Paper Number: 4720 **Grootegeluk Mine Geology**

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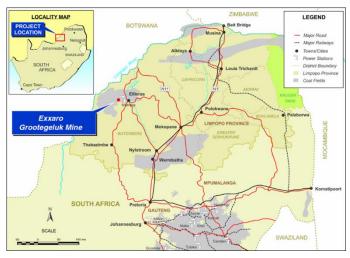


Figure 1: Location of Exxaro's Grootegeluk Mine

station coal are produced from these coal seams.

Grootegeluk Mine, a wholly owned subsidiary of Exxaro Resources Ltd, is a surface coal mining operation on a shallow portion of the Waterberg Coalfield. (Figure 1.) Since the commissioning of Grootegeluk Mine in 1980, it has remained the only operating coal mine in the Waterberg Coalfield. The mine was originally developed to produce low-ash semi-soft coking coal from the upper vitrinite-rich Volksrust Formation which was utilized as a reductant in Iscor's steel production process. The Eskom-owned Matimba power station was later built in close proximity to the mine to utilize the "middling coal" or medium quality coal for power generation. As the mine continued to operate, the lower coal seams of the Vryheid Formation became progressively exposed. Metallurgical coal products and power

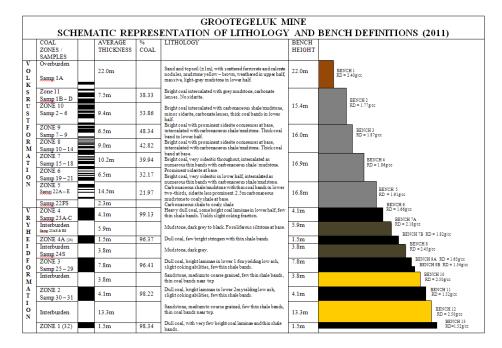


Figure 2: Stratigraphic Sequence of the Waterberg Coalfield

This paper will focus on the geology and stratigraphy (Figure 2), coal occurrences, mining and products of the Grootegeluk Coal Mine in the Waterberg Coalfield.