



January 21, 1998

File: 5560-4800-59240-09
Ref.: 980078

Crestar Project (02)

Mr. Peter Johnson
Crestar Energy Inc.
333 - 7th Avenue SW
PO Box 888
Calgary, AB T2P 4M8

Dear Mr. Johnson:

**RE: APPLICATION FOR PRESSURE MAINTENANCE APPROVAL
LAPP HALFWAY "C" POOL**

This refers to your application dated December 8, 1997 wherein you requested approval of a waterflood pressure maintenance scheme in the subject oil pool.

Attached is Approval # 98-09-002 for the application, granted under section 100 of the Petroleum and Natural Gas Act.

Since the designated pool discovery well will be used for water injection, application should be made to the Resource Revenue Branch of the Ministry of Employment and Investment to transfer royalty exemption entitlement to another producing well in the pool.

Sincerely,

B. van Oort, P. Eng.
Director
Engineering and Operations Branch

Attachment

Copies for Approval Letter to Industry (11)
RE: GEP, Salt Water Disposals, etc.

- | | |
|-------------------------------------|-----------------------|
| <input type="checkbox"/> | G. Miltenberger |
| <input type="checkbox"/> | Data Management |
| <input checked="" type="checkbox"/> | R. Stefik |
| <input type="checkbox"/> | D. Richardson |
| <input type="checkbox"/> | P. Attariwala |
| <input type="checkbox"/> | G. Farr |
| <input type="checkbox"/> | S. Chicorelli |
| <input type="checkbox"/> | Resource Revenue |
| <input type="checkbox"/> | 59240 |
| <input type="checkbox"/> | Wellfiles (originals) |
| <input type="checkbox"/> | Daily |

APPROVAL 98-09-002

**THE PROVINCE OF BRITISH COLUMBIA
PETROLEUM AND NATURAL GAS ACT
MINISTRY OF EMPLOYMENT AND INVESTMENT
ENERGY AND MINERALS DIVISION**


IN THE MATTER of a pressure maintenance scheme of Crestar Energy Inc. (Crestar) for waterflood recovery of oil by water injection into the Lapp Halfway "C" Pool.

The Deputy Minister of Employment and Investment, pursuant to section 100 of the Petroleum and Natural Gas Act, R.S.B.C. 1996, c.361 orders as follows:

The pressure maintenance scheme of Crestar for waterflood recovery of oil from the Lapp Halfway "C" Pool as such scheme is described in the Application to the Ministry from Crestar to the Ministry dated December 8, 1997 is hereby approved, subject to the terms herein contained:

1. The pressure maintenance scheme area shall be delineated by units 48, 49, 58 and 59 of Block C/94-H-10.
2. The project oil allowable is 83.6 m³/d.
3. Water may be injected into the Lapp Halfway "C" Pool through the well located at c-48-C/94-H-10.
4. The scheme shall be deemed to have commenced upon water being injected into the well referred to in clause 3, with the Division being notified in writing of the date of commencement. *October 26/98*
5. The injection pressure at the sandface must not exceed the formation fracture pressure.
6. All associated gas production must be conserved.
7. An oil well may be drilled anywhere within the project area provided that it is not completed nearer than 100 m to the sides of the project area.
8. Royalty-exempt oil production entitlement for the discovery well Crestar et al Lapp c-48-C/94-H-10 (WA#10055) is limited to a volume of 11,450 m³ or the volume produced in the first 36 producing months, whichever is lesser.
9. Progress reports shall be filed as stipulated in Part 9, section 108 of *The British Columbia Drilling and Production Regulation*.

10. The operations of the pressure maintenance scheme will be subject to periodic review, and modification to the approval may be ordered, if deemed appropriate, by the Director of the Engineering and Operations Branch.



Charles Kang, Deputy Minister
Ministry of Employment and
Investment

DATED AT the City of Victoria, in the Province of British Columbia, this 14 day of January, 1998.