



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

- G. Miltenberger
- Data Management
- R. Stefik
- D. Richardson
- P. Attariwala
- G. Farr
- S. Chicorelli
- Resource Revenue
- 59240
- Wellfiles (originals)
- Daily

June 16, 1997

Mr. J.W. Harvey
Joint Venture Manager
Canadian Natural Resources
2000, 425-1st Street S.W.
Calgary, AB T2P 3L8

Dear Mr. Harvey:

RE: PEMBINA RESOURCES LIMITED
INGA A POOL GOOD ENGINEERING APPLICATION

This is with respect to your letter of June 5, 1997 objecting to Pembina Resources Limited's request for a Good Engineering Practice scheme approval in the Inga Inga gas cap.

We have noted your concerns but offer the following comments:

1. The Unit #1 oil project is at a very mature stage. Based on the Ministry's estimates the remaining recoverable oil reserves are only about 2.0 percent of the OOIP.
2. At the current time only one well is being used for water injection. As a result, it is apparent that no effort has been made to balance reservoir voidage in Unit #1. This practice has been ongoing for a lengthy period of time.
3. The water fence originally established between Unit #1 and Unit #3 remains effective. Pressure differentials and producing GOR's noticed in the Unit #1 confirm this.
4. The gas Unit #3 has been in operation since 1970 with no negative impacts on the Unit #1 oil recoveries.

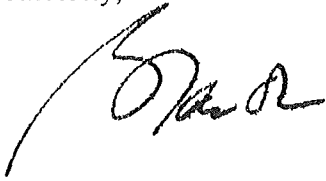
The gas cap allowable of $422.6 \times 10^3 \text{ m}^3$ was approved in 1975. No negative impacts on Unit #1 oil recovery are anticipated if the total withdrawals from the gas cap are maintained at this level. Unit #3 is currently capable of producing about $290 \times 10^3 \text{ m}^3/\text{d}$. In view of this, the Ministry proposes to grant a daily gas allowable of $120 \times 10^3 \text{ m}^3/\text{d}$ for the proposed project. The gas cap withdrawals will therefore be maintained at the rates approved in 1975.

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We would like to give you an opportunity to comment on our proposal. If no comments are received by June 30, 1997 the Ministry will approve Pembina's project.

Sincerely,

A handwritten signature in black ink, appearing to read 'B. van Oort', written over a large, sweeping diagonal stroke that starts from the left margin and extends towards the center of the page.

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

cc: Pembina Resources Limited