

QUPEX TALK – 5 AUGUST 2014

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“HISTORICAL SNAPSHOT OF PETROLEUM AND COAL ACTIVITIES IN QUEENSLAND – A COMMERCIAL PERSPECTIVE”.

1. INTRODUCTION

Thank you for the invitation to talk to you today.

The QUPEX notice for this Luncheon address gave some details of my 40 plus years involvement with the Resource Industry in Australia and overseas, so I won't expand further on that at this stage.

I will, however, briefly refer to how I came to be speaking today.

I was “dobbled in” by John McRobert and Gerry Gerrard after an IC Lunch (Independent Contractors) at the Irish Club shortly after the sudden death of Mal Larkins, and my recollections to those there of the period of some 18-19 years Mal and I had worked together in Coal and Oil & Gas, both at TPM/TDM and then AAR/CSR. This address and its naming had its catalyst in that day at the Irish Club and my off the cuff thoughts then to remember Mal, and the realisation that he and I had both worked with each other longer than any other person in our work lives.

2. WHY A “COMMERCIAL PERSPECTIVE”?

(i) The first and obvious reason is that I am not a geologist, although I have worked with geologists, geophysicists, and most types of engineers for most of the last 45 years;

(ii) The second reason is that I can limit the timeframe I cover from 280 million years, if we think of the Permian period for the Bowen Basin, to say 200 years when considering the human impact on the discovery and development of the mineral and petroleum resources in Australia and, in particular, Queensland.

Having said 200 years you may well consider this a challenge for someone from a profession that tends to look at timeframes of financial and fiscal years and 5 to 10 year forecasts, and strategic plans;

(iii) However, my perspectives have often been related to achieving concrete results, such as the construction and operation of mines, oil and gas fields, and pipelines, and also the impact of such activities on the immediate and wider communities they serve;

(iv) The term “commercial perspectives” replaced my first thought of the term “non-geological perspective”.

3. A SNAPSHOT?

This is a snapshot (or a series of snapshots), not a full chronological listing or dissertation on Coal and Petroleum, is based on my own experiences and research, does stray into other minerals where relevant, and is selective to the extent of identifying key elements of a historical narrative. The period I cover excludes the last decade or so, to allow me to

concentrate on important and interesting features of our history.

Also, I have avoided the temptation of filling the address with endless statistics, charts, etc.

4. **SOME TIME-FRAMES FOR RESOURCE DEVELOPMENT IN QUEENSLAND HISTORY.**

In preparing this address I have looked at what I call 3 broad periods or time-frames in the historical analysis:-

Period 1 – Early settlement to early 20th century:-

Characterised by 2 distinct streams:-

(i) The prospecting stage or what you could call the “gold rush” phenomena; characterised largely by individual, immigrants, with little of what we would call these days “corporate” activity, apart from some use of “syndicates”;

Some early examples:-

(a) **Charters Towers Goldfield, 1871** – led to establishment of a Stock Exchange there, and a number of Private Boarding schools that served the North Qld area for years, with some still operating. I have had family and friends that went to school there;

(b) **Palmer River Goldfield, 1872** – my grandfather and his brothers made their money there, which was invested in farming and cattle properties as far south as Ingham, and a major hotel (Carr’s Central Hotel) in Ingham;

(c) **Mt Morgan Gold/Copper mine, 1882** – Operated until the latter part of the 20th century, with syndicates making large amounts of money, with 2 examples of the result of the use of this wealth being William Knox Darcy, who returned to England and set up a petroleum company which became British Petroleum (BP), and Walter Hall, whose widow, Eliza, set up the Walter and Eliza Hall Medical Research Institute in Melbourne, the foremost medical research institute in Australia.

At one time Mt Morgan was said to be the largest gold mine in the world.

(ii) The need to sustain early settlements, largely by the search for energy sources, which generally meant easily accessible coal, and was readily found close to the small initial settlements (eg Ipswich in Queensland).

Period 2 – First half of the 20th century:-

More systematic and widespread exploration and development by companies leading to commercial operations.

Examples in Queensland would be (a) Mt Isa Mines discovered in 1923, into production 1931, which became one of the largest copper, lead, zinc mines in Australia and in 1980 was Australia's largest company, by market capitalisation, (b) Weipa bauxite explored in 1953, into production in 1963, led to the major industrialisation of Gladstone with the Alumina Refinery, to be followed some years later with the Aluminium Smelter.

Period 3 – From the early 1960s:-

Characterised by the rise of the Corporations, the internationalisation of much of the industry and also the significant emergence of the mineral export trade under long-term contracts.

5. PETROLEUM

Notwithstanding the fact that the Australian land mass was more likely to have gas and coal than oil, the Petroleum area has seen some quite significant milestones in its history in Queensland, including:-

(i) The discovery and production of natural gas at Roma early in the 20th century, resulting in it being the first town in Australia to have gas for domestic use and for street lighting in 1906;

(ii) The discovery of Australia's first commercial oilfield at Moonie in south-west Queensland in 1961 (the Rough Range oil discovery by WAPET (Caltex and Ampol) in 1953, being merely "significant", not "commercial");

(iii) The completion of the Moonie Oil Pipeline from Moonie to Brisbane in 1963, the first oil or gas pipeline in Australia;

(iv) The completion of the Roma (Wallumbilla) to Brisbane natural gas pipeline in 1969, being the first natural gas pipeline in Australia. This facilitated the supply of natural gas to domestic and industrial users not only in Brisbane, but at a number of key towns, cities along the route.

Since 1989 this first pipeline was followed by (at last count) 4 further pipelines in Queensland now giving coverage to a large part of the State, and the link to Moomba, to connect to the interconnected eastern gas markets in NSW, Victoria, South Australia, Tasmania and ACT.

(v) The significant discovery of oil and production from the Jackson field in SW Queensland in 1981, albeit across more than one State and with oil transported to South Australia via the Jackson-Moomba pipeline.

(vi) The advent of major coal seam gas production is not covered here, but adds a new dimension to the future of the Industry.

In looking historically at resources in Queensland and my involvement, one cannot not refer to the Associated Group, through AAR Limited, Mines Administration Pty Ltd, Associated Pipelines Ltd, later to become part of CSR Oil and Gas, which not only did much of the work in developing the Roma gas fields, the Roma to Brisbane gas pipeline, its Indonesian

oilfields, and petroleum exploration in China, but had exploration activities for coal, tin, uranium, gold, etc. It has been one of the most respected and successful exploration companies in Australia's history.

My role in the 1980s was as Commercial Manager and Company Secretary.

6. COAL

(i) Early days - As indicated earlier the search by the early settlers for energy sources led to much of the discovery and use of readily accessible coal suitable for power generation, and also for our early steel mills in other States.

In Queensland, the early development by the middle of the 19th century of Ipswich as the main commercial/industrial centre of the Colony, and a possible capital, was largely built upon the mining of the coal at Ipswich.

Flowing from Ipswich's early development was the opening of Ipswich Grammar School in 1863, the first secondary school in Queensland and possibly in Australia.

Further coal development in those years through to the middle of the 20th century largely was energy-related both for power stations and for coal gas/town gas supplies for domestic use, and for the domestic steel industry;

(ii) post-1960 development

The development of coal from the Bowen Basin in Queensland at the beginning of the 1960s was pivotal to the economic wealth generated from coal in Queensland, New South Wales and for the Australian economy as a whole for the next 50 years. It parallels the development of iron ore in Western Australia, and is linked in history with it.

A number of factors combined to allow this to happen:-

- (1) The known existence of the coal in the Bowen Basin;
- (2) The geological work done the Queensland Department of Mines in relation to the Bowen Basin up to 1962 (and continued in the 1960s by Don King and others such as Peter Goscombe and Eddie Chiu Chong) to show the existence of large quantities of black coal (metallurgical coking) potentially suitable for steel-making;
- (3) The foresight and drive of the Thiess brothers Les, Cecil and Stan;
- (4) The decisions made by the key Japanese Steel Mills (led by Nippon Steel) to modernise and expand their total steel production to increase significantly their share of the world market for steel, and to increase the Japanese production of consumer goods for world markets. This required larger supplies of metallurgical coking coal and iron ore than the Japanese had ever used or had access to.

7. The Moura/ Mt Newman story – A Tale of Two Mines

(i) Moura Coal Mine

(a) The Thiess brothers built up their civil construction business after World War 2 by scouring the Pacific region for equipment left by the Allied Military forces – literally hundreds of dozers, excavators, trucks, jeeps, etc, needed in the Allies drive to build

airstrips, roads, port facilities, etc during the War.

They obtained the ATP (prospecting licence) for the Moura area, dug trial pits and sent trial shipments of coking coal to the Japanese in 1961-2.

They negotiated with the US Peabody Coal Company, then the largest Coal Company in the World, to join them in the venture.

After extensive negotiations Thiess Holdings Limited and Peabody Coal Company signed the first long-term contracts with the Japanese Steel Mills in 1962 for the supply of coking coal. Thiess Peabody Coal Pty Ltd was born. With the signing of the contracts, Mitsui, the Japanese-nominated trading company to act for them, joined the group for it to become Thiess Peabody Mitsui Coal Pty Ltd (TPM). TPM was set up as a company, not a joint venture as many subsequent operations did.

The Peabody 58% interest in TPM was acquired by BHP from Kennecott Copper under a divestiture of Peabody Coal Company under the US Sherman Anti-Trust Act in 1976, with TPM becoming TDM (Thiess Dampier Mitsui Coal Pty Ltd).

My role at TPM/TDM for just 10 years covered commercial/accounting areas ending up as Accounting Manager for the Company.

(ii) Mt Newman Iron Ore Mine

A few months later in 1962 the Japanese Steel Mills signed similar long term contracts with the BHP Mt Newman Iron Ore mine in West Australia for the necessary supply of iron ore to complement the coal from Moura.

(iii) Japanese Steel Mill growth

The Japanese share of the world steel market grew from 6% in 1960 to 16% by the early 1980s

As a side matter, the Managing Director of Mitsui Australia in those early years returned to Japan in the early 1970s and after a few years became the President of Mitsui in Japan.

8. UTAH

Utah was a US company that had been in Australia for some years, with the Construction and Engineering arm being involved in the major post-war Snowy Mountains scheme.

Through its Engineering and Mining arm it looked at the Bowen Basin in the few years after Moura, with major work done by Don King. Its initial investment was the Blackwater mine in the mid 1960s and then followed Goonyella, Peak Downs and Saraji mines, all underwritten by long term contracts with Japanese Steel Mills, based largely on the Moura contracts.

BHP acquired the Utah interests in the early 1980s largely as a result of significant anti-foreign ownership lobbying.

In the few years after finishing my Commerce Degree at UQ I was recruited to the Arthur Andersen & Co (then the largest Accounting firm in the World for their Melbourne office, where my audits included Utah and BHP (including the South Melbourne branch of AIS, which did much of the fabrication of steelwork for the initial Bass Strait oil platforms. After

3 years I saw the light and returned to Queensland to work at the Moura mine – then the only qualified Accountant at the Mine.

9. **POST MOURA/UTAH EARLY GROWTH**

Growth in the Coal Industry since these early days has been enormous in many ways:-

- (i) Number of export mines growing from merely a few in the early 1960s to 50 plus;
- (ii) Production from a few million tonnes in the mid to late 1960s to over 200 million tonnes;
- (iii) Expansion from what was essentially coking coal only in the early days to a significant proportion of steam coal;
- (iv) The significant broadening of the markets from the initial almost sole reliance on Japan to the emergence of the major Chinese market.

10. **CONCLUSION**

The Coal and Petroleum Industries in both Australia and Queensland have faced many obstacles in their history, and continue to face criticism, much differing in extent and content between the 2 segments. In coal and other minerals it is often because of our success, as though success is permanent, and not transitory, when one deals with a non-renewable resource. The same would apply to our major offshore gas resources, and potentially to coal seam gas.

In economic terms some of the criticism seems to imply we should not exploit our comparative or absolute advantages in the market-place.

This is not to say we do not have a duty of care from our activities to the micro and macro environment.

We also face challenges from the ongoing and perennial uncertainty relating to tax systems (State and Federal), which have plagued us since the 1970s.

Thank you for this opportunity to talk to you – I am happy to answer any questions.

Bruce Clarke