



OIL AND GAS COMMISSION

November 17, 1999

OGC 990509  
5880-2600-59240-07

Ms. Barbara Silva  
Exploitation Engineer  
Canadian Natural Resources Limited  
2000, 425 - 1<sup>st</sup> Street S.W.  
Calgary AB T2P 3L8

Dear Ms. Silva:

**RE: APPROVAL FOR CONCURRENT PRODUCTION  
MIKE BLUESKY "A" OIL POOL**

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Attached is a Concurrent Production scheme approval for the subject pool, as requested in your application dated October 25, 1999.

The Approval 99-07-008 is hereby granted under section 97 of the Petroleum and Natural Gas Act.

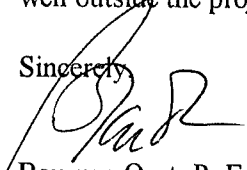
The approved gas limit of 14.0 e<sup>3</sup>m<sup>3</sup>/d is less than the value requested in your application. Since reservoir engineering data indicates that oil reserves may be of a significant size, it is prudent to control gas production to optimize oil recovery.

Please note that the Commission has remapped the Mike Bluesky "A" pool. The well located at d-44-H/94-H-2 is interpreted as intersecting the pool gas cap, due to the correlation of the reservoir pressure history for the two wells. Cross-section mapping would appear to indicate that the Bluesky gas pay in 44-H is below the oil pay encountered in 53-H, however we suspect that the reported well surface elevations may be in error, accounting for this discrepancy. *Correct, see letter in wellfile from surveyor, 3rd error discovered!*

Reservoir pressure tests should be conducted on both d-44-H and d-53-H prior to resumption of production to facilitate further understanding of the pool. Canadian Natural Resources Limited should also examine the feasibility of a gas re-injection partial pressure maintenance scheme for this pool in order to maximize oil recovery. Gas re-injected into a pool is credited against the GOR adjustment factor, eliminating the penalty factor and allowing increased oil production.

Please note that the project allowables may be amended if another operator successfully completes an oil well outside the project area in the subject pool.

Sincerely,

  
Bou van Oort, P. Eng.  
Director  
Engineering and Geology Branch

Attachment

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APPROVAL 99-07-008

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

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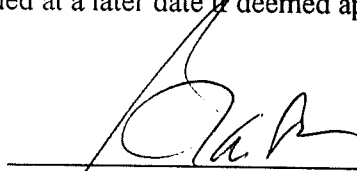
IN THE MATTER of a Concurrent Production scheme of Canadian Natural Resources Limited (CNRL) for producing the Mike Bluesky "A" pool with a project oil and gas allowable.

NOW, THEREFORE, the Commission, pursuant to section 97 of the Petroleum and Natural Gas Act, hereby approves the Concurrent Production scheme of CNRL for oil and gas production with project allowables, as such scheme is described in

*an Application from CNRL to the Commission dated October 25, 1999 and related submission.*

This scheme is approved, subject to the conditions herein contained and, in particular:

1. The area of the scheme shall consist of unit 53-H/94-H-3.
2. The project oil allowable is 14.0 m<sup>3</sup>/d.
3. The project gas allowable is 14.0 e<sup>3</sup>m<sup>3</sup>/d.
4. All produced gas must be conserved. (Feb. 26<sup>th</sup>, 2000)
5. The requirements of section 9 of the *Drilling and Production Regulation* are hereby waived, provided that oil wells within the scheme area are not completed nearer than 100 m to the sides of the approved area.
6. This approval may be modified or rescinded at a later date if deemed appropriate.

  
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Bou van Oort  
Director  
Engineering and Geology Branch

DATED AT the City of Victoria, in the Province of British Columbia, this 17<sup>th</sup> day of November, 1999.