

September 2, 1999

File: 5560-4800-59240-09

Ref.: OGC990447

Crestar Project (02)

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

Dear Mr. Thuillier:

RE: PRESSURE MAINTENANCE APPROVAL, AMENDMENT #1 LAPP HALFWAY "C" POOL

The Commission has reviewed the initial progress report, dated August 27th 1999, for the subject scheme, wherein you request modification to the waterflood pressure maintenance approval.

Production information indicates a favourable early response to the waterflood initiative. Attached is Approval # 98-09-002 (Amendment #1) for the application, granted under section 100 of the Petroleum and Natural Gas Act, modifying the production allowable.

The requirement to retire overproduction of oil based on the project daily oil allowable is hereby waived.

Sincerely, Approval Letters to Industry GEP, SWD, CONCURRENT PROD, PRESSURE MAINTENANCE, WATERFLOOD, ETC. Wellfile (originals) 59240 B. van Oort, P. Eng. Daily Director Resource Revenue Engineering and Geology Branch R. Stefik G. Farr P. Attariwala Attachment C. Gibson D. Krezanoski S. Chicorelli

APPROVAL 98-09-002 (AMENDMENT #1)

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

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 approval granted pursuant to section 100 of the <u>Petroleum and Natural Gas Act</u>, R.S.B.C. 1996, c.361 is hereby amended 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 from Crestar dated December 8, 1997 and amended August 27, 1999 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 for a month shall be based on the previous month's voidage replacement.
- 3. Water may be injected into the Lapp Halfway "C" Pool through the well located at c-48-C/94-H-10.
- 4. The injection pressure at the sandface must not exceed the formation fracture pressure.
- 5. All associated gas production must be conserved.
- 6. 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.
- 7. Progress reports shall be filed as stipulated in Section 8 of the *Petroleum and Natural Gas General Regulation*.
- 8. The operations of the pressure maintenance scheme will be subject to periodic review and modification to the approval may be ordered, if deemed appropriate.

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

DATED AT the City of Victoria, in the Province of British Columbia, this - day of September, 1999.