, 2008

4700-8290-59240-15

Tim Bird, P.Geol.  
Geologist, Regional Exploration  
Canadian Natural Resources Limited  
2500, 855 – 2<sup>nd</sup> Street S.W.  
Calgary, Alberta T2P 4J8

Dear Mr. Bird:

**RE: EXPERIMENTAL SCHEME APPROVAL  
HELMET FIELD – MUSKWA AND EVIE FORMATIONS**

Commission staff have reviewed your application dated December 7, 2007 requesting experimental scheme approval to explore and evaluate shale gas potential of the Devonian shale sequence, specifically the Muskwa and Evie formations, in the Cordova embayment within the Helmet field of northeast British Columbia.

Attached is Approval 08-15-001 granted under section 100 of the Petroleum and Natural Gas Act. At this time there is limited information available regarding shale gas potential in the subject area. Accordingly, the scheme is considered experimental, as it requires ongoing research as to drilling, completion and production methodology. No objections were received following the posting of a notice of your application on the OGC website.

The Approval area is smaller than requested, focused on the location of initial proposed activity. Future application for area amendment will be contingent on results and activity plans.

The Commission must be notified in writing of the effective commencement date of activity for the scheme approval. In accordance with section 57 of the *Drilling & Production Regulation* all well reports and well data will be held confidential for a period of 3 years after the date of release of the drilling rig for a well forming part of this experimental scheme.

Please note that progress reports, as specified in item 5 of the approvals, must be submitted on an annual basis with the first one due on the first anniversary of the commencement date.

Sincerely,

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

Attachment

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**RESOURCE CONSERVATION**

PO Box 9329 Stn Prov Gov't, Victoria BC V8W 9N3 Tel: (250) 952-0302 Fax: (250) 952-0301  
Location: 6<sup>th</sup> Flr 1810 Blanshard St. Victoria BC

APPROVAL 08-15-001

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

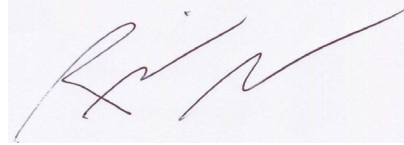
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IN THE MATTER of the experimental scheme of Canadian Natural Resources Limited (Operator) to test the commercial viability of Devonian aged Muskwa and Evie formation shale gas in the Helmet field of NE British Columbia.

NOW THEREFORE, the Commission, pursuant to section 100 of the Petroleum and Natural Gas Act, R.S.B.C. 1996, c.361, hereby orders as follows:

1. The experimental scheme for the exploration and development of Muskwa and Evie formation shale gas in the Helmet field, as such proposal is described in the application to the Commission received December 7, 2007 is hereby approved, subject to terms and conditions herein contained.
2. The area of the experimental scheme consists of:  
94-P-10  
Block K – units 14-19, 24-29, 34-39 and 44-49.
3. The gas wells within the scheme area may be produced without individual well allowable restrictions.
4. The requirements of Section 10 of the *Drilling and Production Regulation* are hereby waived, provided that gas wells within the project area are not completed nearer than 250 m to the sides of the approved project area.
5. The Operator must submit a progress report to the Commission annually. The progress report is due within 60 days after the end of each period and must contain:
  - a) the daily average rate of gas and water produced during each month for each producing well, and for the scheme as a whole,
  - b) the monthly cumulative gas and water production from each producing well, and for the scheme as a whole,
  - c) details of any workover or fracture treatment program done on any of the wells with results of the workovers or fracture treatment,
  - d) an evaluation of bottom hole pressures and any other data collected,
  - e) representative sample analysis of produced gas and water,
  - f) a discussion of the overall performance of the scheme,
  - g) any other information that is considered necessary, in the opinion of the Commission, to evaluate the progress, performance and efficiency of the scheme.
6. The operations of the experimental scheme will be subject to review by the Commission. The Director, Resource Conservation Branch or the Director, Operations Engineering Branch, or their designates, may issue guidelines regarding the operations of the scheme.

7. The Operator of the scheme shall complete operations as set out in the proposed program described in the application to the Commission.
8. The approval or any condition of it may be modified or rescinded, if deemed appropriate.

A handwritten signature in dark ink, appearing to read 'Richard Slocomb', is written over a light grey rectangular background.

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Richard Slocomb  
Supervisor, Reservoir Engineering  
Resource Conservation

DATED AT the City of Victoria, in the Province of British Columbia, this 25<sup>th</sup> day of January 2008.