FOREWORD

In his book "The Peaks of Lyell" (1954) the eminent Australian historian Professor Geoffrey Blainey wrote of the North Lyell Mining Disaster, Tasmania, 1913. The work contains the following quotation from the report of the Royal Commission which investigated the mine fire -

"We regret that, from lack of convincing evidence on several matters arising in the course of the inquiry, we cannot report with that degree of certainty which we should desire. Forty-two men are said to have lost their lives in various parts of the mine; and, with so many voices lost to us in the silence of death, the evidence is necessarily incomplete, and we can only deplore the fate of those whose testimony concerning the happenings in the mine on the fatal 12th of October will never be given before an earthly tribunal".

These words apply equally to the Moura No.4 Underground Mine Explosion of 1986. This explosion research report produced in 1990, some seventy-seven years after the North Lyell disaster has used all information that it has been possible to glean in the Moura No.4 explosion aftermath without the "voices lost to us".

Many people have given of their best to try to analyse what occurred at Moura No.4 Mine. The authors of this report wish to place on record their gratitude to:

- The many employees of Moura No.4 Mine.
- Experts within Australia and of New Zealand, United States of America, United Kingdom, Federal Republic of Germany, together with their respective organisations.
- The Project Review Committee which included representatives of The Department of Resource Industries, Coal Association, Mining Unions and Police Force in Queensland.

All these people displayed total commitment in assisting the research team and ensuring that the outcome of this project is the best possible in the circumstances.

Disasters such as the Moura No.4 explosion generally occur as a result of a combination of factors. In some cases these include the human factor. There is no indication to even suggest that there was a human factor in the fatal train of vents in the Main Dips Section. The evidence examined suggests that the section crew members were overwhelmed by factors beyond their control - the development of an explosive mixture and a source of ignition which still cannot be absolutely determined.

Mining is not the only industry having potential hazards in its operations. In many industries it can never be said that a disaster will not occur. Constant vigilance has to be exercised in most industries and in none of them more so than in mining where the balance of the forces of nature is of necessity upset.