

David Borton 07.11.99

On graduating from Portsmouth with a BSc London Ext. (pass) degree in Geology and Geography in 1972, I joined De Beers Consolidated Mines Ltd as an Exploration Geologist based in Kimberley South Africa. On arrival I was given a Landrover, a Bedford truck, a Caravan and about 10 Africans and was told to drive to Sishen where I would meet up with a Scottish geologist who would show me the ropes. I will not forget the first day there which was about 40C. My new London-bought desert boots did not survive the day, the soles firstly melted and secondly relocated themselves before solidifying in the cool of the evening, becoming unwareable in one day. After three months induction I was off exploring with my own team for kimberlites and their treasured contents. I had a number of camps at Sishen, Vryburg, Schweizer Renecke, Lichtenberg, 150 miles west of Mafeking, in the Northern Cape, Lethlakane in Botswana. They were trying times – a young ‘rooinek’ learning Afrikaans so as to communicate with the farmers and African staff, in a land of harsh extremes, wild animals, poisonous snakes and learning how to find diamonds ( a topic not covered at Portsmouth although kimberlites had been covered in about 1 minute).

The job had little geology in it as wind-blown Kalahari sands covered almost all the bedrock, but lots of general life experience. Managing a camp with up to 6 Africaans field assistants, a mechanic, 20 African labourers, their food supplies/rations, pay, vehicle maintenance, resolving personal and intertribal disputes in a remote desert location was something Portsmouth had never trained me for. After many soul-searching nights thinking of the local pub, family and friends working in civilised locations, the lack of geology and members of the opposite sex, I determined to move on after 18 months. The experience was invaluable for managing people and budgets in remote locations and at the end I knew what a diamond, pyrope garnet, eclogite and lherzolite nodules and kimberlites looked like and how to locate and evaluate diamond-bearing pipes.

In mid 1974 I joined Falconbridge Nickel Mines in Windhoek in Namibia. They were looking for anything that would make money and so a full range of commodities in a variety of geological terrains using best available geophysics and geochemistry provided a huge learning experience and very solid grounding for an economic geologist which, by this stage, I had decided I wanted to be. We covered nickel, copper, lead, silver, zinc, diamonds, tungsten, tin, gold, uranium and fluorite.

We spent nights in the south of South West Africa as it was then, mapping scheelite skarns with UV lamps (learning that scorpions have a similar light blue radiance to scheelite, so beware touching, and that snakes are very active at night). I flew airborne radiometric surveys in the Namib desert with a spectrometer between my legs using the most detailed available 1:250000 scale maps to navigate, in the search for calcrete uranium deposits. I roamed through the Brukaros kimberlite field locating airborne magnetic anomalies over previously undiscovered kimberlites, as well as old 9 kg shell casings from the 1910 war between the Germans and the Hereros. I ran a large drill programme and then a feasibility study on the Swartmodder Copper Silver deposit which was later developed. Learned how to sleep in 52 deg. C covered by a wet towel, while chasing fault filled barite, sphalerite, galena mineralisation on the flanks of the Mt. Brukaros carbonatite volcano. We were very successful developing 3 new base metal mines in as many years.

Windhoek was a great base to return to on weekends with lager and Jagermeister chaser boose ups at the Kaisekrone, intercompany cricket matches with a beer for a wicket, catch or a 4, two for a six followed by ‘boatraces’ if you were still standing. Game viewing at local wildlife reserves and braaivleis. It was in Windhoek that I met my German wife. When in 1978 terrorist bombs in town and the need to carry a gun in the field became reality we decided to move on. South West Africa provided a very broad practical geological, geochemical, and geophysical experience which was invaluable.

We married in England in Sept. 1978 had a one day honeymoon and I started the MSc Minex degree at the Royal School of Mines, Imperial College, London, two days later. The highlight was a tour of the Irish base metal deposits and the completion of a dissertation on ‘Tungsten: A commodity survey and exploration guide’ sponsored by BP Minerals. They then employed me as a research geologist from Sept 1979 to Feb 1980 to do a similar review of Niobium and the business

opportunities for it around the world. The RSM provided a solid theoretical exploration experience as well as theoretical background to the people management that I had learned practically over the preceding years.

Following interviews in the Hague and the offer to join Shell in Australia I took a position as senior geologist with Shell in Cairns, Queensland in March 1980 to explore for tin. In 1982 we moved to Wagga Wagga in NSW still exploring for tin before the price collapsed. There I had a budget of \$2.5M and a staff of 17 including 4 geologists. In 1984 we moved to Orange in NSW where I was senior geologist base metals exploring the Siluro Devonian volcanic belts for Volcanic Massive Sulphide and Porphyry Copper deposits and then became Regional Manager NSW in 1987 when slowly our focus changed to epithermal and porphyry related gold mineralization. I was on the Council of the NSW Chamber of Mines as well, until 1989 when we moved to Cairns and I took up the role of Business Development Manager – NE Australia and the Pacific Islands. At this stage we got involved in the Union Reefs prospect in the NT which later was to provide a foundation stone to the float of Acacia. In 1990 I became Regional Exploration Manager Qld and got involved in a pre feasibility study on the Yaamba magesite project near Rockhampton with the American's Peabody and the Austrian's Veitscher Magnsitewerke for development of a Dead Burned Magnesia project. We explored for base metals around Mt. Isa and for gold in the Drummond Basin.

In 1992 we moved to Melbourne and I became Regional Manager Eastern and Southern Australia with a focus on gold exploration. In Nov. 1994 the Metals Division of Shell in Australia known as Billiton Australia was floated by Shell who had decided to get out of the metals business and we raised \$400M on the ASX paying Shell \$320M and taking over the assets as a new company Acacia Resources Ltd. I retained the same title and had a huge new learning curve as we launched into the real world with reporting to the ASX and restructuring and focusing of this gold company.

In 1995 I became Chief Geologist Exploration in addition to the prior role and we now have some 40 geologists exploring for gold all over Australia. My present job entails two segments, one as Regional Exploration Manager Eastern and Southern Australia directly managing about \$2.5 M of gold exploration primarily in South Australia. In the Chief Geological role I am responsible I am responsible for maintaining technical excellence across the full \$32.5M Acacia exploration budget. This entails supervising employing the right people, training them and recognising the need for and involving technical experts when necessary. I look after Acacia's research and am the Representative on the Australian Mineral Industries Research Association. As such I frequently meet with the major research groups and assess new proposals. With some 40 geologists I spend a lot of time travelling to their prospects assessing and ranking programmes and coordinating the budgets.

We have been very successful expanding from a 1/3<sup>rd</sup> interest in one mine producing 100,000oz. Au annually in 1994 to now having 5 mines producing over 500,000 oz Au in 1998. We have expanded the resource base from 3M oz when we floated to around 12M oz now. For expenditure of \$120M over the 5 years we have added about \$3.6Billion worth of gold in resources to the value of the company. The future looks rather bleak now the Reserve Bank of England has elected to sell about half of its gold reserves driving the price down by 15%, but we keep positive.

I am rather proud of the above and look back on a huge range of enormously satisfying experiences, with I'm sure many more to come. There are a few interesting other points I would like to make in addition. I failed English O level twice, passing on the third attempt, eventually gaining 6 in total. I did three A levels, Art, Geography and Chemistry getting 3 E grades at the first attempt and repeating the same grades after a year of extra study. My careers adviser at school told me I was wasting my time thinking of a career in geology which I had generated a love for from the age of 16, because based on school reports and teachers views, I would not get the grades to be accepted to do a geology degree. I was told to focus on the police force, fire brigade or army. Why Portsmouth Poly should accept me with such a poor academic record (I was deputy Head Boy and House Captain though) still never ceases to amaze me, but they did and in allowing me to do geology and geography enabled me to start grappling with my favourite subject. If I remember rightly I got a pass in Geography and a 2B rating in Geology resulting in a pass degree. Not exactly the best result

to start a career in geology, but there were signs that mineral exploration and travel were real loves. A turning point for me was meeting with friends of the family studying at London Universities on New Years Eve 1970, who had spent the previous summer vacation working as students on the gold mines in South Africa. They gave me the address of the Chief Geologist of the Anglo American Corporation and suggested that I send a letter making mention of their names and work there. I enquired in writing as to whether there may be any vacation work for the summer of 1971 and I received a letter back saying I would commence employment on June 10<sup>th</sup> at a salary of R440 per month at the President Steyn Gold Mine in Welkom in the Orange Free State. In mid 1972 when I obtained my pass degree I did not believe I had a chance against the numerous geology graduates in the competition for the very few jobs on offer. For reasons which I still do not understand Anglo American Corporation offered me one of 8 positions as a graduate geologist that year out of some 300 applicants. The summer vacation report must have played a part.

It was great catching up with you recently and I'm sure we'll meet again in the years to come when I return to family gatherings in Bosham. Please pass on my regards to the Poly teaching staff and thanks in particular to whoever decided to offer me a place at the Poly with less than sparkling A level results.

Please pass on John Wroe's email and I will remind him of our early get-together in Welkom back in 1971.

David Borton.