



Province of  
British Columbia

Ministry of  
Energy, Mines and  
Petroleum Resources

MO  
✓ DM/ADME/PEN/PSA/mef  
920123  
6000-4800-59240-13

OFFICE OF THE  
MINISTER

bcc: Mr. D.L. Johnson

✓ Approvals Book

February 14, 1992

*Modifications to  
existing WF  
(WAG Pilot)*

*CNRL*  
Mr. David A. Bramsen  
Manager, Engineering  
Unocal Canada Management Limited  
150-6th Avenue S.W., Box 1180  
Calgary, Alberta  
T2P 2K9

Dear Mr. Bramsen:

**RE: APPLICATION FOR GAS INJECTION AS WATER AFTER  
GAS (WAG) PILOT; MILLIGAN CREEK HALFWAY UNIT #1**

This refers to the application dated August 20, 1991, and subsequent correspondence of October 11, 1991, wherein you request approval of a produced gas injection as a pilot scheme in the Milligan Creek Halfway Unit #1.

Attached is an Approval #92-13-001 for the application granted under section 116 of the Petroleum and Natural Gas Act.

This approval or any condition of it may be modified at a later date if deemed appropriate through a change in circumstances.

Yours sincerely,

*Original signed  
by Minister*

Anne Edwards  
Minister

Attachment

*not  
effective  
until start of gas  
inj.*

*none yet 92-08-31*

*None yet  
95-02-22  
95-10-06*

APPROVAL 92-13-001

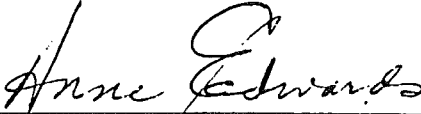
THE PROVINCE OF BRITISH COLUMBIA  
PETROLEUM AND NATURAL GAS ACT  
MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES  
ENERGY RESOURCES DIVISION

IN THE MATTER of a pilot scheme of Unocal Canada Management Ltd. for enhanced recovery of oil by water after gas (WAG) injection into the Milligan Creek Halfway Unit #1.

The Minister of Energy, Mines and Petroleum Resources, pursuant to section 116 of the Petroleum and Natural Gas Act, hereby orders as follows:

1. The pilot scheme of Unocal Canada Management Ltd. (Operator) for enhanced recovery of oil by WAG injection in a part of the Milligan Creek Halfway Unit #1 as such scheme is described in the Application from the Operator to the Ministry dated 20 August 1991, and related Submission dated 11 October 1991, is hereby approved, subject to the terms herein contained.
2. Water and natural gas may be injected to the Milligan Creek Halfway Pool through well d-53-G/94-H-2. WA  
401
3. The pilot scheme shall be delineated by the following wells:
  - (a) d-52-G/94-H-2
  - (b) c-52-G/94-H-2
  - (c) a-63-G/94-H-2
  - (d) d-53-G/94-H-2
4. The pilot scheme shall be deemed to have commenced upon gas being injected into the well referred to in clause 2, with the Ministry being notified in writing of the date of commencement.
4. A comprehensive progress report shall be filed at the end of the WAG pilot scheme, giving details of injection and production volumes and estimates of incremental oil recovery from the pilot project.

water started  
April/92,  
no gas inj  
yet.  
88  
92-08-31

  
Anne Edwards  
Minister

DATED AT the City of Victoria, in the Province of  
British Columbia, this 09 day of February, 1992.