

John Campbell (Jock) Braithwaite

New Zealand has lost an outstanding leader of its mining industry. Jock Braithwaite died in Nelson on July 24, 2011 and is survived by his wife Rosemary, his four children and nine grandchildren.

Born and educated in Invercargill, Jock completed his BE (Mining) degree at the Otago School of Mines in 1957 and joined NZ minerals industry pioneer Tas McKee in Lime and Marble Ltd to realise Tas's ambitions of developing a significant New Zealand's mining industry.

Beginning with uranium exploration on the West Coast and small non-metallic operations mainly in the Nelson District (Takaka Hill marble, Cobb talc/magnesite, Mt Burnett dolomite), Jock built an encyclopaedic knowledge of the non-metals business and fine grinding, and was soon involved with evaluating a number of base metal prospects mainly in NW Nelson. In the course of this work he forged a strong relationship with the geologists of the Geological Survey who were completing regional mapping at the time and he and Tas were very successful in gaining recognition at a political level of NZ's mineral potential, to the extent that small grants toward exploration work became available. By the late 1960s mineral exploration was very active and Jock was instrumental in forming exploration joint ventures between Lime and Marble and a number of major overseas companies including ASARCO, Kennecott, BHP, and MIM.

Throughout this period Lime and Marble's industrial mineral production grew significantly and Jock developed the Mt Burnett dolomite deposit in extremely steep and difficult terrain to produce dolomite for glassmaking, refractories and agriculture, and the Coalgate bentonite deposit which produced a product successful in penetrating the competitive markets of oil well drilling, iron ore pelletising and civil engineering applications

L&M Oil was another major chapter in Jock's career and provided New Zealand investors with their first opportunity to invest in the petroleum potential of the country. During the 1960s L&M Oil in a joint venture with Aquitaine drilled unsuccessful offshore exploration wells in Golden Bay and off Farewell Spit then moved to onshore exploration in Taranaki. Here, in a joint venture with Aquitaine and Shell BP and Todd, reinterpretation of seismic data led to the identification of a new generation of potential structures and the Urenui well was drilled in 1972 yielding (at that time) non-commercial quantities of gas and condensate. Casing was purchased for the next target (McKee 1) (named for Tas McKee) when the first oil shock struck in 1973 but at this time the government refused to renew the licences effectively forcing L&M Oil out of onshore Taranaki. The government's rewriting of the terms of oil exploration in NZ at this time resulted in a seven year hiatus in oil exploration drilling, and it wasn't until 1979 that the state owned Petrocorp finally drilled the McKee 1 well which was a success.

Not one to dwell on setbacks, Jock grew increasingly interested in gold in the late 1970s and, from the earlier joint venture survey completed with ASARCO, had a deep understanding of the remaining alluvial potential of the South Island.

Initially involving Lime and Marble in the successful joint venture company Thames Minerals on the West Coast, in 1981 Jock convinced the board of L&M Oil to invest the residual funds of that company (no longer significant in terms of oil exploration) in establishing operations on the unpredictable and gorge entrenched Shotover River. As these operations consolidated, the company

name was changed to L&M Mining, and Jock resigned his Lime and Marble (by now part of the TNL Group) responsibilities to be full-time Managing Director.

Jock immersed himself in all aspects of alluvial mining and was never happier than when on a plant in the Shotover. As plants became larger and more sophisticated he was able to draw on the expertise of his large international network of mining colleagues to fast track the technical development and a new generation of very successful hydraulic excavator fed floating recovery plants evolved.

By the late 1980s ownership of L&M Mining changed and Jock became a sought after consultant, particularly with his expertise in alluvial mining, in New Zealand and around the world.

Jock particularly valued being part of the mining community and from the earliest days when he used to take the time to attend the Miners Dinner at the Otago School of Mines he supported the fraternity and did much to raise the profile and enhance the image of mining in NZ. He joined the AusIMM as a student in 1957, was admitted as a member in 1965 and transferred to Fellow in 1968. He was a founding member of the NZ branch in 1966, Branch Chairman (1975-1977), Councillor Representing New Zealand (1982 – 1987) and was awarded an Honorary Fellowship in 2004. He was also a member of American Inst of Mining, Metallurgical & Petroleum Engineers and the Society for Mining Metallurgy & Exploration.

In his private life he loved the mountains and bush and cherished the annual Arana Tramping Club excursion where he and his old University of Otago friends all based in Nelson and all with the same girls they had met at university, would undertake an annual week long tramp. He climbed Mt Cook in his 50s and with Rosemary climbed Mt Kilimanjaro when he was 72. In later years he and Rosemary travelled extensively to generally out of the way places including Antarctica (twice), Mongolia, Cuba, South America and Alaska.

Jock was a dedicated volunteer for the Brook Waimarama Sanctuary Wildlife Trust in Nelson and a stalwart of the Nelson Rock and Mineral Club.

For those who worked with him Jock will be remembered for his unassuming leadership, his energy, enthusiasm and excellent judgement. A totally practical man he was equally at home in the board room or on the end of a shovel and quickly gained the respect of all. He will deservedly be remembered as a pillar of the fledgling industry in NZ.

By Alister Coleman