

## **DISCOVERY THROUGH THE AGES – A JOURNEY OF COAL RESOURCE DISCOVERY IN QUEENSLANDS BOWEN BASIN FROM THE 1960'S AND THE 2000'S**

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Exploration methods, technology and equipment may have changed greatly over the last few decades but still does not replace sound geological principles in making new coal resource discoveries. Starting with a case history of the early big discoveries in the Bowen Basin, Central Queensland, author and co presenter Mr Lex Hansen will provide an overview of the methods, techniques, equipment and successes of exploration during the early 1960's in the Bowen Basin.

Mr Hansen was a member of the team of 3 geologists working for Utah development Company (purchased by BHP Ltd in the 19080's) that made the first big coking coal discoveries in the Bowen Basin extending from Blackwater in the south along the western side of the Basin to Goonyella in the north. The majority of these discoveries are still in production today, some 50 years later.

These will then be contrasted with a more recent case study involving greenfields discovery's at the Meteor Downs and Rockwood Projects as well as the world class brownfields coking coal discovery at Saraji East, located also in the Bowen Basin Central Queensland. This will provide a unique opportunity as to recent coal exploration methodology, technology and successes. Co author and co presenter Mr Darren Walker lead the teams responsible for these discoveries.

The authors will then contrast and compare exploration from the 'then' and 'now' and discuss the importance of 'grass roots' geological field work, data analysis and principles in successful exploration regardless of the perceived exploration or resource maturity of a mineral province.