

TIME TO SHINE: ELLENDALE DIAMONDS

On 4 April 2007, Miles Kennedy (Chairman, Kimberley Diamond Company) spoke to the Kimberley Society about his company's involvement with exploration and diamond mining in the Kimberley. Despite being a lawyer, rather than a geologist, he was involved in the exploration from the outset and, in 1993, he formed the Kimberley Diamond Company. As one of only two diamond producers in Australia, the company comes second to Argyle, which has one of the biggest mines in the world.

Miles explained that every diamond is unique and, as well as being at least 3,200 million years old—as old as the earth itself—they are valuable because they are hard to find. They occur in the diamond stability field, 200 kilometres below the earth's surface, and can be accessed only if a volcano passes through and brings them up to the surface at 600–700 km/hr in what is known as a diamond pipe or lamproite pipe.

The search for Kimberley diamonds began in earnest in 1967 and a syndicate, in which CRA (now Rio Tinto) was involved, discovered some at Ellendale in 1976. The discovery of the Argyle alluvial diamonds in the East Kimberley followed, with the rich AK1 pipe being located in 1979 and brought into production in 1983.

The Kimberley Diamond Company owns the Ellendale Diamond Field some 100 kilometres east of Derby. The first 70 kilometres of access is easy, on the sealed section of the Gibb River Road, before 40 kilometres of unsealed road to the Roberts Road turnoff which takes drivers 24 kilometres south to Ellendale. The difficulty of exploring that area and then building the mine can be imagined because, even now, the road needs to be raised so that the mine won't be marooned for four months every year.

Miles Kennedy and his team started their exploration work in 1994 and lived in tents at Blina, which is adjacent to Ellendale, for four years. They traversed 140 kilometres in their search for the volcanic pipes in the northern section of the Blina tenements and dug thousands of holes. At the first camp, a cement mixer was used for sifting for diamonds. The plant was upgraded in 1999 and diamond treatment plants of greater size were built.

While all of that was going on, the company was engaged in an acquisition program focused on the Ellendale Field. The relationship between the two fields is such that Blina Diamonds NL, in which Kimberley Diamond Company holds a large interest, controls a 1,350-km² tenement package that covers and surrounds the central core

of the Ellendale Field. Within that tenement package are fifty identified lamproite pipes and some diamondiferous alluvial channels.

In 2001, Kimberley Diamond Company reached agreement to purchase the Ellendale Project for A\$23.25 million and, in mid-2002, it began commercial diamond mining there. The Ellendale mining lease covers 124 square kilometres, and Kimberley Diamond Company has spent A\$200 million developing it. Most of the diamonds are exported and the company now has an office in Antwerp for direct tendering. In production, the Kimberley Diamond Company has over 8.9 million tonnes processed to 28 February 2007; 637,000 carats sold; and sales revenue exceeding A\$149 million as of 31 March 2007 and about to quadruple. Production is conflict free, unlike that in some parts of the world.

At Ellendale, where up to 500 people have been employed on the mine and in construction, workers stay 14 days before flying out for a week at home. Sixty-one per cent of the workforce are from Broome, Derby and Fitzroy Crossing, and about seventeen per cent are company-trained Aboriginal people. The Kimberley Diamond Company has an agreement with the local Aboriginal people: reached after two years of negotiations whereby the company pays them \$150,000 per year, or 5% of any dividend derived from the mine, and provides training programmes. The money is paid into a trust for nine different tribal groups.

Today, at Pipe 9, where the company mines one lamproite pipe, the camp is six to seven kilometres in size and accommodates 440 people. Twenty kilometres to the south of Pipe 9 is a new big pipe. This new plant, Ellendale 4, was successfully commissioned in September 2006 at a cost of A\$51 million for plant and infrastructure.

For every tonne of rock processed, the Ellendale mining operation requires a tonne of water. Diamonds are 3.2 times heavier than water: Sp. Grav. = 3.2. In the processing, the mine uses gravity separation to access the diamonds. The mined material is passed over an x-ray and the diamonds are seen to sparkle and fluoresce. There is a huge subterranean aquifer and they have big dams to recycle the water. The revegetation process is an ongoing environmental requirement for the mine. For every hectare disturbed, the mine is required to lodge a bond of A\$15,000 with the Western Australian Government to revegetate. The pipes will become lakes when the mining company has finished with them because the water table is only 30 metres underground.

The diamonds at Ellendale are \$150 per carat. Argyle pink diamonds are the most valuable in the world and, at the Ellendale mining operation, the diamond

production is 30% yellow and 70% white. Miles explained that carat is a measurement of weight and is based on the weight of an individual carob seed (a carob seed is always a precise weight, namely, one fifth of a gram) and hence "carat" is derived from "carob". The Ellendale diamonds are not industrial diamonds and are all gem or near gem quality diamonds, making Ellendale the second highest price per carat of any hard rock diamond mine in the world. A total of 650,000 carats will be produced this financial year. The Kimberley signature stone is a Fancy Yellow Diamond (rare and highly valuable).

Miles Kennedy gave a most interesting, informative and enjoyable address and accompanied his talk with a PowerPoint presentation of photographs, geological maps and a Kimberley Diamond Company promotional film. We thanked him enthusiastically for his time and goodwill.

Joy Embury and Daphne Edinger

A POSTSCRIPT TO THE KIMBERLEY DIAMONDS TALK

Kimberley Diamond Company has been in the media spotlight since Miles Kennedy's presentation to the Kimberley Society. Months of speculation about a possible takeover ended on 19 July 2007, when the company's board unanimously recommended acceptance of a 70 cents-a-share cash bid by UK-based Gem Diamonds Ltd.

Gem is said to be ready to pump \$30 million into Kimberley Diamond Company as part of what is described as a 'friendly \$300 million takeover'. The timing and feasibility are linked to the need for expansion of the Ellendale project, which has been impeded by cost increases and the rising Australian dollar.

Towards the close of the takeover negotiations, Miles Kennedy lost his long-time business partner and friend, Graeme Hutton, who died in Broome on the night of the 18th. It was Mr Hutton who convinced Mr Kennedy to hunt for diamonds and then worked with him to prove and develop the Ellendale field.