

1977 SYMPOSIUM KEYNOTE ADDRESS (ABSTRACT)

THE EXPLORATION CHALLENGE - OLD TASKS NEW TECHNIQUES

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AS expressively described by F Jeffries of Esso, oil exploration is a "great lottery". Chances of success in that lottery are always frighteningly slim. Horse racing is a better analogy; studying form helps to beat the odds.

Exploration in Queensland has reached the point where reassessment of the odds is feasible in the light of the wealth of the information now available from petroleum exploration ventures within and without the state and from

laboratory based research into controls on petroleum generation, migration and entrapment.

Basins, plays and prospects must still be evaluated in the light of the seven critical factors: presence of reservoir, seal, trap, source, timing of trap formation relative to fluid migration, preservation and producibility. Sedimentological and structural/ tectonic modelling, coupled with geomechanical data greatly enhance

the value of raw data from outcrop and well sections and from present day, much improved geophysical techniques.

The state of exploration in Queensland varies from basin to basin, but critical reassessment should be a continuing exercise for all. Thereby the odds may be repeatedly adjusted, hopefully so that punters will still take the chance on looking for and – even more hopefully – finding petroleum. ▀

RESOURCES EXPLORATION FIGURES SHOW NEED FOR INVESTMENT CERTAINTY

NEW exploration data from the Australian Bureau of Statistics reinforces the need for clear and consistent rules for investment in the Queensland resources sector.

Queensland Resources Council (QRC) Chief Executive Ian Macfarlane said the data shows exploration expenditure is up across minerals and petroleum.

"The year on year comparisons show an increase in exploration investment across all of Queensland's major resources, including coal, petroleum and copper," Mr Macfarlane said.

"If explorers are taking the punt to invest in exploration, they must have certainty that all subsequent project investments will be assessed fairly under a stable and transparent set of rules."

Over the last year mineral exploration is up 18%, coal exploration expenditure is up 44%, copper exploration expenditure is up 40% and selected base metals exploration expenditure (copper, silver, lead-zinc, nickel and cobalt combined) is up 30%. Petroleum exploration expenditure is up 39% compared to the same quarter last year.

"Queensland had a wake call with the recently released Fraser Institute ranking showing the state has fallen a place to number 13 in terms of investment attractiveness," Mr Macfarlane said.

"At the same time Western Australia has secured the number two ranking.

"Queensland can't take its future success for granted. The resources sector



QRC Chief Executive Ian Macfarlane.

employs 316,000 Queenslanders either directly or in supporting industries.

"The Queensland budget would be in the red by \$4.6 billion this year alone without the royalty taxes from the Queensland resources sector. The majority of those royalty taxes come from coal exports.

"To keep these benefits flowing to all Queenslanders we need a strong resources sector, underpinned by new investments and new projects to deliver new jobs."