



Province of
British Columbia

ASSISTANT DEPUTY MINISTER

Ministry of
Energy, Mines and
Petroleum Resources

Parliament Buildings
Victoria
British Columbia
V8V 1X4

Ref. No. 881067

11.6 17M\$

October 19, 1988

Petro-Can Project (02)

Mrs. K.E. Sendall
Petro-Canada Resources
P.O. Box 2844
Calgary, Alberta
T2P 3E3

WARGEN FIELD

CONCURRENT PRODUCTION

PRE-APPROVAL

(see letter 90113 of Feb 1/90)

Dear Mrs. Sendall:

The Ministry of Energy, Mines and Petroleum Resources (the Ministry) has reviewed your application dated July 16, 1988, for concurrent production in the Wargen field.

No objections were received following the publication of a notice of the application in the B.C. Gazette.

Petro-Canada Resources, as operator of the Wargen field, is hereby granted approval under section 113 of the Petroleum and Natural Gas Act to produce oil and gas concurrently from the Gething 'A' formation of the Wargen field subject to the following terms and conditions:

- 1) The area of approval is units 34-39, 44-49, 54-60, 64-70, 76-79 and 86-89 of Block C and units 51, 61 of Block D, all of NTS 94-H-6.
- 2) The Gething formation is defined at a datum depth of 305.1 mss to 325.8 mss in well c-58-E/94-H-6.
- 3) The Ministry recognizes that the oil leg is currently defined by only three wells: d-37-C, d-48-C and d-56-C, all in NTS 94-H-6 and is characterized by net pays of less than 3 m. As stated, your plans are to drill wells at d-46-C, d-47-C and d-57-C, all in NTS 94-H-6 to firm up oil reserves.

*rescinded
Feb 1/90.*

The Ministry has deferred setting oil and gas allowables pending results of the infill drilling program. The operator must submit an application for allowables under Division 77 of the Drilling and Production Regulations.

- 4) No oil or gas wells may be placed on permanent production from the area of approval until oil and gas allowables are approved by the Ministry. The existing wells in the pool are located at:

<u>Well Location</u>	<u>Status</u>
d-37-C/94-H-6	Oil Well
d-48-C/94-H-6	Oil Well
d-56-C/94-H-6	Oil Well
c-58-C/94-H-6	Gas Well
d-59-C/94-H-6	Gas Well
c-77-C/94-H-6	Gas Well
d-60-C/94-H-6	Abandoned

- 5) Gas produced from the area of approval will be conserved.
- 6) Water produced from the area of approval must be metered and disposed of as required under Division 95 of the Drilling and Production Regulations.
- 7) An annual progress report will be filed covering the 12 calendar months after the commencement of production and each year-end thereafter. The progress report should contain the following:
- the daily average rate, during each month, of the oil and gas production from each producing well and from the pool as a whole;
 - the average gas-oil and water-oil ratios, during each month, from each producing well and from the pool as a whole;

Revised Feb 1/90.
DGA = 81 10⁶ m³/year

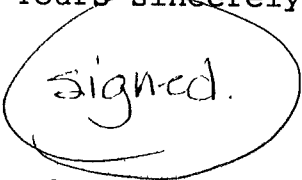
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eff. April 12/90
(see Ref letter dated April 30/90)
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- iii) the monthly and cumulative gas, oil and water production from each producing well and from the pool as a whole;
 - iv) details of any reservoir pressure surveys made during the report period together with average pool pressure for the year;
 - v) details of any workover or well treatment programs carried out during the report period;
 - vi) a general review of operations during the report period together with the latest estimate of gas and oil reserves.
- 8) This approval may be modified or rescinded as circumstances change.

Yours sincerely,


signed.

John Allan
Assistant Deputy Minister
Energy Resources Division

cc: D.L. Johnson
Manager, Field Operations

PSA/DM/ev:lg